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Fungi of Nicaragua: the first annotated checklist

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Fungi of Nicaragua: the first annotated checklist

Ricardo J. Soza* 

RESUMEN

Se presenta la primera lista de hongos de Nicaragua. Está basada en revisiones bibliográficas y en varias colecciones realizadas por el autor. Se aceptan un total de 1603 especies, distribuidas en 652 géneros, 277 familias, 102 órdenes, 29 clases y 10 filos, 26 especies son endémicas de Nicaragua. El filo con el mayor número de especies registradas es Ascomycota (921 especies), seguido de Basidiomycota (580), Myxomycota (41), Oomycota (28), Glomeromycota (22), Mucoromycota (6), Monoblepharomycota (2), Blastocladiomycota (1), Rozellomycota (1), y Chytridiomycota (1). La familia con el mayor número de especies registradas es Pucciniaceae (57 especies), seguida de Polyporaceae (56), Mycosphaerellaceae (49), Graphidaceae (49) y Parmeliaceae (42). El género con el mayor número de especies registradas es *Puccinia* (44 especies), seguido de *Porina* (29), *Marasmius* (27), *Xylaria* (24), *Parmotrema* (22) y *Cercospora* (18). Los hongos de Nicaragua pueden dividirse en 11 grupos dadas sus características, ecología y asociaciones, de estos el más representativo es Basidiomycota (462), seguido de líquenes (hongos liquenizados) (419), Ascomycota (228 especies), Hyphomycetes (216), hongos roya (87), Coelomycetes (62), Myxomycetes (41), Oomycota (28), hongos carbones (27), micorrizas arbusculares (22) y microhongos (11). El departamento con el mayor número de especies registradas es Río San Juan (403 especies), seguido de Managua (297) y Rivas (239). Más de 301 especies tienen una localidad desconocida debido a la falta de literatura. Un total de 56 especies de hongos son nuevos registros para Nicaragua.

Palabras clave: lista patrón, hongos, Nicaragua, diversidad, distribución

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ABSTRACT

The first checklist of the fungi from Nicaragua is presented. It is based on bibliographic reviews and on a collection made by the author. A total of 1603 species are accepted, distributed among 652 genera, 277 families, 102 orders, 29 classes, and 10 phyla; 26 species are endemic to Nicaragua. The phylum with the highest number of recorded species is Ascomycota (921 species), followed by Basidiomycota (580), Myxomycota (41), Oomycota (28), Glomeromycota (22), Mucoromycota (6), Monoblepharomycota (2), Blastocladiomycota (1), Rozellomycota (1), and Chytridiomycota (1). The family with the highest number of recorded species is Pucciniaceae (57 species), followed by Polyporaceae (56), Mycosphaerellaceae (49), Graphidaceae (49), and Parmeliaceae (42). The genus with the highest number of recorded species is *Puccinia* (44 species), followed by *Porina* (29), *Marasmius* (27), *Xylaria* (24), *Parmotrema* (22), and *Cercospora* (18). The fungi of Nicaragua can also be divided into 11 groups according to their characteristics, ecology, and associations. The most representative of these groups are the Basidiomycota (462), followed by Lichenized Fungi (lichens) (419), Ascomycota (228 species), Hyphomycetes (216), Rust Fungi (87), Coelomycetes (62), Myxomycetes (41), Oomycota (28), Smut Fungi (27), Arbuscular Mycorrhizal Fungi (22), and Microfungi (11). The department with the highest number of recorded species is Río San Juan (403 species), followed by Managua (297) and Rivas (239). More than 301 species have an unknown locality due to lack of literature. A total of 56 species of fungi are new records for Nicaragua.

Key words: checklist, fungi, Nicaragua, diversity, distribution

INTRODUCTION

Nicaragua is the largest country in Central America, with a land area of 130,373.47 km². It shares a border with Honduras to the north and Costa Rica to the south. It is located between the Pacific Ocean and the Caribbean Sea. It is also located in a transition zone from tropical to subtropical climate, creating favorable conditions for the development of biodiversity, where different species distribution ranges converge. It possesses significant biodiversity, presenting the largest expanses of humid tropical forest and the best-preserved lowland ecosystems in all Central America (Rueda 2007). Nicaragua has approximately 7% of the world's biodiversity and boasts 68 ecosystem types that represent 60% of the total in Central America. 20,485 species of living organisms have been reported, where 29.35% correspond to flora species, 9.75% are vertebrates, 59.98% are invertebrates, and 0.89% represent fungal species (MARENA 2020).

Worldwide, fungi are considered one of the most diverse groups on the planet. According to Kirk *et al.* (2008), more than 97,861 species of fungi have been described worldwide. However, Hawksworth (2001) suggests that there are approximately 1.5 million species in the world, of which 80% are microscopic fungi.

However, Hibbett *et al.* (2011) noted that it would take 1,170 years to describe 1.4 million species of fungi. Currently, there is a lack of information regarding the study of fungi in Nicaragua (Bermudez & Sánchez 2000). Available data are fragmented and scattered in the literature; specimens collected in the country are found in herbaria and international institutions (Rueda 2007). According to Hawksworth (1993), only six species of fungi were described for Nicaragua between 1980 and 1990, a glimpse into the slow pace of the study of these organisms in the country. And not only in diversity but also in exploitation, Nicaragua is one of the few countries in Central America where wild mushrooms are not commercialized, unlike Guatemala and Costa Rica, where mushrooms generate income and are a well-used resource (Pérez-Moreno *et al.* 2020).

Table 1. Comparison of numbers of known fungal species between selected countries of the neotropics.

Country	All Fungi	Lichens	Rust Fungi	Smut Fungi	Myxomycetes	References
Mexico	7632	2722	608	125	323	López 1984, Durán 1987, Aguirre-Acosta <i>et al.</i> 2014, Herrera-Campos <i>et al.</i> 2014, Lado & Wrigley de Basanta 2008
Nicaragua	1603	419	87	27	41	This paper
Costa Rica	5534	1740	318	52	242	Piepenbring 1996, Rojas <i>et al.</i> 2018, Moncada <i>et al.</i> 2022, Mardones <i>et al.</i> 2024
Panama	1807	325	113	24	108	Piepenbring 2001, Piepenbring 2006, Piepenbring 2007, Piepenbring <i>et al.</i> 2011
Colombia	7241	2670	493	71	110	Moncada <i>et al.</i> 2022, Cossu <i>et al.</i> 2022
Brazil	5719	4310	745	77	234	Hennen <i>et al.</i> 2005, Piepenbring <i>et al.</i> 2011, Maia <i>et al.</i> 2015, Aptroot 2021, Cossu <i>et al.</i> 2022

In contrast to some Central American countries (Table 1), Nicaragua still lacks information on the diversity of its mushrooms; for example, in Costa Rica, more than 5534 species have been recorded (Mardones *et al.* 2024), and in Panama, about 1807 species (Piepenbring 2007).

This gives us an idea of the current state of mycological research in the country. On the other hand, fungal diversity is better studied than in neighboring countries such as Honduras, El Salvador, or Guatemala, where 105, 311, and 445 fungal species have been catalogued to date, respectively (Flores-Arzú *et al.* 2012, Maekawa *et al.* 2013, Bastidas 2016, Vásquez-Díaz 2017, Pérez-Moreno *et al.* 2020). Much remains to be known and studied, especially in the *Pinus-Quercus* forests of the northern center of the country and the pine forests of the Nicaraguan Caribbean, which are unexplored and where new species are very likely to be found (Pérez-Moreno *et al.* 2020).

HISTORY OF THE STUDY OF FUNGI IN NICARAGUA

According to the available literature, the first researchers and works on fungi in Nicaragua appeared in the 19th century. One of these researchers was Charles Wright (figure 1), an American botanist and member of the *U.S. North Pacific Exploring Expedition*, who stopped in Nicaragua in 1856, where he made botanical (including fungi) and zoological collections (Gray 1856). These collections of fungi were studied and identified by Miles Joseph Berkeley and Moses Ashley Curtis, who catalogued 66 species of Nicaraguan fungi (Berkeley & Curtis 1960), being the first list of fungi for the country. Later, in 1892, Iowa State University made an expedition to Nicaragua, led by Bohumil Shimek and Charles L. Smith (figure 1), who were in the country for 3 months and during that time collected several samples of fungi, lichens, and myxomycetes, along with mosses, vascular plants, and zoological specimens (Shimek 1893), material examined and identified in the works of MacBride (1893), Smith (1893), and Ellis & MacBride (1896).

Charles L. Smith returned to Nicaragua between 1895 and 1896 on a second botanical expedition that included southern Mexico and made new collections of fungi and myxomycetes (MacBride 1896, Ellis & Everhart 1896, MacBride & Smith 1896). In the same decade, Roland Thaxter described several species of Laboulbeniales, ascomycete fungi that are obligate ectoparasites of insects, the first Nicaraguan records for this group (Thaxter 1892, 1894). In early 1903, Charles F. Baker, an American botanist and entomologist, made collections of rusts and basidiomycetes in the Pacific region of the country (Crum 1952). Between 1906 and 1919, Joseph C. Arthur, an important American botanist, made collections of rust in Nicaragua. He also examined several herbarium samples of this same group; these were the first species of these fungi for Nicaragua (Arthur 1906, 1919).

In 1920, a long period of more than 20 years began in which no work was carried out on fungi in the country (figure 2). It was not until 1943-1946 that Arthur G. Kevorkian, an American botanist, made collections of plant and soil diseases (which included several species of fungi).

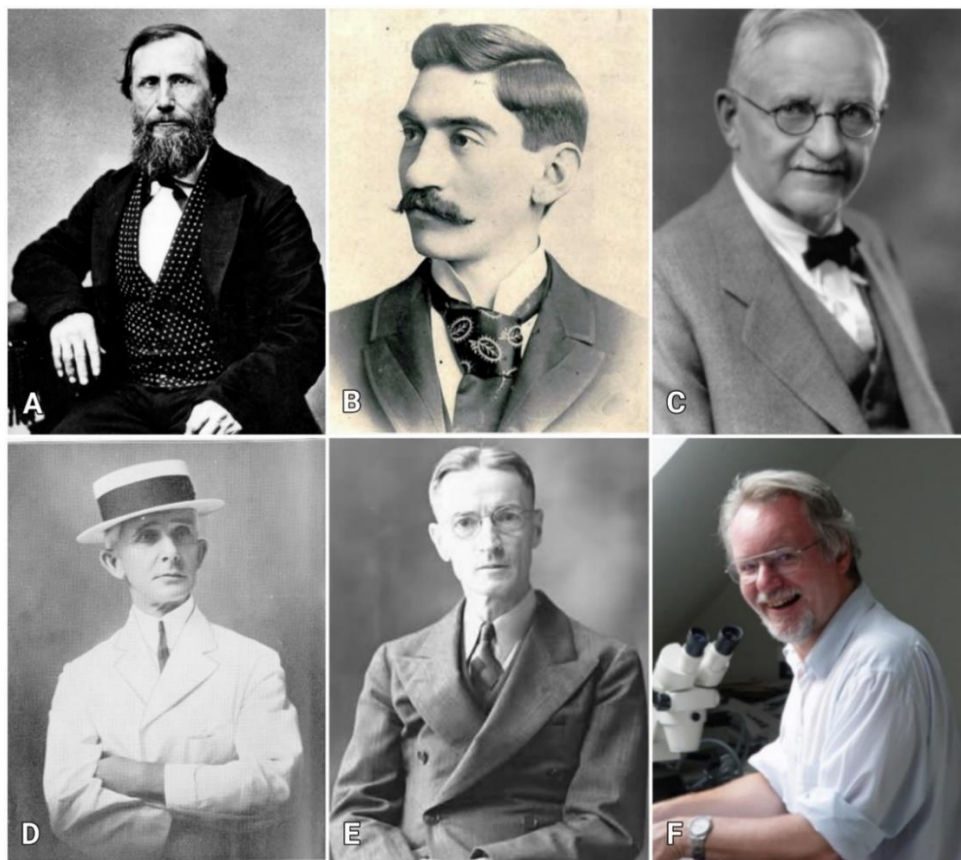


Figure 1. Mycologists who had a profound influence in the study of Nicaraguan fungi. A: Charles Wright (1811-1885). B: Charles Leonard Smith (1866-1923). C: Bohumil Shimek (1861-1937). D: Charles Fuller Baker (1872-1927). E: Paul Carpenter Standley (1884-1963). F: Othmar Breuss (1955-present) (public domain, except Figure 1B, adapted from Delgado & Koukol 2016).

From these collections, new species of Nicaraguan *Penicillium* and *Aspergillus* were described (Raper & Fennell 1948, Raper & Thom 1949). Between 1947 and 1949, Paul Carpenter Standley (figure 1) made several mycological collections in Nicaragua (mainly in Jinotega, Atlántico Sur, and Chontales), mostly of macrofungi and rusts (MycoPortal 2025). During this period, mycological work in Nicaragua focused on the study of plant diseases, where several species of microfungi were inventoried. The first list was made between 1951 and 1957 by Samuel C. Litzenberger, a Canadian agronomist and phytopathologist (Litzenberger & Stevenson 1957). Several species of phytopathogenic fungi were added with the work of Evans (1984) and González *et al.* (1985a, 1985b). In 1977, Joe F. Hennen and John W. McCain collected several species of rust fungi for Nicaragua (Hennen & McCain 1993). In this same year, Meike Piepenbring described the first fungus of the “smut fungi” type (Ustilaginomycetes) (Piepenbring & Bauer 1997), and in 2003, this same author cited another 20 species for the country (Piepenbring 2003).

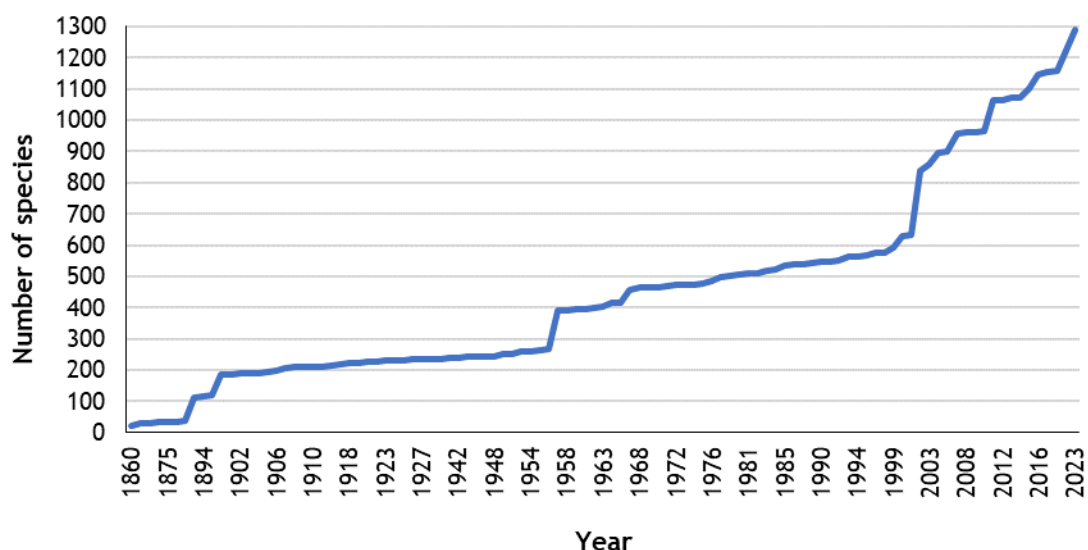


Figure 2. Cumulative number of fungal species recorded in Nicaragua from 1860 until 2023.

In 1977, Michael H. Ivory, a researcher at the Forestry Institute of Oxford University, made several collections of Boletales fungi associated with the *Pinus caribaea* forests from Atlántico Norte, Nicaragua (Singer *et al.* 1983, 1991, 1992, HerbKew 2024). In 1984, the first inventory elaborated by national authors was carried out; the work lists several species of fungi from the department of León (Meléndez *et al.* 1984).

At the beginning of the 2000s, work on the study of fungi in Nicaragua reached its highest peak. In this year, Picone (2000) produced the first list of arbuscular mycorrhizal fungi (Glomeromycota) with 21 species from Atlántico Sur, Nicaragua. In 2002, Othmar Breuss, an Australian mycologist, compiled the first list of Nicaraguan lichens based on an exhaustive bibliographic review and a series of collections he made mainly in the Pacific region of Nicaragua, citing a total of 273 species (Breuss 2002). In 2004, Nicaraguan biologist Iris Saldívar prepared a mycological inventory in the Reserva Natural Chocoyero-El Brujo, Managua (González *et al.* 2004). This same author, in collaboration with other researchers, would carry out three other inventories in the Refugio de Vida Silvestre Río Escalante Chacocente, Carazo (González & Orozco 2006), Reserva de Biósfera Indio Maíz, Río San Juan (González & Orozco 2007, Saldívar 2018), and in the Reserva Natural Datanlí-El Diablo, Jinotega (Saldívar 2015).

In 2011, Gregorio Delgado made the first list of Hyphomycetes, or imperfect fungi of Nicaragua through a review of literature and herbarium specimens, listing 216 species (Delgado 2011, Delgado & Koukol 2016).

Continuing with the study of lichens, Othmar Breuss and Robert Lücking continued collecting specimens, describing several new species of lichens endemics to Nicaragua and adding 37 species to the previous list (Lücking 2008, Rivas-Plata *et al.* 2011, Breuss 2011, Breuss & Lücking 2015, Lücking *et al.* 2016).

In 2015 and 2016, two inventories of fungi were carried out in Nicaragua, the first by Juan C. Vargas-Fuentes in the Paisaje Miraflor, Estelí (Vargas-Fuentes & Gribal 2015) and the second by Noé M. Ubau-Matamoros in Nandaime, Granada (Ubau-Matamoros 2016a).

The Instituto de Protección y Sanidad Agropecuaria (IPSA) of Nicaragua presented a list of pests present in the country, listing more than 136 species of microfungi (IPSA 2021). In 2021, two new species of Laboulbeniales were described from Moropotente, Estelí, endemic to Nicaragua (Dima *et al.* 2021). The most recent studies on fungi from Nicaragua were carried out by Soza *et al.* (2023), who reported 180 species from Reserva Ecológica El Bajo, Managua, of which 49 species were reported for the first time in the country, and Jung *et al.* (2024), who described 5 species of the genus *Phytophthora* from Matagalpa and Granada, of which 2 species are endemic to Nicaragua.

DIVERSITY OF FUNGI IN NICARAGUA

The 1603 species reported from Nicaragua are distributed among 652 genera, 277 families, 102 orders, 29 classes, and 10 phyla. The phylum with the highest number of recorded species (figure 3) is Ascomycota (921 species), followed by Basidiomycota (580), Myxomycota (41), Oomycota (28), Glomeromycota (22), Mucoromycota (6), Monoblepharomycota (2), Blastocladiomycota (1), Rozellomycota (1), and Chytridiomycota (1). The great majority of fungi belong to Ascomycetes, representing 921 species, 63 orders and 12 classes. The most represented class is Agaricomycetes (453 species), followed by Lecanoromycetes (331) and Sordariomycetes (241).

The family with the highest number of recorded species is Pucciniaceae (57 species), followed by Polyporaceae (56), Mycosphaerellaceae (49), Graphidaceae (49), and Parmeliaceae (42) (table 2). The genus with the highest number of recorded species is *Puccinia* (44 species), followed by *Porina* (29), *Marasmius* (27), *Xylaria* (24), *Parmotrema* (22), and *Cercospora* (18) (table 3).

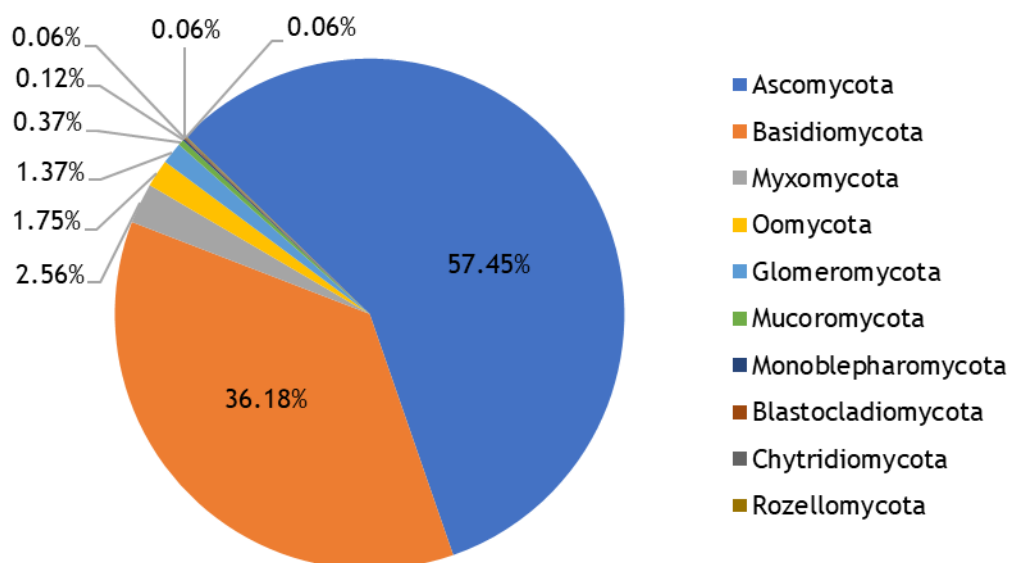


Figure 3. Distribution of fungi species registered in Nicaragua by phylum.

Table 2. Most representative fungal families in Nicaragua.

Family	Genera	Species
Pucciniaceae	3	57
Polyporaceae	20	56
Mycosphaerellaceae	14	49
Graphidaceae	10	49
Parmeliaceae	9	42
Xylariaceae	7	38
Marasmiaceae	6	38
Trichotheliaceae	2	35
Aspergillaceae	2	33
Hymenochaetaceae	13	32
Pleosporaceae	6	32
Hypoxylaceae	9	28
Nectriaceae	9	27
Agaricaceae	11	26
Caliciaceae	9	26
Physciaceae	7	24
Peronosporaceae	7	21
Pilocarpaceae	8	20

Table 3. Most predominant fungal genera in Nicaragua.

Genus	Species
<i>Puccinia</i>	44
<i>Porina</i>	29
<i>Marasmius</i>	27
<i>Xylaria</i>	24
<i>Parmotrema</i>	22
<i>Cercospora</i>	18
<i>Pyrenula</i>	17
<i>Aspergillus</i>	17
<i>Penicillium</i>	16
<i>Fusarium</i>	16
<i>Graphis</i>	16
<i>Cladonia</i>	15
<i>Alternaria</i>	15
<i>Colletotrichum</i>	15
<i>Trametes</i>	14
<i>Astrothelium</i>	12

Twenty-six (26) species of fungi are endemic to Nicaragua (1.6%): *Acanthonitschkea horrida* (Ellis & Everh.) M.E. Barr, *Allophoma nicaraguensis* Q. Chen & L. Cai, *Cryptandromyces pinguis* Santam. & W. Rossi, *C. tricornis* Santam. & W. Rossi, *Diatrypella pauper* Ellis & Everh., *Encoelia nicaraguensis* (E.J. Durand) W.Y. Zhuang, *Erythrogloeum pini-acicola* H.C. Evans, *Graphis paraschiffneri* Lücking & Breuss, *Hjortstamia rimosissima* (Berk. & M.A. Curtis) Boidin & Gilles, *Jobellisia nicaraguensis* (Ellis & Everh.) M.E. Barr, *Laboulbenia dentifera* Thaxt., *Lasioloma appendiculatum* Breuss, *Meliola nicaraguensis* Speg., *Micropeltis subapplanata* Speg., *Phyllachora permeans* (Berk. & M.A. Curtis) Sacc., *Phytophthora angustata* T. Jung, L. Garcia, Mendieta-Araica & Balci, *P. calidophila* T. Jung, Balci, L. Garcia & Mendieta-Araica, *Porina pseudomalmei* Breuss, *Prolixandromyces lingulatus* R.K. Benj., *P. rhinoceralis* R.K. Benj., *Puccinia sepulta* Berk. & M.A. Curtis, *Radulum rhabarbarinum* Berk. & M.A. Curtis, *Ramularia pistiae* R.C. Fern. & R.W. Barreto, *Rosellinia gigaspora* Ellis & Everh., *Septobasidium sublilacinum* (Ellis & Everh.) Burt, and *Tylopilus nicaraguensis* Singer & M.H. Ivory, all of which are considered vulnerable because of their restricted distribution.

The fungi of Nicaragua can also be divided into 11 groups according to their characteristics, ecology, and associations (figure 4). The most representative of these groups are the Basidiomycota (462), followed by Lichenized Fungi (lichens) (419), Ascomycota (228 species), Hyphomycetes (216), Rust Fungi (87), Coelomycetes (62), Myxomycetes (41), Oomycota (28), Smut Fungi (27), Arbuscular Mycorrhizal Fungi (22), and Microfungi (11).

Of these groups, the most notable are the lichens, with 419 species, which represent 25% of the fungi known in Nicaragua. These in turn can be classified by their substrates, the most predominant being corticolous lichens (75%), followed by foliicolous (23.5%), saxicolous (1%), and lichenicolous (0.5%). Smut fungi and rust fungi are obligate pathogens of vascular plants.

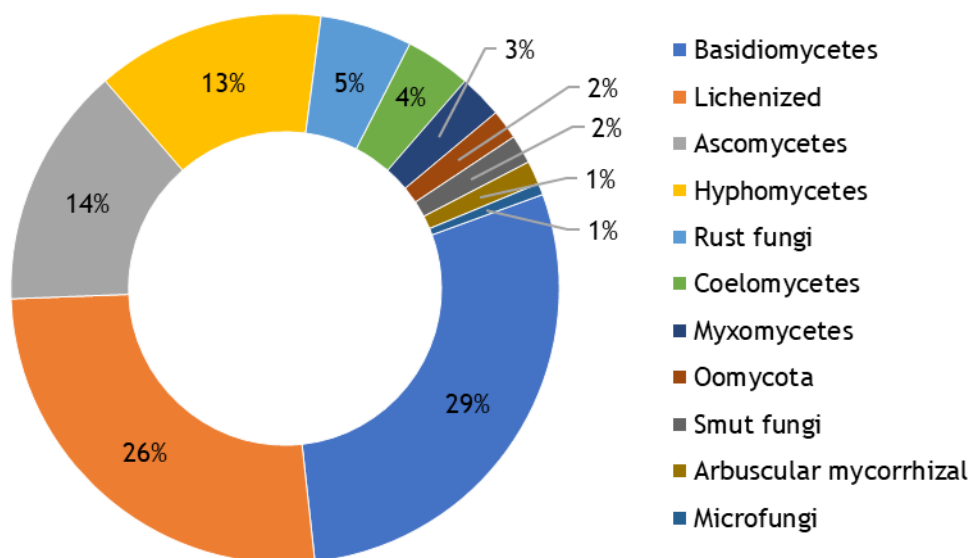


Figure 4. Distribution of fungi species registered in Nicaragua by style of life.

DISTRIBUTION AND CONSERVATION STATUS OF FUNGI IN NICARAGUA

The total number of species by department ranges from a high of 403 species in Río San Juan to a low of 9 in Boaco (figure 5). Biogeographically, Nicaragua is divided into three main regions. The Pacific Lowlands in the west, where 901 species have been recorded, the Caribbean Lowlands in the east, with 518 species, and the Central Highlands, with 409 species. The department with the highest number of recorded species is Río San Juan (403 species), followed by Managua (297), and Rivas (239) (figure 6). These departments contain more than 50% of the fungal records made in Nicaragua. Many researchers, especially Charles Wright, Charles L. Smith, Othmar Breuss, and Iris Saldívar, have conducted their studies and collections in Río San Juan, as this site has always been considered one of the most biologically diverse in Nicaragua and of greatest scientific interest (Rueda 2007). These three departments, with greater species diversity, have been relatively well studied but present largely different fungal diversity due to their distinct ecological regimes.

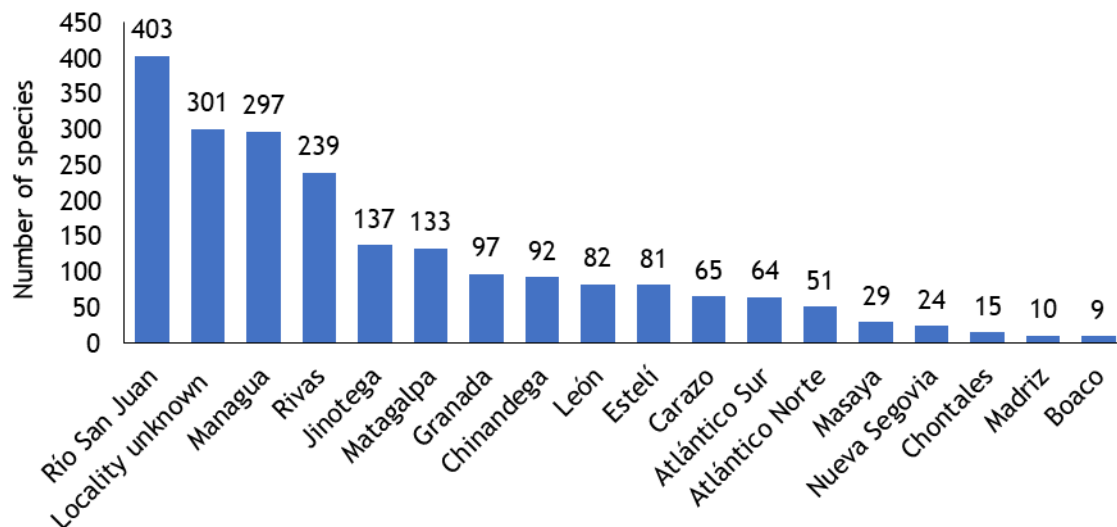


Figure 5. Number of records grouped by department.

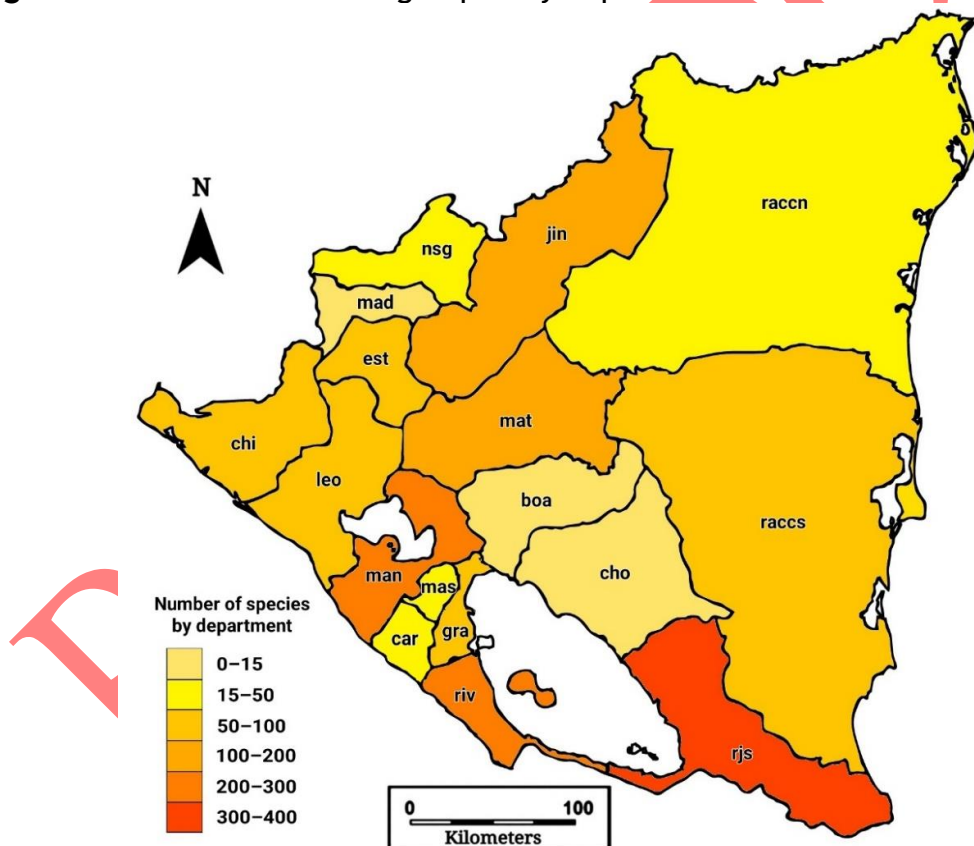


Figure 6. Richness of fungi and their distribution by departments of Nicaragua. Boaco: boa, Carazo: car, Chinandega: chi, Chontales: cho, Estelí: est, Granada: gra, Jinotega: jin, León: leo, Madriz: mad, Managua: man, Masaya: mas, Matagalpa: mat, Nueva Segovia: nsg, Rivas: riv, Río San Juan: rsj, Región Autónoma de la Costa Caribe Norte: RACCN, Región Autónoma de la Costa Caribe Sur: RACCS.

In Managua (400-900 m), Premontane Dry Forest predominates, with lower mean annual precipitation (<2000 mm), while in Río San Juan (0-600 m), Lowland Wet Forest predominates, have a very high mean annual precipitation (>4000 mm). On the other hand, Rivas (Isla de Ometepe: 600-1200 m) on the Volcán Maderas is dominated by Premontane Moist Forest with high mean annual precipitation (>2000 mm) (Sunyer & Köhler 2010). 301 species of fungi have an unknown locality; that is, the locality is not specified in the bibliography.

According to Weaver *et al.* (2003), in Nicaragua there are 76 protected areas established by the Sistema Nacional de Areas Protegidas (SINAP), equivalent to 18.2% of the national territory. Still, 75% of all reserves contain less than 50% of their original forest cover (Weaver *et al.* 2003). Almost 90% of fungal records in Nicaragua occur in at least one of the established protected areas in the country or in private reserves; for example, more than 200 fungal species have been recorded in two protected areas in Managua (Reserva Natural Chocoyero El Brujo and Reserva Ecológica El Bajo) (González *et al.* 2004, Soza *et al.* 2023). Other protected areas where hundreds of fungal species have been recorded include the Reserva de la Biosfera Isla de Ometepe, Refugio Bartola, Reserva Natural Cerro Datanli El Diablo, Reserva Biológica Indio Maíz, among others (Smith 1893, Ellis & MacBride 1896, Saldívar 2015, 2018). It is necessary more collections should be carried out at sites that are not under any protection to understand the current status of fungal conservation in Nicaragua and to promote measures to protect the habitat of these species.

Worldwide, 597 fungus species have been assessed and classified into the following categories: Critically threatened (32 sp., 5%), Endangered (101 sp., 17%), Vulnerable (151 sp., 25%), Near Threatened (61 sp., 10%), and Least Concern (200 sp., 34%) (Mueller *et al.* 2022). Of the species evaluated, only 0.5% of the fungi present in Nicaragua fall into an IUCN category. More research is needed on the habitat and distribution of fungal species, not only in Nicaragua but also throughout the tropical region, to evaluate these species and place them in an IUCN category.

METHODS

Collection methods

The material examined comes from different sites in Nicaragua (figure 7 and 8), collected between 2019 and 2024. The collection methodology was carried out following Lodge *et al.* (2004), searching for fungi, lichens, and myxomycetes on all available substrates. Specimens were collected with a knife, including, where possible, a portion of the substrate to which the fungus was attached. Paper bags and plastic boxes with compartments were used for transporting the samples. For conservation, an electric dehydrator was used, and some samples were air-dried. Once dry, the samples were stored in paper envelopes labeled with all the collected data.

The fungi were photographed in situ and deposited in the author's personal collection (RSE-F).

For identification, a compound microscope and other laboratory materials were used. Hand-cut specimens were then observed under a microscope. Reagents such as Mezler and 5% KOH were also used for reactions involving spores and other microscopic structures (Largent *et al.* 1977). Specimens were identified based on morphological data and specialized literature.

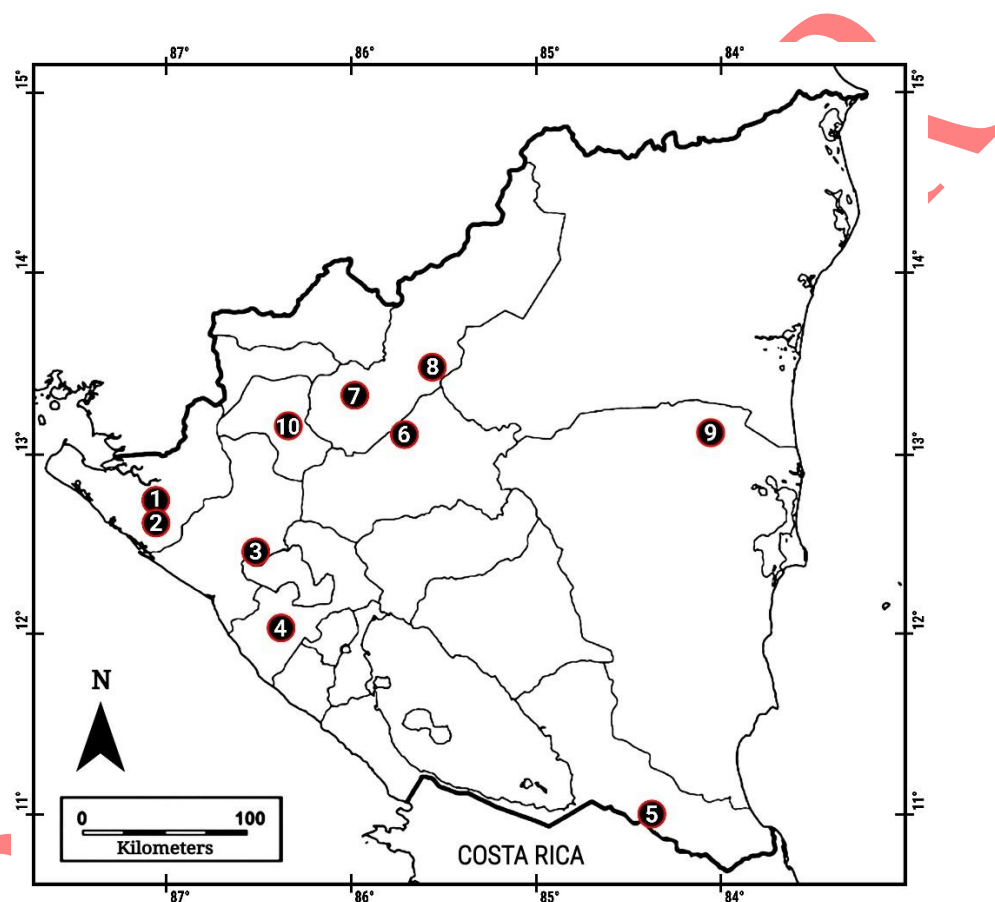


Figure 7. View of some of the sampling localities in Nicaragua. 1. Volcán Chonco and Volcán San Cristóbal 2. Ingenio San Antonio 3. Volcán Momotombo 4. Reserva Ecológica El Bajo 5. Refugio Bartola 6. Selva Negra 7. Reserva Silvestre Privada El Jaguar 8. Reserva Natural Macizo de Peñas Blancas 9. Reserva Natural Llanos de Karawala 10. Reserva Natural Tisey-La Estanzuela.

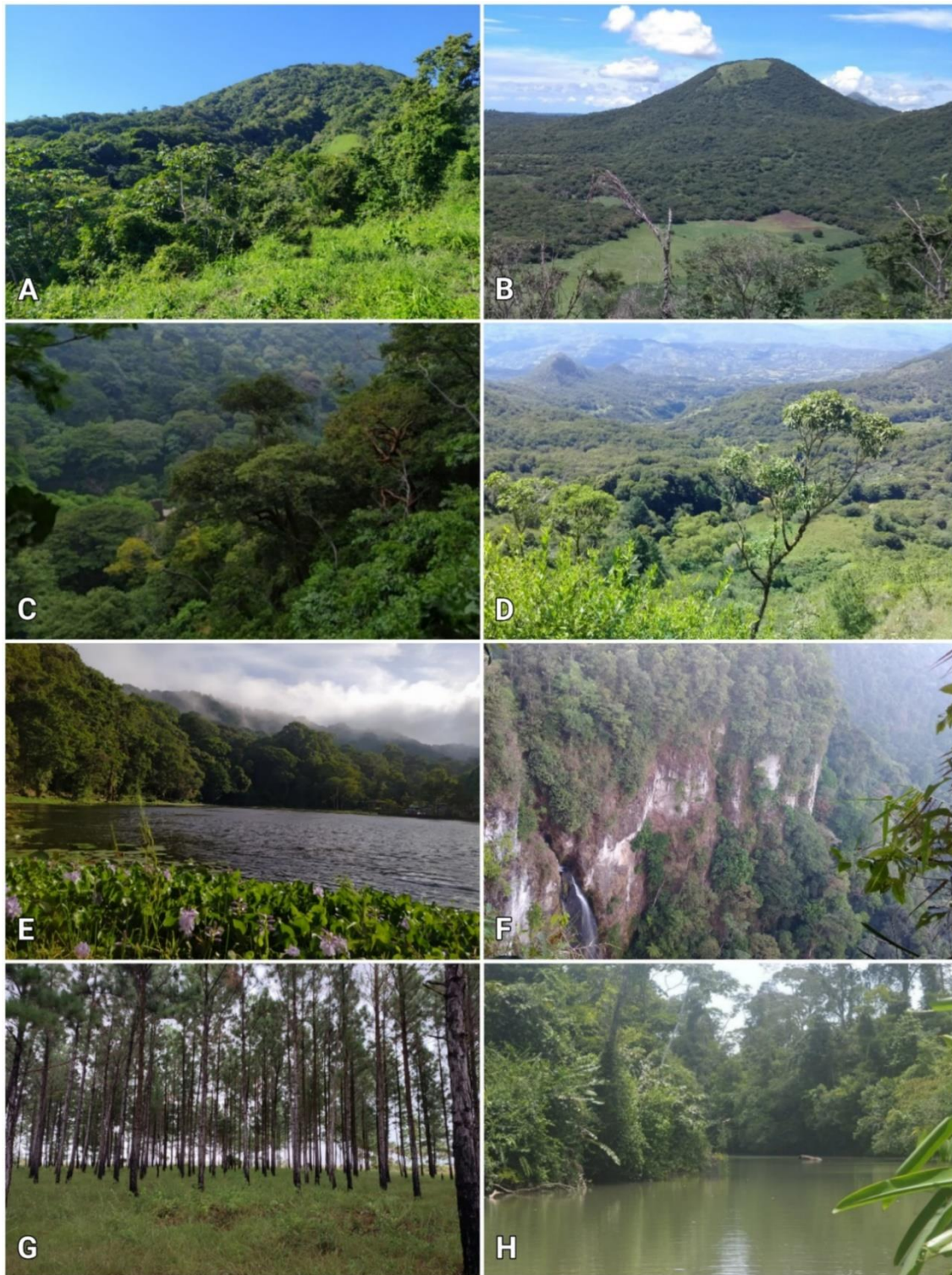


Figure 8. Habitats in Nicaragua. A: Volcán Chonco, Chinandega. B: Volcán Momotombo, León. C: Reserva Ecológica El Bajo, Managua. D: Reserva Natural Tisey-La Estanzuela, Estelí. E: Selva Negra, Matagalpa. F: Reserva Natural Macizo de Peñas Blancas, Jinotega. G: Reserva Natural Llanos de Karawala, Atlántico Sur. H: Refugio Bartola, Río San Juan (photos by Ricardo Soza).

Nomenclatural, taxonomic, and records revision

For compiling a comprehensive compendium of fungi of Nicaragua, data were gathered from extensive literature searches of checklists, published papers, databases (Mycportal, HerBI, HerbKew, GBIF, Consortium of Lichen Herbaria), the internet, thesis, scientific articles, books, and citations found in literature.

In order to verify current taxonomic status and check synonyms for each of the scientific names included in the checklist, specialized literature and the online fungal nomenclature databases MycoBank (www.mycobank.org) and Index Fungorum (www.indexfungorum.org) were consulted. The system of classification used here follows that of Lücking *et al.* (2017), Rojas & Stephenson (2021), Wijayawardene *et al.* (2022), Wang *et al.* (2023), Zhou *et al.* (2023), Vizzini *et al.* (2024), and Spirin *et al.* (2024). The phyla, class, orders, families, genera, and species are listed alphabetically. Fungal taxa whose taxonomy is not well established are placed under *incertae sedis*. Myxomycota and Oomycota are included in this checklist. Although these belong to a different kingdom (Protista), these have been included and treated as a fungal-like group. These pseudofungi share common characteristics with true fungi.

RESULTS

Fungi of Nicaragua (10 phyla, 29 classes, 102 orders, 277 families, 652 genera, 1603 species, 26 endemic species).
A total of 56 species of fungi are new records for Nicaragua.

Kingdom FUNGI Bartling

Phylum ASCOMYCOTA Caval.-Sm.

Subphylum PEZIZOMYCOTINA O.E. Erikss. & Winka

Class ARTHONIOMYCETES O.E. Erikss. & Winka

Order ARTHONIALES Henssen ex D. Hawksw. & O.E. Erikss.
(4 families, 12 genera, 34 species)

Family ARTHONIACEAE Rchb. ex Rchb.
(6 genera, 16 species)

Genus *Arthonia* Ach. (9 species)

Arthonia accolens Stirt.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1056, Breuss 2023: 134).

Arthonia circumtincta Müll. Arg.

Lichenized, corticolous. Rivas (Breuss 2002: 1056, Breuss 2023: 134).

Arthonia complanata Fée

Lichenized, corticolous. Río San Juan (Breuss 2002: 1056, Breuss 2023: 134).

Arthonia cyanea Müll. Arg.

Lichenized, foliicolous. Rivas (Breuss 2002: 1056, Breuss 2023: 134).

Arthonia interducta Nyl.

Lichenized, corticolous. Río San Juan (Nylander 1863: 98, Willey 1890: 23, Hue 1892: 261, Imshaug 1956: 81, Pfister & Sayre 1978: 123, Breuss 2002: 1054, Breuss 2023: 134).

Arthonia meizomorpha Nyl.

Lichenized, corticolous. Río San Juan (Breuss, 2002: 1056, Breuss 2023: 134).

Arthonia microsperma Nyl.

Lichenized, corticolous. Río San Juan (Consortium of Lichen Herbaria 2024).

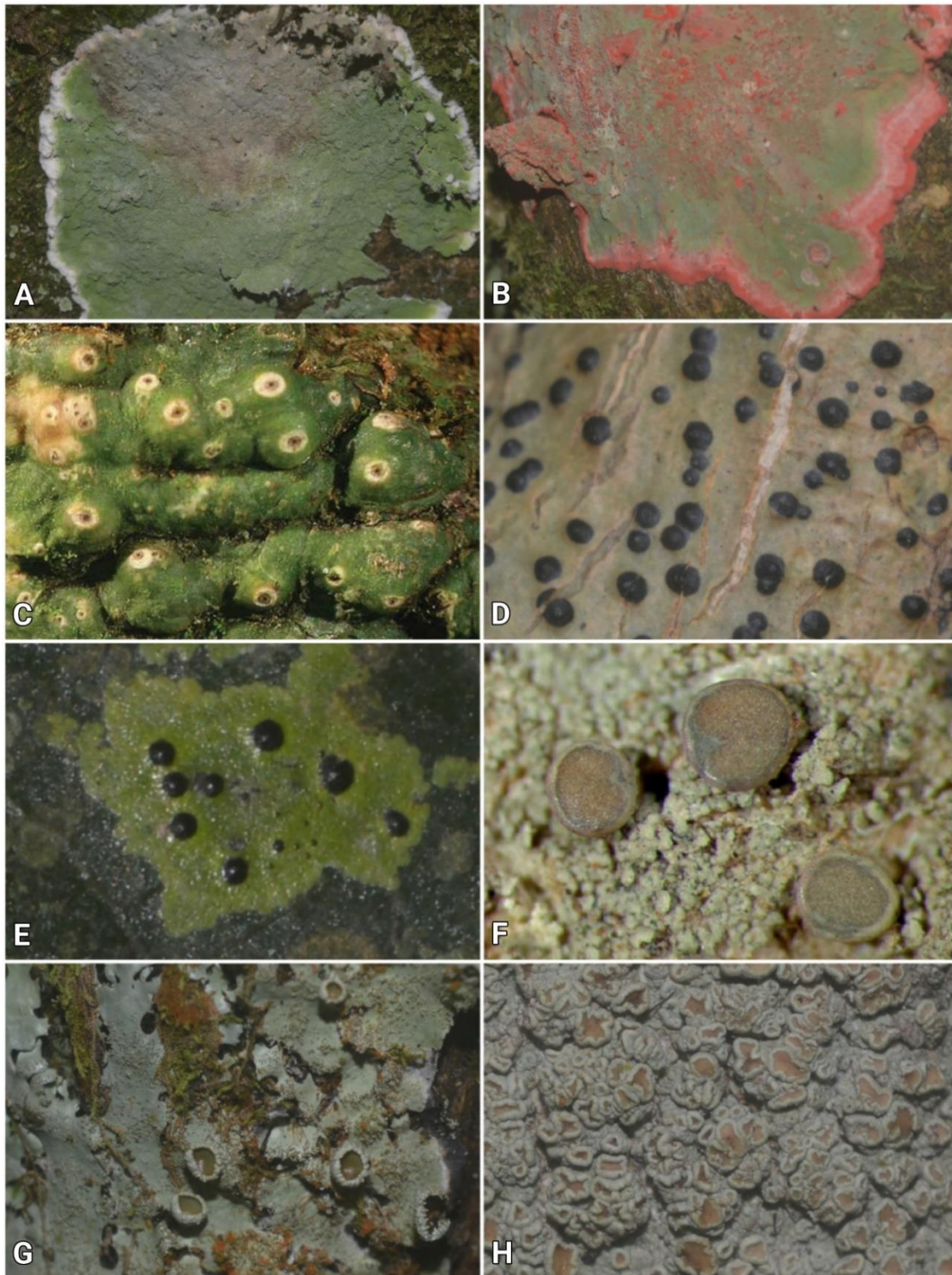


Figure 9. A: *Cryptothecia* sp., Jinotega. B: *Herpothallon rubrocinctum*, Jinotega. C: *Astrothelium nicaraguense*, Granada. D: *Pyrenula* sp., Jinotega. E: *Pyrenula* sp., Jinotega. F: *Malmidea cineracea*, Río San Juan. G: *Parmotrema* sp., Jinotega. H: *Lecanora* sp., Jinotega (photos by Ricardo Soza, C and F by Robert Lücking).

***Arthonia pseudopegraphina* Matzer**

Lichenized, lichenicolous. Río San Juan (Breuss 2002: 1056, Breuss 2023: 134).

***Arthonia taediosa* Nyl.**

Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 123).

Genus *Coniocarpon* DC. (1 species)

***Coniocarpon cinnabarinum* DC.**

Lichenized, corticolous. Rivas (Pfister & Sayre 1978: 123, as *Arthonia cinnabarina*).

Genus *Cryptothecia* Stirt. (2 species)

***Cryptothecia phlyctidiformis* (Müll. Arg.) D.D. Awasthi & Singh**

Lichenized, corticolous. Rivas (Breuss 2011: 106, Breuss 2023: 136).

***Cryptothecia subnidulans* Stirt.**

Lichenized, corticolous. Rivas (Breuss 2002: 1057, Breuss 2023: 136).

Genus *Helicobolomyces* Matzer (1 species)

***Helicobolomyces cinnabarinula* (Müll. Arg.) Wijayaw. & Ertz**

Lichenized, lichenicolous. Río San Juan (Breuss 2002: 1056, as *Arthonia cinnabarinula*, Breuss 2023: 137).

Genus *Herpothallon* Tobler (2 species)

***Herpothallon roseocinctum* (Fr.) Aptroot, Lücking & G. Thor**

Lichenized, corticolous. Rivas (Breuss 2002: 1057, as *Chiodecton roseocinctum*, Breuss 2023: 137).

***Herpothallon rubrocinctum* (Ehrenb.) Aptroot, Lücking & G. Thor**

Lichenized, corticolous. Jinotega, Managua (Consortium of Lichen Herbaria 2024).

Genus *Tylophoron* Nyl. ex Stizenb. (1 species)

***Tylophoron moderatum* Nyl.**

Lichenized, corticolous. Matagalpa (Tibell 1996: 70, Breuss 2002: 1055, Breuss 2023: 141).

Family LECANOGRAPHACEAE Ertz, Tehler, G. Thor & Frisch
(1 genus, 1 species)

Genus *Lecanographa* Egea & Torrente (1 species)

Lecanographa lyncea (Sm.) Egea & Torrente
Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 137).

Family OPEGRAPHACEAE Körb. ex Stizenb.
(1 genus, 4 species)

Genus *Opegrapha* Ach. (4 species)

Opegrapha microsperma Müll. Arg.
Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 138).

Opegrapha millegrana Redinger
Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 138).

Opegrapha primana Nyl.
Lichenized, corticolous. Río San Juan (Nylander 1863: 375, Hue 1892: 251, Imshaug 1956: 82, Pfister & Sayre 1978: 122, Breuss 2002: 1054, Breuss 2023: 138).

Opegrapha vulgata (Ach.) Ach.
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 122).

Family ROCCELLACEAE Chevall.
(3 genera, 11 species)

Genus *Cresponea* Egea & Torrente (2 species)

Cresponea flava (Vain.) Egea & Torrente
Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 136).

Cresponea melanocheiloides (Vain.) Egea & Torrente
Lichenized, corticolous. Rivas (Breuss 2002: 1057, Breuss 2023: 136).

Genus *Dichosporidium* Pat. (1 species)

Dichosporidium nigrocinctum (Ehrenb.) G. Thor
Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1057, Breuss 2023: 136).

Genus *Mazosia* A. Massal. (8 species)

Mazosia dispersa (J. Hedrick) R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia longispora Lücking & Matzer

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia melanophthalma (Müll. Arg.) R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia paupercula (Müll. Arg.) R. Sant.

Lichenized, foliicolous. Rivas (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia phyllosema (Nyl.) Zahlbr.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia pilosa Kalb & Vězda

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia praemorsa (Stirt.) R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Mazosia rotula (Mont.) A. Massal.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

ARTHONIALES genus *incertae sedis*

Genus *Bactrospora* A. Massal. (2 species)

Bactrospora incana Egea & Torrente

Lichenized, corticolous. Granada (Neuwirth 2017: 66, fig. 1a-b; Breuss 2023: 134).

Bactrospora myriadea (Fée) Egea & Torrente

Lichenized, corticolous. Chinandega (Egea & Torrente 1993: 245, Breuss 2002: 1054, Breuss 2023: 134).

Class CANDELARIOMYCETES Voglmayr & Jaklitsch

Subclass CANDELARIOMYCETIDAE Timdal & M. Westb.

Order CANDELARIALES Miadl., Lutzoni & Lumbsch.
(1 family, 1 genus, 1 species)

Family CANDELARIACEAE Hakul.
(1 genus, 1 species)

Genus *Candelaria* A. Massal. (1 species)

Candelaria concolor (Dicks.) Stein.

Lichenized, corticolous and saxicolous. Estelí, Matagalpa (Consortium of Lichen Herbaria 2024).

Class DOTHIDEOMYCETES O.E. Erikss. & Winka

Subclass DOTHIDEOMYCETIDAE P.M. Kirk, P.F. Cannon, J.C. David & Stalpers
ex C.L. Schoch, Spatafora, Crous & Shoemaker

Order CAPNODIALES Woron.
(1 family, 2 genera, 2 species)

Family CAPNODIACEAE (Sacc.) Höhn. Ex Theiss.
(2 genera, 2 species)

Genus *Capnodium* Mont. (1 species)

Capnodium coffeae Pat.

Coelomycetes, parasitic on *Coffea arabica*. Locality unknown (McGuire & Crandall 1967: 145).

Genus *Leptoxylum* Speg. (1 species)

Leptoxylum fumago (Woron.) Crous

Hyphomycetes, on *Citrus sinensis*, *Gossypium hirsutum*. Chinandega, León, Managua (Litzenberger & Stevenson 1957: 6, as *Fumago vagans*, McGuire & Crandall 1967: 134, as *F. vagans*, IPSA 2021: 6, as *F. vagans*, Delgado 2011: 14).

Order CLADOSPORIALES Abdollahz. & Crous
(1 family, 1 genus, 4 species)

Family CLADOSPORIACEAE Chalm. & R.G. Archibald
(1 genus, 4 species)

Genus *Cladosporium* Link (4 species)

Cladosporium cucumerinum Ellis & Arthur

Hyphomycetes, parasitic on *Citrullus lanatus*, *Cucumis melo*. Locality unknown (IPSA 2019: 5).

Cladosporium herbarum (Pers.) Link

Hyphomycetes, parasitic on *Carthamus tinctorius*, *Gladiolus hortulans*, *Mangifera indica*, *Paspalum notatum*, *Pinus caribaea*, *Triticum aestivum*, *Zea mays*. Atlántico Norte, Managua (Litzenberger & Stevenson 1957: 6, McGuire & Crandall 1967: 126, Wellman 1977: 435, González *et al.* 1985b: 127, Lenné 1990: 104, Delgado 2011: 10, IPSA 2021: 5).

Cladosporium oxysporum Berk. & M.A. Curtis

Hyphomycetes, saprobic on dead wood. León, Managua (Delgado 2011: 11).

Cladosporium tenuissimum Cooke

Hyphomycetes, parasitic on *Oryza* sp. Locality unknown (Delgado 2011: 11).

Order MYCOSPHAERELLALES (Nannf.) P.F. Cannon
(3 families, 17 genera, 52 species)

Family EXTREMACEAE Quaedvl. & Crous
(1 genus, 1 species)

Genus *Castanedospora* G. Delgado & A.N. Mill. (1 species)

Castanedospora pachyanthicola (Castañeda & W.B. Kendr.) G. Delgado & A. Mill.

Hyphomycetes, saprobic dead bamboo stems. Río San Juan (Delgado & Koukol 2016: 29, fig. 4c-d, as *Sporidesmium pachyanthicola*).

Family MYCOSPHAERELLACEAE Lindau
(14 genera, 49 species)

Genus *Asperisporium* Maubl. (1 species)

Asperisporium caricae (Speg.) Maubl.

Hyphomycetes, parasitic on *Carica papaya*. Managua (Litzenberger & Stevenson 1957: 5, McGuire & Crandall 1967: 129, Crous & Braun 2003: 105, Delgado 2011: 8, IPSA 2021: 4).

Genus *Catenulocercospora* C. Nakash., Videira & Crous (1 species)

Catenulocercospora fusimaculans (G.F. Atk.) C. Nakash., Videira & Crous

Hyphomycetes, parasitic on *Panicum maximum*. Jinotega, Managua (Litzenberger & Stevenson 1957: 13, as *Cercospora fusimaculans*, McGuire & Crandall 1967: 152, as *C. fusimaculans*, Lenné 1990: 92, as *C. fusimaculans*, Crous & Braun 2003: 192, as *Passalora fusimaculans*, Delgado 2011: 16, as *P. fusimaculans*).

Genus *Cercospora* Fresen. ex Fuckel (18 species)

Cercospora beticola Sacc.

Hyphomycetes, parasitic on *Beta vulgaris*. Managua, Masaya, Matagalpa (Litzenberger & Stevenson 1957: 4, McGuire & Crandall 1967: 143, Crous & Braun 2003: 79, Delgado 2011: 9, IPSA 2021: 5).

Cercospora canescens Ellis & G. Martin

Hyphomycetes, parasitic on *Glycine max*, *Lablab purpureus*, *Vigna unguiculata*. Chinandega, Managua (Litzenberger & Stevenson 1957: 8, Wellman 1977: 446, Delgado 2011: 9, IPSA 2021: 5).

Cercospora citrullina Cooke

Hyphomycetes, parasitic on *Citrullus lanatus*. Managua (Crous & Braun 2003: 125, Delgado 2011: 9).

Cercospora coffeicola Berk. & Cooke

Hyphomycetes, parasitic on *Coffea arabica*. Estelí, Managua (Litzenberger & Stevenson 1957: 6, McGuire & Crandall 1967: 145, Holliday 1980: 68, IICA 1993: 41, Delgado 2011: 9).

Cercospora gossypina Cooke

Hyphomycetes, parasitic on *Gossypium hirsutum*. Locality unknown (González *et al.* 1985b: 127, Delgado 2011: 9).

***Cercospora janseana* (Racib.) O. Constant.**

Hyphomycetes, parasitic on *Oryza sativa*. Managua (Litzenberger & Stevenson 1957: 13, as *Cercospora oryzae*, McGuire & Crandall 1967: 123, as *C. oryzae*, Delgado 2011: 10, as *C. oryzae*, IPSA 2021: 11, as *Sphaerulina oryzina*, Crous & Braun 2003: 231, as *Passalora janseana*).

***Cercospora kikuchii* T. Matsumoto & Tomoy.**

Hyphomycetes, parasitic on *Glycine max*. Jinotega, Managua (Litzenberger & Stevenson 1957: 9, IICA 1993: 41, Delgado 2011: 9).

***Cercospora lactucae-sativae* Sawada**

Hyphomycetes, parasitic on *Lactuca sativa*. Locality unknown (González *et al.* 1985b: 128, as *Cercospora longissima*, Delgado 2011: 10).

***Cercospora longipes* E.J. Butler**

Hyphomycetes, parasitic on *Saccharum officinarum*. Chinandega (Saumtally & Sullivan 2000: 77, Delgado 2011: 10).

***Cercospora physalidis* Ellis**

Hyphomycetes, parasitic on *Capsicum annuum*, *Ipomoea batatas*, *Nicotiana tabacum*, *Solanum tuberosum*. Managua (Litzenberger & Stevenson 1957: 5, as *Cercospora capsici*, McGuire & Crandall 1967: 138, as *C. capsici*, Delgado 2011: 9, as *C. capsici*, IPSA 2021: 5, as *C. capsici*, Litzenberger & Stevenson 1957: 13, as *C. nicotianae*, Wellman 1977: 261, as *C. nicotianae*, Delgado 2011: 10, as *C. nicotianae*, IPSA 2021: 5, as *C. nicotianae*, IPSA 2021: 5, as *C. solanicola*).

***Cercospora psoraleae-bituminosae* Săvul. & Sandu**

Hyphomycetes, parasitic on *Cyamopsis tetragonoloba*. Managua (Delgado 2011:10, as *Cercospora psoraleae*).

***Cercospora ricinella* Sacc. & Berl.**

Hyphomycetes, parasitic on *Ricinus communis*. Managua (Litzenberger & Stevenson, 1957: 15, Wellman 1977, Delgado 2011: 10).

***Cercospora sapindi* Obreg.-Bot.**

Hyphomycetes, parasitic on *Melicoccus bijugatus*. Locality unknown (Girard 1968: 81, Delgado 2011: 10).

***Cercospora sesami* Zimm.**

Hyphomycetes, parasitic on *Sesamum indicum*. Managua (Litzenberger & Stevenson 1957: 16, IICA 1993: 41, Delgado 2011: 10, IPSA 2021: 5).

***Cercospora sorghi* Ellis & Everh.**

Hyphomycetes, parasitic on *Sorghum bicolor*, *Zea mays*. Estelí (CATIE 1981: 13, Delgado 2011: 10, IPSA 2021: 5).

Cercospora zae-maydis Tehon & E.Y. Daniels

Hyphomycetes, parasitic on *Zea mays*. Chinandega (MyCoPortal 2024).

Cercospora zebrina Pass.

Hyphomycetes, parasitic on *Trifolium resupinatum*. Managua (Litzenberger & Stevenson 1957: 17, Wellman 1977: 432, Delgado 2011: 10).

Cercospora zinniae Ellis & G. Martin

Hyphomycetes, parasitic on *Zinnia* sp. Managua (Delgado 2011: 10).

Genus *Clarohilum* Videira & Crous (1 species)

Clarohilum henningsii (Allesch.) Videira & Crous

Hyphomycetes, parasitic on *Manihot esculenta*. Managua (Delgado 2011: 16, as *Passalora henningsii*, Litzenberger & Stevenson 1957: 12, as *Cercospora henningsii*, McGuire & Crandall 1967: 143, as *C. henningsii*, Delgado 2011: 9, as *C. henningsii*).

Genus *Dothistroma* Hulbary (1 species)

Dothistroma septosporum (Dorogin) M. Morelet

Coelomycetes, on *Pinus oocarpa*. Estelí (Evans 1984, as *Mycosphaerella pini*).

Genus *Lecanosticta* Syd. (2 species)

Lecanosticta guatemalensis Quaedvl. & Crous

Coelomycetes, parasitic on *Pinus oocarpa*, *Pinus tecunumanii*. Estelí, Matagalpa (Evans 1984, as *Lecanosticta acicola*, van der Nest *et al.* 2019: 6).

Lecanosticta jani van der Nest, M.J. Wingf. & I. Barnes

Coelomycetes, on *Pinus oocarpa*. Matagalpa (van der Nest *et al.* 2019: 18).

Genus *Nothopassalora* U. Braun, C. Nakash., Videira & Crous (1 species)

Nothopassalora personata (Berk. & M.A. Curtis) Braun, Nakash., Videira & Crous

Hyphomycetes, parasitic on *Arachis hypogaea*. Managua (Delgado 2011: 9, as *Cercospora arachidis*, Crous & Braun 2003: 317, *Passalora personata*, Litzenberger & Stevenson 1957: 4, as *Cercospora personata*, Delgado 2011: 10, as *C. personata*).

Genus *Passalora* Fr. (7 species)***Passalora arachidicola* (Hori) U. Braun**

Hyphomycetes, parasitic on *Arachis hypogaea*. Managua (IPSA 2021: 8, as *Mycosphaerella arachidis*, Litzenberger & Stevenson 1957: 4, as *Cercospora arachidicola*, Delgado 2011: 9, Crous & Braun 2003: 62).

***Passalora caladii* (F. Stevens) U. Braun & A. Sivapalan**

Hyphomycetes, parasitic on *Xanthosoma sagittifolium*. Locality unknown (IPSA 2021: 5, as *Cercospora verruculosa*).

***Passalora fulva* (Cooke) U. Braun & Crous**

Hyphomycetes, parasitic on *Solanum lycopersicum*. Locality unknown (McGuire & Crandall 1967: 136, as *Cladosporium fulvum*, Delgado 2011: 16).

***Passalora koepkei* (W. Krüger) U. Braun & Crous**

Hyphomycetes, on *Saccharum officinarum*. Locality unknown (IPSA 2021: 9).

***Passalora manihotis* (F. Stevens & Solheim) U. Braun & Crous**

Hyphomycetes, parasitic on *Manihot esculenta*. Managua (Litzenberger & Stevenson 1957: 12, as *Cercospora caribaea*, McGuire & Crandall 1967: 143, as *C. caribaea*, Delgado 2011: 16).

***Passalora sojina* (Hara) H.D. Shin & U. Braun**

Hyphomycetes, parasitic on *Glycine max*. Locality unknown (IPSA 2021: 9).

***Passalora vaginae* (W. Krüger) U. Braun & Crous**

Hyphomycetes, parasitic on *Saccharum officinarum*. Chinandega (Wellman 1977: 368, as *Cercospora vaginae*, Ricaud 2000: 161, as *Mycovellosiella vaginae*, Delgado 2011: 16, IPSA 2021: 9).

Genus *Pseudocercospora* Speg. (9 species)***Pseudocercospora bixae* (Allesch. & F. Noack) Crous, Alfenas & R.W. Barreto**

Hyphomycetes, parasitic on *Bixa orellana*. Locality unknown (IPSA 2021: 5, as *Cercospora bixae*).

***Pseudocercospora cruenta* (Sacc.) Deighton**

Hyphomycetes, on *Vigna unguiculata*. Managua (Litzenberger & Stevenson 1957: 18, as *Cercospora cruenta*, Wellman 1977: 432, as *C. cruenta*, Delgado 2011: 10).

***Pseudocercospora fijiensis* (M. Morelet) Deighton**

Hyphomycetes, parasitic on *Musa paradisiaca*. Locality unknown (Mourichon & Fullerton 1990: 214, as *Cercospora fijiensis*, IPSA 2021: 8, as *Mycosphaerella fijiensis*, Crous & Braun 2003: 185, Delgado 2011: 18).

***Pseudocercospora griseola* (Sacc.) Crous & U. Braun**

Hyphomycetes, on *Phaseolus vulgaris*. Estelí, Managua, Matagalpa (Litzenberger & Stevenson 1957: 15, as *Isariopsis griseola*, McGuire & Crandall 1967: 120 as *I. griseola*, CATIE 1981: 13, as *I. griseola*, Crous & Braun 2003: 205, as *Phaeoisariopsis griseola*, Crous et al. 2006: 169, as *P. griseola* f. *mesoamericana*, Delgado 2011: 18, IPSA 2021: 10).

***Pseudocercospora musae* (Zimm.) Deighton**

Hyphomycetes, parasitic on *Musa paradisiaca*. Managua (Litzenberger & Stevenson 1957: 15, as *Cercospora musae*, Mourichon & Fullerton 1990: 217, as *C. musae*, McGuire & Crandall 1967: 130, as *Mycosphaerella musicola*, IPSA 2021: 9, as *M. musicola*, Crous & Braun 2003: 286, Delgado 2011: 18).

***Pseudocercospora pini-densiflorae* (Hori & Nambu) Deighton**

Hyphomycetes, parasitic on *Pinus oocarpa*. Estelí (Evans 1984: 65, as *Cercoseptoria pini-densiflorae*, Crous & Braun 2003: 32, Delgado 2011: 18).

***Pseudocercospora purpurea* (Cooke) Deighton**

Hyphomycetes, on *Persea americana*. Managua (Litzenberger & Stevenson 1957: 14, as *C. purpurea*, McGuire & Crandall 1967: 131, as *C. purpurea*, Wellman 1977: 305, as *C. purpurea*, Crous & Braun 2003: 345, Delgado 2011: 18, IPSA 2021: 10).

***Pseudocercospora stizolobii* (Syd. & P. Syd.) Deighton**

Hyphomycetes, parasitic on *Mucuna pruriens*. Managua (Litzenberger & Stevenson 1957: 12, as *Cercospora stizolobii*, Delgado 2011: 18).

***Pseudocercospora ulei* (Henn.) B.T. Hora & Mizubuti**

Hyphomycetes, parasitic on *Hevea brasiliensis*. Atlántico Sur, Managua (Litzenberger & Stevenson 1957: 11, as *Dothidella ulei*, Spaulding 1961: 92, as *D. ulei*, McGuire & Crandall 1967: 150, as *D. ulei*, Holliday 1980: 263, as *Microcyclus ulei*, Gómez et al. 1990: 3, as *M. ulei*, Delgado 2011: 13, as *Fusicladium heveae*).

Genus *Ramularia* Unger (2 species)***Ramularia phaseoli* (O.A. Drumm.) Deighton**

Hyphomycetes, on *Phaseolus vulgaris*. Managua (Litzenberger & Stevenson 1957: 18, as *Ramularia phaseolina*, McGuire & Crandall 1967: 121, as *R. phaseolina*, Wellman 1977: 317, as *Ovularia phaseoli*, IPSA 2021: 9, as *Mycovellosiella phaseoli*, Deighton 1967: 123, Watson 1971: 66, Braun 1998: 148, Delgado 2011: 18).

***Ramularia pistiae* R.C. Fern. & R.W. Barreto**

Hyphomycetes, parasitic on *Pistia stratiote*. Managua (endemic) (Fernandes & Barreto 2005: 50, Delgado 2011: 18).

Genus *Ramulariopsis* Speg. (1 species)

***Ramulariopsis gossypii* (Speg.) U. Braun**

Hyphomycetes, parasitic on *Gossypium hirsutum*. Chinandega, Estelí, León, Managua, Matagalpa, Nueva Segovia, Rivas (Litzenberger & Stevenson 1957: 10, as *Ramularia areola*, McGuire & Crandall 1967: 147, as *Mycosphaerella areola*, IPSA 2021: 8, as *M. areola*, Braun 1998: 314, Delgado 2011: 19).

Genus *Ramulispora* Miura (1 species)

***Ramulispora sorghi* (Ellis & Everh.) L.S. Olive & Lefebvre**

Hyphomycetes, parasitic on *Sorghum bicolor*. Locality unknown (IPSA 2021: 11).

Genus *Scolecostigmina* U. Braun (1 species)

***Scolecostigmina palmivora* (Sacc.) Kamal**

Hyphomycetes, parasitic on *Cocos nucifera*. Locality unknown (McGuire & Crandall 1967: 132, as *Exosporium palmivorum*, IPSA 2021: 6, as *E. palmivorum*, Delgado 2011: 19, as *Stigmina palmivora*, Braun *et al.* 2014: 252).

Genus *Septoria* Sacc. (3 species)

***Septoria dianthi* (Alb. & Schwein.) Desm.**

Coelomycetes, parasitic on *Dianthus caryophyllus*. Matagalpa (Litzenberger & Stevenson 1957: 8).

***Septoria lycopersici* Speg.**

Coelomycetes, parasitic on *Solanum lycopersicum*. Locality unknown (McGuire & Crandall 1967: 137, IPSA 2021: 11).

***Septoria vignae* Henn.**

Coelomycetes, parasitic on *Vigna* sp. Locality unknown (Lin & Rios 1985: 202).

**Family TERATOSPHAERIACEAE Crous & U. Braun
(2 genera, 2 species)**

Genus *Acrodontium* de Hoog (1 species)

***Acrodontium crateriforme* (J.F.H. Beyma) de Hoog**

Hyphomycetes, parasitic on *Pinus oocarpa*. Locality unknown (Delgado 2011: 5).

Genus *Stenella* Syd. (1 species)

***Stenella citri-grisea* (F.E. Fisher) Sivan.**

Hyphomycetes, parasitic on *Citrus aurantiifolia*. Locality unknown (IPSA 2021: 8, as *Mycosphaerella citri*).

Order MYRIANGIALES Starbäck
(2 families, 2 genera, 8 species)

Family ELSINOACEAE Höhn. ex Sacc. & Trotter
(1 genus, 7 species)

Genus *Elsinoë* Racib. (7 species)

Elsinoë brasiliensis Bitanc. & Jenkins (con o sin acento ?)

Parasitic on *Manihot esculenta*. Locality unknown (IPSA 2021: 6).

Elsinoë fawcettii Bitanc. & Jenkins

Parasitic on *Citrus aurantium*, *C. limon*, *C. sinensis*. Managua (Litzenberger & Stevenson 1957: 6, as *Sphaceloma fawcettii*, McGuire & Crandall 1967: 134, IPSA 2021: 6).

Elsinoë mangiferae Bitanc. & Jenkins

Parasitic on *Mangifera indica*. Locality unknown (McGuire & Crandall 1967: 131, Girard 1967: 76, Girard 1968: 81).

Elsinoë perseae (Jenkins) Rossman & W.C. Allen

Parasitic on *Persea americana*. Locality unknown (McGuire & Crandall 1967: 132, as *Sphaceloma perseae*, IPSA 2021: 11, as *S. perseae*).

Elsinoë phaseoli Jenkins

Parasitic on *Phaseolus lunatus*. Masaya (MyCoPortal 2024).

Elsinoë poinsettiae (Jenkins & Rühle) Rossman & W.C. Allen

Parasitic on *Euphorbia pulcherrima*. Managua (Litzenberger & Stevenson 1957:9, as *Sphaceloma poinsettiae*).

Elsinoë psidii (Bitanc. & Jenkins) Romberg & W.C. Allen

Parasitic on *Psidium guajava*. Locality unknown (González *et al.* 1985b: 127, as *Sphaceloma psidii*, IPSA 2021: 11, as *S. psidii*).

Family MYRIANGIACEAE Nyl.
(1 genus, 1 species)

Genus *Myriangium* Mont. & Berk. (1 species)

Myriangium duriaei Mont. & Berk.

Saprobic on dead wood. Río San Juan (Smith 1893: 405).

Subclass PLEOSPOROMYCETIDAE C.L. Schoch, Spatafora, Crous & Shoemaker

Order HYSTERIALES Lindau
(1 family, 2 genera, 2 species)

Family HYSTERIACEAE Chevall.
(2 genera, 2 species)

Genus *Psiloglonium* Höhn. (1 species)

Psiloglonium clavisporum (Seaver) E. Boehm, C.L. Schoch & Spatafora
Saprobic on dead wood. Río San Juan (Seaver 1925: 4, as *Glonium clavisporum*,
Seaver & Chardon 1926: 77, as *G. clavisporum*, Lohman 1937: 61, pl. 1, fig. 5,
pl. 2, fig. 14, as *G. clavisporum*).

Genus *Rhytidhysterion* Speg. (1 species)

Rhytidhysterion rufulum (Spreng.) Speg.
Saprobic on dead wood. León (MyCoPortal 2024).

Order PLEOSPORALES Luttrell ex M.E. Barr
(17 families, 32 genera, 69 species)

Family ASTROSPHAERIACEAE Phook. & K.D. Hyde
(2 genera, 2 species)

Genus *Astrosphaeriella* Syd. & P. Syd. (1 species)

Astrosphaeriella uberina (Mont.) K.D. Hyde & J. Fröhl.
Saprobic on dead wood. Rivas (Smith 1893: 402, as *Melanopsamma shimekii*, Barr
1990: 27, as *Javaria shimekii*, Hyde & Fröhlich 1998: 118, fig. 172-173, 178).
Notes: *M. shimekii* was originally described from Ometepe Island, Rivas by Smith
(1893), later transferred to the genus *Javaria* by Barr (1990). According to Hyde
& Fröhlich (1998) *J. shimekii* is a synonym of *A. uberina*. *Javaria* is an accepted
synonym of *Astrosphaerella* (Zhang *et al.* 2012).

Genus *Mycopepon* Boise (1 species)

Mycopepon smithii (Ellis & Everh.) Boise
Saprobic on dead wood. Río San Juan (Smith 1893: 404).

Family CORYNESPORASCACEAE Sivan.
(1 genus, 3 species)

Genus *Corynespora* Güssow (3 species)

Corynespora cassiicola (Berk. & M.A. Curtis) C.T. Wei

Hyphomycetes, saprobic on dead wood or parasitic on *Carica papaya*, *Glycine max*, *Phaseolus vulgaris*. Carazo, León, Managua (Litzenberger & Stevenson 1957: 9, as *Helminthosporium vignicola*, Wellman 1977: 166, González *et al.* 1985b: 128, Delgado 2011: 11, INTA 2013: 27, Marcenaro & Valkonen 2016: 7, IPSA 2021: 6).

Corynespora sesameum (Sacc.) Goto

Hyphomycetes, parasitic on *Sesamum indicum*. Managua (Delgado 2011: 14, as *Helminthosporium sesameum*).

Corynespora torulosa (Syd. & P. Syd.) Crous

Hyphomycetes, parasitic on *Musa paradisiaca*. Masaya (Litzenberger & Stevenson 1957: 131, as *Helminthosporium torulosum*, McGuire & Crandall 1967:130, as *H. torulosum*, Delgado 2011: 12, as *Deightoniella torulosa*, IPSA 2021: 6).

Family DICTYOSPORIACEAE Boonmee & K.D. Hyde
(1 genus, 1 species)

Genus *Dendryphiella* Bubák & Ranoj. (1 species)

Dendryphiella vinosa (Berk. & M.A. Curtis) Reisinger

Hyphomycetes, saprobic on dead wood. Managua (Delgado 2011: 12, fig. 4).

Family DIDYMELLACEAE Gruyter, Aveskamp & Verkley
(7 genera, 10 species)

Genus *Allophoma* Q. Chen & L. Cai (2 species)

Allophoma nicaraguensis Q. Chen & L. Cai

Coelomycetes, parasitic on *Coffea arabica*. Matagalpa (endemic) (de Gruyter & Noordeloos 1992: 82, fig. 7, as *Phoma costaricensis*, Boerema *et al.* 2004: 68, as *P. costaricensis*, Aveskamp *et al.* 2010: 42, as *P. costaricensis*, Chen *et al.* 2015: 162, fig. 4a-j).

Allophoma tropica (R. Schneid. & Boerema) Q. Chen & L. Cai

Coelomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (HerbIMI 2024).

Genus *Ascochyta* Lib. (3 species)

***Ascochyta malvicola* Sacc.**

Coelomycetes, parasitic on *Gossypium hirsutum*. Locality unknown (González et al. 1985b: 127, as *Ascochyta gossypii*).

***Ascochyta phaseolorum* Sacc.**

Coelomycetes, on *Glycine max*. Chinandega, Managua, Masaya (Perera 1985: 16).

***Ascochyta sorghi* Sacc.**

Coelomycetes, on *Sorghum bicolor*. Locality unknown (González et al. 1985b: 129).

Genus *Boeremia* Aveskamp, Gruyter & Verkley (1 species)

***Boeremia exigua* (Desm.) Aveskamp, Gruyter & Verkley**

Coelomycetes, on *Pinus oocarpa*. Estelí (HerbIMI 2024).

Genus *Didymella* Sacc. ex D. Sacc. (1 species)

***Didymella maydis* (Arny & R.R. Nelson) Q. Chen & L. Cai**

Coelomycetes, on *Zea mays*. Locality unknown (IPSA 2021: 9, as *Mycosphaerella zae-maydis*).

Genus *Epicoccum* Link (1 species)

***Epicoccum sorghinum* (Sacc.) Aveskamp, Gruyter & Verkley**

Coelomycetes, on *Saccharum officinarum*. Locality unknown (Girard 1968: 81, as *Phoma insidiosa*, IICA 1993: 41, as *Phoma sorghina*, Croft 2000b: 167, as *Leptosphaeria sacchari*, IPSA 2021: 7, as *L. sacchari*).

Genus *Phoma* Sacc. (1 species)

***Phoma costaricensis* Echandi**

Coelomycetes, on *Coffea arabica*. Estelí (Catie 1982: 172, IPSA 2021: 9).

Genus *Stagonosporopsis* Died. (1 species)

***Stagonosporopsis caricae* (Syd. & P. Syd.) Aveskamp, Gruyter & Verkley**

Coelomycetes, on *Carica papaya*. Locality unknown (IPSA 2021: 9, as *Phoma caricae-papayae*).

Family DIDYMOSPHAERIACEAE Munk
(1 genus, 3 species)

Genus *Pseudopithomyces* Ariyaw. & K.D. Hyde (3 species)

Pseudopithomyces chartarum (Berk. & M.A. Curtis) J.F. Li, Ariyaw. & K.D. Hyde
Hyphomycetes, saprobic on *Cocos nucifera*. León, Managua (Delgado 2011: 17, as
Pithomyces chartarum).

Pseudopithomyces maydicus (Sacc.) J.F. Li, Ariyaw. & K.D. Hyde
Hyphomycetes, on dead wood. León (Delgado 2011: 17, as *Pithomyces maydicus*).

Pseudopithomyces sacchari (Speg.) Ariyaw. & K.D. Hyde
Hyphomycetes, saprobic on *Cocos nucifera*. León, Managua (Delgado 2011: 17, as
Pithomyces sacchari).

Family LEPTOSPHAERIACEAE M.E. Barr
(1 genus, 1 species)

Genus *Sphaerellopsis* Cooke (1 species)

Sphaerellopsis filum (Biv.) B. Sutton
Coelomycetes, parasitic on *Cynodon dactylon*. Locality unknown (Pfister & Sayre
1978: 48, as *Hendersonia uredinicola*, González *et al.* 1985b: 129, as *Darluca*
filum).

Family MASSARINACEAE Munk
(2 genera, 3 species)

Genus *Helminthosporium* Link (2 species)

Helminthosporium sesami I. Miyake
Hyphomycetes, on *Sesamum indicum*. Managua (Delgado 2011: 12, as *Drechslera*
sesami, Litzenberger & Stevenson 1957: 16, Watson 1971: 84, Wellman 1977:
389, IPSA 2021: 7).

Helminthosporium solani Durieu & Mont.
Hyphomycetes, on *Solanum tuberosum*. Locality unknown (IPSA 2021: 7).

Genus *Stagonospora* (Sacc.) Sacc. (1 species)

Stagonospora sacchari T. Lo & L. Ling
Coelomycetes, on *Saccharum officinarum*. Locality unknown (IPSA 2021: 11).

Family MELANOMMATACEAE G. Winter
(1 genus, 3 species)

Genus *Byssosphaeria* Cooke (1 species)

Byssosphaeria diffusa Cooke

Saprobic on dead wood. Río San Juan (Smith 1893: 400, as *Herpotrichia diffusa*).

Byssosphaeria rhodomphala (Berk.) Cooke

Saprobic on bark. Rivas (Ellis & Everhart 1896: 70, as *Nectria chaetostroma*, Seaver 1909: 195, as *Macbridella chaetostroma*, Samuels 1973: 1276, as *Herpotrichia rhodosticta*, Samuels 1976: 8, as *H. rhodosticta*).

Byssosphaeria schiedermayriana (Fuckel) M.E. Barr

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Family MYCOPORACEAE Zahlbr.
(1 genus, 1 species)

Genus *Mycoporum* Flot. ex Nyl. (1 species)

Mycoporum lacteum (Ach.) R.C. Harris

Lichenized, corticolous. Río San Juan (Breuss 2002: 1062, as *Tomasellia lactea*, Breuss 2023: 138).

Family NEOCAMAROSPORIACEAE Wanas., Wijayaw., Crous & K.D. Hyde
(1 genus, 1 species)

Genus *Neocamarosporium* Crous & M.J. Wingf. (1 species)

Neocamarosporium betae (Berl.) Ariyaw. & K.D. Hyde

Coelomycetes, parasitic on *Beta vulgaris*. Locality unknown (IPSA 2021: 10, as *Pleospora betae*).

Family PERICONIACEAE Nann.
(1 genus, 1 species)

Genus *Periconia* Tode (1 species)

Periconia byssoides Pers.

Hyphomycetes, saprobic on dead wood. León (Delgado 2011: 17, fig. 7).

Family PHAEOSPHAERIACEAE M.E. Barr
(1 genus, 1 species)

Genus *Phaeosphaeria* I. Miyake (1 species)

Phaeosphaeria oryzae I. Miyake

Parasitic on *Oryza sativa*. Managua (McGuire & Crandall 1967: 124, as *Phaeoseptoria oryzae* and *Leptosphaeria oryzina*, Litzenberger & Stevenson 1957: 13, Phookamsak *et al.* 2014: 203).

Family PLEOSPORACEAE Nitschke
(6 genera, 32 species)

Genus *Alternaria* Nees (15 species)

Alternaria alternata (Fr.) Keissl.

Hyphomycetes, parasitic on *Glycine max*, *Solanum tuberosum*. Chinandega, Jinotega, Managua (Perera 1985: 16, Delgado 2011: 5, Méndez-Úbeda *et al.* 2017: 104, IPSA 2021: 3).

Alternaria atra (Preuss) Woudenb. & Crous

Hyphomycetes, saprobic. Locality unknown (Delgado 2011: 20, as *Ulocladium atrum*).

Alternaria brassicae (Berk.) Sacc.

Hyphomycetes, parasitic on *Brassica oleracea*, *B. pekinensis*, *B. rapa*. Estelí, Managua, Matagalpa (Litzenberger & Stevenson 1957: 5, McGuire & Crandall 1967: 138, CATIE 1981: 13, Verma & Saharan 1993: 75, Saharan 1994: 11, Crous & Braun 2003: 86, Delgado 2011: 5, IPSA 2021: 4).

Alternaria chartarum Preuss

Hyphomycetes, parasitic on *Leucaena leucocephala*. Locality unknown (Delgado 2011: 20, as *Ulocladium chartarum*).

Alternaria citri Ellis & N. Pierce

Hyphomycetes, parasitic on *Citrus limon*, *C. sinensis*. Locality unknown (McGuire & Crandall 1967: 133, Delgado 2011: 5, IPSA 2021: 4).

Alternaria cucumerina (Ellis & Everh.) J.A. Elliott

Hyphomycetes, parasitic on *Citrullus lanatus*. *Cucumis vulgaris*. Locality unknown (IPSA 2021: 4).

Alternaria dauci (J.G. Kühn) J.W. Groves & Skolko

Hyphomycetes, parasitic on *Daucus carota*. Matagalpa (Litzenberger & Stevenson 1957: 8, McGuire & Crandall 1967: 137, Delgado 2011: 5, IPSA 2021: 4).

Alternaria flagelloidea (G.F. Atk.) Luttr.

Hyphomycetes, parasitic on *Panicum maximum*. Locality unknown (Wellman 1977: 296, as *Helminthosporium flagelloideum*, Delgado 2011: 5).

Alternaria macrospora Zimm.

Hyphomycetes, parasitic on *Gossypium hirsutum*. Managua (Litzenberger & Stevenson 1957: 9, McGuire & Crandall 1967: 146, Delgado 2011: 6, IPSA 2021: 4).

Alternaria padwickii (Ganguly) M.B. Ellis

Hyphomycetes, parasitic on *Oryza sativa*. Locality unknown (? Localidad no especificada ¿) (IICA 1993: 41, IPSA 2021: 12, as *Trichoconiella padwickii*).

Alternaria porri (Ellis) Cif.

Hyphomycetes, parasitic on *Allium cepa*. Managua (Litzenberger & Stevenson 1957: 4, McGuire & Crandall 1967: 139, Wellman 1977: 8, CATIE 1981: 13, Delgado 2011: 6, IPSA 2021: 4).

Alternaria ricini (Yoshii) Hansf.

Hyphomycetes, parasitic on *Ricinus communis*. Managua (Delgado 2011: 6).

Alternaria sesami (E. Kawam.) Mohanty & Behera

Hyphomycetes, parasitic on *Sesamum indicum*. Locality unknown (IICA 1993: 14, IPSA 2021: 4).

Alternaria solani Sorauer

Hyphomycetes, parasitic on *Solanum lycopersicum*, *S. tuberosum*. Estelí, Jinotega, Managua, Matagalpa (Litzenberger & Stevenson 1957: 12, McGuire & Crandall 1967: 125, Berlin & Eitrem 2005: 16, Delgado 2011: 6, IPSA 2021: 4).

Alternaria tenuissima (Kunze) Wiltshire

Hyphomycetes, on dead wood or parasitic on *Oryza* sp. León (Delgado 2011: 6).

Genus *Bipolaris* Shoemaker (9 species)

Bipolaris bicolor (Mitra) Shoemaker

Hyphomycetes, saprobic on dead wood. León (Delgado 2011: 8).

Bipolaris cookei (Sacc.) Shoemaker

Hyphomycetes, parasitic on *Sorghum bicolor*. Locality unknown (IPSA 2021: 4).

Bipolaris cynodontis (Marignoni) Shoemaker

Hyphomycetes, parasitic on *Cynodon dactylon*. Managua (Litzenberger & Stevenson 1957: 8, as *Helminthosporium cynodontis*, McGuire & Crandall 1967: 151, as *H. cynodontis*, Lenné 1990: 42, as *Cochliobolus cynodontis*, Delgado 2011: 8).

Bipolaris gigantea (S. Ito) B. Lane, Stricker, M.E. Sm., S.L. Flory & Harmon
Hyphomycetes, parasitic on *Cynodon dactylon*. Managua (Litzenberger & Stevenson 1957: 8, as *Helminthosporium giganteum*, McGuire & Crandall 1967: 151, as *H. giganteum*, Delgado 2011: 12, as *Drechslera gigantea*).

Bipolaris heveae (Petch) Arx
Hyphomycetes, on *Hevea brasiliensis*. Managua (Litzenberger & Stevenson 1957: 11, as *Helminthosporium heveae*, Spaulding 1961: 134, as *H. heveae*, McGuire & Crandall 1967: 150, as *H. heveae*, Delgado 2011: 8, IPSA 2021: 4).

Bipolaris maydis (Y. Nisik. & C. Miyake) Shoemaker
Hyphomycetes, parasitic on *Zea mays*. Chinandega, Estelí, Jinotega, Managua (Litzenberger & Stevenson 1957: 18, as *Helminthosporium maydis*, McGuire & Crandall 1967: 118, as *H. maydis*, IPSA 2021: 5, as *Cochliobolus heterostrophus*, Delgado 2011: 8).

Bipolaris oryzae (Breda de Haan) Shoemaker
Hyphomycetes, parasitic on *Oryza sativa*. Chinandega, Managua, Rivas (Litzenberger & Stevenson 1957: 13, as *Helminthosporium oryzae*, McGuire & Crandall 1967: 123, as *H. oryzae*, Wellman 1977, as *H. oryzae*, IPSA 2021: 5, as *Cochliobolus miyabeanus*, Delgado 2011: 8).

Bipolaris sacchari (E.J. Butler) Shoemaker
Hyphomycetes, parasitic on *Saccharum officinarum*. Chinandega, Managua (Litzenberger & Stevenson 1957: 16, as *Helminthosporium sacchari*, McGuire & Crandall 1967: 127, as *Cercospora sacchari*, McGuire & Crandall 1967: 128, as *H. sacchari*, Delgado 2011: 9, IPSA 2021: 4).

Bipolaris sorokiniana (Sorokin) Shoemaker
Hyphomycetes, parasitic on *Chloris gayana*, *C. virgata*, *Triticum aestivum*. Carazo (Litzenberger & Stevenson 1957: 6, as *Helminthosporium sativum*, McGuire & Crandall 1967: 126, as *H. sativum*, Lenné 1990: 32, as *Cochliobolus sativus*, IPSA 2021: 5, as *C. sativus*, Delgado 2011: 9).

Genus *Curvularia* Boedijn (5 species)

Curvularia cymbopogonis (C.W. Dodge) J.W. Groves & Skolko
Hyphomycetes, on *Hyparrhenia rufa*. Locality unknown (Delgado 2011: 11).

Curvularia hawaiiensis (Bugnic. ex M.B. Ellis) Manamgoda, L. Cai & K.D. Hyde
Hyphomycetes, on dead leaf. León (Delgado 2011: 8, as *Bipolaris hawaiiensis*).

***Curvularia lunata* (Wakker) Boedijn**

Hyphomycetes, saprobic on dead leaves of *Cocos nucifera*, *Roystonea* sp. and parasitic on *Oryza sativa*, *Zea mays*, *Zoysia matrella*. León, Managua (Litzenberger & Stevenson 1957: 19, McGuire & Crandall 1967: 123, Wellman 1977: 462, Delgado 2011: 11, IPSA 2021: 5, as *Cochliobolus lunatus*).

***Curvularia ravenelii* (M.A. Curtis ex Berk.) Manamgoda, L. Cai & K.D. Hyde**

Hyphomycetes, parasitic on *Sporobolus indicus*. Jinotega (McCain & Hennen 1986: 120, as *Helminthosporium ravenelii*).

***Curvularia verruculosa* Tandon & Bilgrami ex M.B. Ellis**

Hyphomycetes, parasitic on *Pinus oocarpa*. Estelí (Delgado 2011: 11).

Genus *Exserohilum* K.J. Leonard & Suggs (1 species)

***Exserohilum turcicum* (Pass.) K.J. Leonard & Suggs**

Hyphomycetes, on *Sorghum bicolor*, *Zea mays*. Chinandega, Estelí, Jinotega, Managua, Matagalpa (Litzenberger & Stevenson 1957: 17, as *Helminthosporium turcicum*, McGuire & Crandall 1967: 118, as *H. turcicum*, CATIE 1981: 13, as *H. turcicum*, IPSA 2021: 11, as *Setosphaeria turcica*, Delgado 2011: 12).

Genus *Pleospora* Rabenh. ex Ces. & De Not. (1 species)

***Pleospora herbarum* (Pers.) Rabenh.**

Saprobic on wood or parasitic on *Allium cepa*. Locality unknown (IPSA 2021: 12).

Genus *Pyrenophora* Fr. (1 species)

***Pyrenophora tritici-repentis* (Died.) Drechsler**

Hyphomycetes, parasitic on *Triticum aestivum*. Locality unknown (Delgado 2011: 12, as *Drechslera tritici-repentis*).

**Family ROUSSOELLACEAE Jian K. Liu, Phook., D.Q. Dai & K.D. Hyde
(1 genus, 1 species)**

Genus *Immotthia* M.E. Barr (1 species)

***Immotthia atrograna* (Cooke & Ellis) M.E. Barr**

Saprobic on dead wood. Río San Juan (Smith 1893: 409, as *Hypoxylon insidens*).

**Family SPORORMIACEAE Munk
(1 genus, 1 species)**

Genus *Sporormiella* Ellis & Everh. (1 species)

***Sporormiella minima* (Auersw.) S.I. Ahmed & Cain**

Parasitic on *Pinus caribaea*. Atlántico Norte (HerbIMI 2024).

Family TETRAPLOSPHAERIACEAE Kaz. Tanaka & K. Hiray
(1 genus, 1 species)

Genus *Tetraploa* Berk. & Broome (1 species)

Tetraploa aristata Berk. & Broome

Hyphomycetes, saprobic on dead leaves. León (Delgado 2011: 19).

Family TORULACEAE Corda
(1 genus, 2 species)

Genus *Torula* Pers. (2 species)

Torula herbarum (Pers.) Link

Hyphomycetes, saprobic on dead wood. León (Delgado 2011: 19).

Torula verrucospora (P. Mathur & G. Singh) B. Sutton

Hyphomycetes, saprobic on dead wood. León, Managua (Delgado 2011: 19, as *Torula herbarum* f. *quaternella*).

PLEOSPORALES genera *incertae sedis*

Genus *Ostropella* (Sacc.) Höhn. (1 species)

Ostropella albocincta (Berk. & M.A. Curtis) Höhn.

Saprobic on dead wood. Río San Juan (Smith 1893: 403, as *Lophiostoma ovinum*, Huhndorf 1993: 491, fig. 2).

Notes: *L. ovinum* was originally described by Smith (1893) based on collections from El Castillo, Río San Juan. According to Huhndorf (1993) *L. ovinum* is a synonym of *O. albocincta*.

Genus *Repetophragma* Subram. (1 species)

Repetophragma cubense (Mercado) J. Mena

Hyphomycetes, on bark. Río San Juan (Delgado & Koukol 2016: 27, fig. 3l-m).

DOTHIDEOMYCETES orders *incertae sedis*

Order ASTERINALES M.E. Barr ex D. Hawksw. & O.E. Erikss.
(2 families, 2 genera, 2 species)

Family ASTERINACEAE Hansf.
(1 genus, 1 species)

Genus *Asterina* Lév. (1 species)

***Asterina bullata* Berk. & M.A. Curtis**

Epiphyte on dead leaves. Río San Juan (Berkeley & Curtis 1860: 129, Ellis & Everhart 1892: 44).

Notes: *Asterina bullata* was originally described by Berkeley & Curtis (1860) based on a specimen collected by C. Wright from Río San Juan. Theissen (1912) would review the original material and determine that it belongs to the genus *Calothyrium*, however, the taxonomic status of this genus is not clear. According to Wijayawardene *et al.* (2017) *Calothyrium* is a synonym of *Asterinella*.

Family LEMBOSIACEAE Hosag.
(1 genus, 1 species)

Genus *Lembosia* Lév (1 species)

***Lembosia tenella* Lév.**

Epiphyte on *Coccoloba uvifera*. Río San Juan (Theissen 1913: 426, Stevens & Ryan 1939: 89, Hongsanan *et al.* 2014: 27, fig. 17a-g).

Order BOTRYOSPHAERIALES C.L. Schoch, Crous & Shoemaker
(3 families, 4 genera, 11 species)

Family BOTRYOSPHAERIACEAE Theiss. & H. Syd.
(2 genera, 2 species)

Genus *Lasiodiplodia* Ellis & Everh. (1 species)

***Lasiodiplodia theobromae* (Pat.) Griffon & Maubl.**

Coelomycetes, parasitic on *Agave* sp., *Ananas comosus*, *Citrullus lanatus*, *Citrus* sp., *Cocos nucifera*, *Cucumis melo*, *Daucus carota*, *Gossypium hirsutum*, *Glycine max*, *Mangifera indica*, *Manihot esculenta*, *Persea americana*, *Phaseolus vulgaris*, *Pinus oocarpa*, *Sesamum indicum*, *Theobroma cacao*. Boaco, Carazo, Chinandega, Estelí, Managua, Matagalpa (McGuire & Crandall 1967: 134, as *Diplodia cococarpa*, McGuire & Crandall 1967: 148, as *Diplodia natalensis*, Litzenberger & Stevenson 1957: 9, as *Diplodia gossypina*, McGuire & Crandall 1967: 146, as *D. gossypina*, Litzenberger & Stevenson 1957: 17, as *Diplodia theobromae*, McGuire & Crandall 1967: 148, as *D. theobromae*, Wellman 1977:

389, as *Botryodiplodia theobromae*, CATIE 1981: 13, as *B. theobromae*, IICA 1993: 41, as *B. theobromae*, Rees 1988: 321, INTA 2013: 17, Marcenaro & Valkonen 2016: 7, IPSA 2021: 7).

Genus *Macrophomina* Petr. (1 species)

***Macrophomina phaseolina* (Tassi) Goid.**

Coelomycetes, parasitic on *Arachis hypogaea*, *Glycine max*, *Gossypium hirsutum*, *Helianthus annuus*, *Phaseolus vulgaris*, *Sesamum indicum*, *Sorghum bicolor*, *Zea mays*. Boaco, Carazo, Chinandega, Managua, Matagalpa (Litzenberger & Stevenson 1957: 11, McGuire & Crandall 1967: 118, Perera 1985: 16, González *et al.* 1985b: 127, IICA 1993: 41, INTA 2013: 32, Marcenaro & Valkonen 2016: 7, IPSA 2021: 8).

**Family PHYLLOSTICTACEAE Fr.
(1 genus, 8 species)**

Genus *Phyllosticta* Pers. (8 species)

***Phyllosticta batatas* (Thüm.) Cooke**

Coelomycetes, on *Ipomoea batatas*. Managua (Litzenberger & Stevenson 1957: 11, McGuire & Crandall 1967: 144, IPSA 2021: 9, as *Phomopsis ipomoeae-batatas*).

***Phyllosticta bixina* E. Young**

Coelomycetes, parasitic on *Bixa orellana*. Locality unknown (IPSA 2021: 9).

***Phyllosticta coffeicola* Delacr.**

Coelomycetes, parasitic on *Coffea arabica*. Locality unknown (GBIF 2025).

***Phyllosticta gossypina* Ellis & G. Martin**

Coelomycetes, parasitic on *Gossypium hirsutum*. Locality unknown (González *et al.* 1985b: 127, IPSA 2021: 9).

***Phyllosticta musae* F. Stevens & E. Young**

Coelomycetes, parasitic on *Musa paradisiaca*. Locality unknown (IPSA 2021: 9).

***Phyllosticta nicotianae* Ellis & Everh.**

Coelomycetes, parasitic on *Nicotiana tabacum*. Locality unknown (IPSA 2021: 9).

***Phyllosticta oryzae* Hori**

Coelomycetes, parasitic on *Oryza sativa*. Locality unknown (McGuire & Crandall 1967: 124, IPSA 2021: 9).

***Phyllosticta phaseolina* Sacc.**

Coelomycetes, parasitic on *Phaseolus vulgaris*. Managua (Litzenberger & Stevenson 1957: 14, McGuire & Crandall 1967: 121, IPSA 2021: 9).

**Family PLANISTROMELLACEAE M.E. Barr
(1 genus, 1 species)**

Genus *Kellermania* Ellis & Everh. (1 species)

Kellermania macrospora (Durieu & Mont.) Minnis & A.H. Kenn.
Coelomycetes, parasitic on *Agave* sp. Estelí, Managua (Litzenberger & Stevenson 1957: 4, as *Dothidella parryi*, CATIE 1981: 13, as *D. parryi*).

**Order EREMITHALLALES Lücking & Lumbsch
(1 family, 1 genus, 1 species)**

**Family MELASPILEACEAE W. Watson
(1 genus, 1 species)**

Genus *Melaspilea* Nyl. (1 species)

Melaspilea urceolata (Fr.) Ertz & Diederich
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 124, as *Melaspilea arthonioides*).

**Order KIRSCHSTEINIOTHELIALES Hern.-Restr., R.F. Castañeda, Gené & Crous
(1 genus, 2 species)**

KIRSCHSTEINIOTHELIALES genus *incertae sedis*

Genus *Brachysporiella* Bat. (2 species)

***Brachysporiella gayana* Bat.**

Hyphomycetes, on dead wood. Río San Juan (Delgado & Koukol 2016: 19, fig. 3g).

Brachysporiella setosa (Berk. & M.A. Curtis) M.B. Ellis

Hyphomycetes, saprobic on dead wood. Río San Juan (Delgado & Koukol 2016: 26, fig. 3h, as *Monotosporella setosa*).

Order MONOBLASTIALES Lücking, M.P. Nelsen & K.D. Hyde
(1 family, 1 genus, 1 species)

Family MONOBLASTIACEAE Walt. Watson
(1 genus, 1 species)

Genus *Anisomeridium* (Müll. Arg.) M. Choisy (1 species)

Anisomeridium foliicola R. Sant. & Tibell
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1056, Breuss 2023: 134).

Order PARMULARIALES D.Q. Dai & K.D. Hyde
(1 family, 1 genus, 1 species)

Family PARMULARIACEAE E. Müll. & Arx ex M.E. Barr
(1 genus, 1 species)

Genus *Hysterostomella* Speg. (1 species)

Hysterostomella tetracerae (F. Rudolphi) Höhn.
Parasitic on *Tetracera volubilis*. León (MyCoPortal 2024).

Order STRIGULALES Lücking, M.P. Nelsen & K.D. Hyde
(1 family, 4 genera, 9 species)

Family STRIGULACEAE Zahlbr.
(4 genera, 9 species)

Genus *Phyllobathelium* (Müll. Arg.) Müll. Arg. (2 species)

Phyllobathelium firmum (Stirt.) Vězda
Lichenized, foliicolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Phyllobathelium nigrum R. Sant. & Tibell
Lichenized, foliicolous. Río San Juan, Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Genus *Puiggariella* Speg. (1 species)

Puiggariella nemathora (Mont.) S.H. Jiang, Lücking & J.C. Wei
Lichenized, foliicolous. Masaya, Río San Juan, Rivas (Santesson 1952: 149, as *Strigula nemathora*, Imshaug 1956: 80, as *S. nemathora*, Breuss 2002: 1062, as *S. nemathora*, Breuss 2023: 140).

Genus *Racoplaca* Fée (1 species)

Racoplaca maculata (Cooke & Masee) S.H. Jiang, Lücking & J.C. Wei
Lichenized, foliicolous. Rivas (Breuss 2002: 1062, as *Strigula maculata*, Breuss 2023: 140).

Genus *Strigula* Fr. (5 species)

Strigula antillarum (Fée) Müll. Arg.
Lichenized, foliicolous. Rivas (Breuss 2002: 1062, Breuss 2023: 141).

Strigula concreta (Fée) R. Sant.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Strigula nitidula Mont.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Strigula smaragdula Fr.
Lichenized, foliicolous. Managua, Masaya, Río San Juan (Santesson 1952: 165, as *Strigula elegans*, Pfister & Sayre 1978: 126, as *Strigula feei*, Breuss 2002: 1055, Breuss 2023: 141).

Strigula viridis (Lücking) R.C. Harris
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1060, as *Phylloporis viridis*, Breuss 2023: 139, as *P. viridis*).

**Order TRYPETHELIALES Lücking Aptroot & Sipman.
(1 family, 5 genera, 19 species)**

**Family TRYPETHELIACEAE Zenker
(5 genera, 19 species)**

Genus *Astrothelium* Eschw. (12 species)

Astrothelium aeneum (Eschw.) Aptroot & Lücking
Lichenized, corticolous. León (Breuss 2002: 1062, as *Trypethelium aeneum*, Breuss 2023: 134).

Astrothelium bicolor (Taylor) Aptroot & Lücking
Lichenized, corticolous. Río San Juan (Aptroot & Lücking 2016: 847, Breuss 2023: 134).

Astrothelium cecidiogenum (Aptroot & Lücking) Aptroot & Lücking
Lichenized, corticolous. Locality unknown (Nelsen *et al.* 2014: 991, *Cryptothelium cecidiogenum*).

***Astrothelium diplocarpum* Nyl.**

Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 743, Breuss 2023: 134).

***Astrothelium floridanum* Zahlbr. ex M. Choisy**

Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 743, Breuss 2023: 134).

***Astrothelium megaspermum* (Mont.) Aptroot & Lücking**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1059, as *Laurera megasperma*, Breuss 2023: 134).

***Astrothelium nicaraguense* Lücking, M.P. Nelsen & T. Orozco**

Lichenized, corticolous. Granada (Lücking *et al.* 2016a: 649, fig. 4e-f, Lücking *et al.* 2016b: 745, fig. 35k, 39d, Breuss 2023: 134).

***Astrothelium nitidiusculum* (Nyl.) Aptroot & Lücking**

Lichenized, corticolous. Locality unknown (Nelsen *et al.* 2014: 992 as *Trypethelium nitidiusculum*).

***Astrothelium phlyctaena* (Fée) Aptroot & Lücking**

Lichenized, corticolous. Rivas (Breuss 2002: 1062, as *Trypethelium ochroleucum*, Aptroot & Lücking 2016: 877, Breuss 2023: 134).

***Astrothelium robustum* Müll. Arg.**

Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 745, Breuss 2023: 134).

***Astrothelium subscoria* Flakus & Aptroot**

Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 745, Breuss 2023: 134).

***Astrothelium variolosum* (Ach.) Müll. Arg.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1062, as *Trypethelium variolosum*, Breuss 2023: 134).

Genus *Constrictolumina* Lücking, M.P. Nelsen & Aptroot (1 species)

***Constrictolumina cinchonae* (Ach.) Lücking, M.P. Nelsen & Aptroot**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1056, as *Arthopyrenia cinchonae*, Breuss 2023: 136).

Genus *Pseudobogoriella* Lücking, R. Miranda & Aptroot (2 species)

Pseudobogoriella hemisphaerica (Müll. Arg.) Lücking, R. Miranda & Aptroot
Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 746, as *Bogoriella hemisphaerica*, Breuss 2023: 134, as *B. hemisphaerica*).

Pseudobogoriella miculiformis (Müll. Arg.) Lücking, R. Miranda & Aptroot
Lichenized, corticolous. Locality unknown (Lücking *et al.* 2016b: 746, as *Bogoriella miculiformis*, Breuss 2023: 134, as *B. miculiformis*).

Genus *Pseudopyrenula* Müll. Arg. (3 species)

Pseudopyrenula cerei Vain.
Lichenized, corticolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

Pseudopyrenula diluta (Fée) Müll. Arg.
Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1061, Breuss 2023: 140).

Pseudopyrenula subnudata Müll. Arg.
Lichenized, corticolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

Genus *Trypethelium* Sprengel (1 species)

Trypethelium eluteriae Spreng.
Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1062, Aptroot & Lücking 2016: 964, Breuss 2023: 141).

**Order VENTURIALES Y. Zhang, C.L. Schoch & K.D. Hyde
(2 families, 2 genera, 2 species)**

**Family SYMPOVENTURIAACEAE Y. Zhang *ter*, C.L. Schoch & K.D. Hyde
(1 genus, 1 species)**

Genus *Ochroconis* de Hoog & Arx (1 species)

Ochroconis humicola (G.L. Barron & L.V. Busch) de Hoog & Arx
Hyphomycetes, saprobic on dead wood. Managua (Delgado 2011: 15).

**Family VENTURIAACEAE E. Müll. & Arx ex M.E. Barr
(1 genus, 1 species)**

Genus *Dimeriella* Speg. (1 species)

Dimeriella sacchari (Breda de Haan) Hansf. ex E.V. Abbott
Parasitic on *Saccharum officinarum*. Locality unknown (IPSA 2021: 6).

DOTHIDEOMYCETES families *incertae sedis*

Family DYSRHYNCHACEAE Boonmee & K.D. Hyde
(1 genus, 1 species)

Genus *Dysrhynchis* Clem. (1 species)

Dysrhynchis oligotricha (Mont.) Arx

Parasitic on *Olyra latifolia*. Granada (Hansford 1941: 6, *Neohoehnelia oligotricha*).

Family PARODIELLACEAE Theiss. & H. Syd. ex M.E. Barr
(1 genus, 1 species)

Genus *Parodiella* Speg. (1 species)

Parodiella perisporioides Speg.

Parasitic on *Crotalaria retusa*. Managua (MyCoPortal 2024).

Family PHAEODIMERIELLACEAE Boonmee, Mapook & K.D. Hyde
(1 genus, 1 species)

Genus *Phaeodimeriella* Speg. (1 species)

Phaeodimeriella trinitensis R.E.D. Baker & W.T. Dale

Epiphytic on *Guazuma ulmifolia*. Río San Juan (Berkeley 1868: 373, as *Asterina pelliculosa*).

Notes: According to Theissen (1912) in the Kew herbarium there are more than 19 collections from various parts of the world under the name of *A. pelliculosa* (including those from Nicaragua) the majority designated by M. J. Berkeley. Several specimens were examined by Theissen, who determined that the specimens collected by C. Wright from Cuba, and probably also those collected from Nicaragua, are more closely related to *A. solanicola* than to *A. pelliculosa*. Although the Nicaraguan specimens were not examined by Theissen, I will tentatively use the name *A. solanicola* for this catalogue. Baker & Dale (1951) concluded that *A. solanicola* is a synonym of *P. trinitensis*.

Class EUROTOMYCETES Tehler ex O.E. Eriksson & K. Winka

Subclass CHAETOTHYRIOMYCETIDAE Doweld

**Order CHAETOTHYRIALES M.E. Barr
(1 family, 1 genus, 1 species)**

**Family COCCODINIACEAE Höhn. ex O.E. Erikss.
(1 genus, 1 species)**

Genus *Limacinula* Höhn. (1 species)

Limacinula musicola (Bat.) D.R. Reynolds
Saprobic on living leaves. Chontales (MyCoPortal 2024).

**Order PYRENULALES Fink ex D. Hawksw. & O.E. Erikss.
(1 family, 2 genera, 18 species)**

**Family PYRENULACEAE Rabenh.
(2 genera, 18 species)**

Genus *Anthracothecium* Hampe ex A. Massal. (1 species)

Anthracothecium prasinum (Eschw.) R.C. Harris
Lichenized, corticolous. Rivas (Breuss 2002: 1056, as *Anthracothecium praelustre*, Breuss 2023: 134, as *A. praelustre*).

Genus *Pyrenula* Ach. (17 species).

Pyrenula aggregata (Fée) Fée
Lichenized, corticolous. Río San Juan (Nylander 1863: 120, as *Verrucaria aggregata*, Hue 1892: 289, as *V. aggregata*, Imshaug 1956: 77, as *Melanotheca aggregata*, Pfister & Sayre 1978: 125, as *V. aggregata*, Breuss 2002: 1054, as *M. aggregata*, Breuss 2023: 138, as *M. aggregata*).

Pyrenula bahiana Malme
Lichenized, corticolous. Rivas (Breuss 2002: 1061, Breuss 2023: 140).

Pyrenula chilensis (Fée) R.C. Harris
Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 140).

Pyrenula chlorospila (Nyl.) Arnold
Lichenized, corticolous. Rivas (Breuss 2002: 1061, as *Pyrenula* cf. *maculata*, Breuss 2023: 140, as *Pyrenula* cf. *maculata*).

***Pyrenula cocoes* Müll. Arg.**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1061, Breuss 2023: 140).

***Pyrenula confinis* (Nyl.) R.C. Harris**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1061, as *Pyrenula corticata*, Breuss 2011: 108, Breuss 2023: 140, as *P. corticata*, Breuss 2023: 140).

***Pyrenula duplicans* (Nyl.) Aptroot**

Lichenized, corticolous. Río San Juan, Rivas (Nylander 1863: 116, as *Verrucaria duplicans*, Hue 1892: 288, as *V. duplicans*, Imshaug 1956: 76, as *Anthracotheicum duplicans*, Pfister & Sayre 1978: 125, as *V. duplicans*, Breuss 2002: 1054, as *A. duplicans*, Breuss 2002: 1056, as *Anthracotheicum interponens*, Breuss 2023: 140).

***Pyrenula globifera* (Eschw.) Aptroot**

Lichenized, corticolous. Rivas (Breuss 2011: 108, Breuss 2023: 140).

***Pyrenula leucostoma* Ach.**

Lichenized, corticolous. Rivas (Breuss 2002: 1056, as *Anthracotheicum libricola*, Breuss 2023: 134, as *A. libricola*).

***Pyrenula mamillana* (Ach.) Trevis.**

Lichenized, corticolous. Río San Juan (Smith 1893: 402, as *Melanomma subconicum*).

Notes: *M. subconicum* was originally described by Smith (1893) based on collections from El Castillo, Río San Juan. According to Aptroot (2012) *M. subconicum* is a synonym of *P. mamillana*.

***Pyrenula microcarpa* Müll. Arg.**

Lichenized, corticolous. Río San Juan (Breuss 2011: 108, Breuss 2023: 140).

***Pyrenula micromma* (Mont.) Trevis.**

Lichenized, corticolous. Rivas (Breuss 2011: 108, Breuss 2023: 140).

***Pyrenula ochraceoflava* (Nyl.) R.C. Harris**

Lichenized, corticolous. León, Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

***Pyrenula pyrenuloides* (Mont.) R.C. Harris**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1061, Breuss 2023: 140).

***Pyrenula quassiicola* Fée**

Lichenized, corticolous. Rivas (Breuss 2011: 108, Breuss 2023: 140).

***Pyrenula schiffneri* (Zahlbr.) Aptroot**

Lichenized, corticolous. Rivas (Breuss 2002: 1061, as *Pyrenula falsaria*, Breuss 2023: 140).

***Pyrenula thelomorpha* Tuck.**

Lichenized, corticolous. Río San Juan (Breuss 2011: 108, Breuss 2023: 140).

**Order VERRUCARIALES Mattick ex D. Hawksw. & O.E. Erikss.
(1 family, 2 genera, 2 species)**

**Family VERRUCARIACEAE Zenker
(2 genera, 2 species)**

Genus *Dermatocarpon* Eschw. (1 species)

***Dermatocarpon miniatum* (L.) W. Mann**

Lichenized, saxicolous. Jinotega (Consortium of Lichen Herbaria 2024).

Genus *Phylloblastia* Vain. (1 species)

***Phylloblastia amazonica* Kalb & Vězda**

Lichenized, foliicolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Subclass EUROTOMYCETIDAE Geiser & Lutzoni

**Order EUROTIALES G.W. Martin ex Benny & Kimbr.
(2 families, 3 genera, 36 species)**

**Family ASPERGILLACEAE Link
(2 genera, 33 species)**

Genus *Aspergillus* P. Micheli ex Haller (17 species)

***Aspergillus awamori* Nakaz.**

Hyphomycetes, saprobic isolated from soil. Chontales (Plata-Oviedo 2021: 133)

***Aspergillus caesiellus* Saito**

Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 6).

***Aspergillus candidus* Link**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*. Chinandega, León, Estelí, Jinotega, Matagalpa, Nueva Segovia, Rivas (Carcache 1999: 41).

***Aspergillus flavus* Link**

Hyphomycetes, parasitic on *Arachis hypogaea*, *Coffea arabica*, *Phaseolus vulgaris*, *Pinus caribaea*. Atlántico Norte, Estelí, Matagalpa (Delgado 2011: 6, INTA 2013: 35, Marcenaro & Valkonen 2016: 7, IPSA 2021: 4).

***Aspergillus fumigatus* Fresen.**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*, parasitic on *Pinus caribaea*. Atlántico Norte, Chinandega, Matagalpa, Nueva Segovia (Carcache 1999: 45, Delgado 2011: 6).

***Aspergillus glaucus* (L.) Link**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*. Chinandega, Matagalpa, Nueva Segovia (Carcache 1999: 45).

***Aspergillus nidulans* (Eidam) G. Winter**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*. Chinandega, Matagalpa, Nueva Segovia (Carcache 1999: 45).

***Aspergillus niger* Tiegh.**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*, parasitic on *Allium cepa*, *Arachis hypogaea*, *Coffea arabica*, *Phaseolus vulgaris*, isolated from soil. Chinandega, León, Estelí, Jinotega, Matagalpa, Nueva Segovia, Rivas (Litzenberger & Stevenson 1957: 4, McGuire & Crandall 1967: 139, Carcache 1999: 41, Delgado 2011: 6, INTA 2013: 38, Martínez-García 2019: 16, fig. 2a-d, IPSA 2021: 5).

***Aspergillus ochraceus* K. Wilh.**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*, and parasitic on *Hypothenemus hampei*. Chinandega, León, Estelí, Jinotega, Matagalpa, Nueva Segovia, Rivas (Carcache 1999: 41, Vega *et al.* 1999: 11, Delgado 2011: 6).

***Aspergillus oryzae* (Ahlb.) Cohn**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*, and saprobic isolated from soil. Chinandega, León, Estelí, Matagalpa, Nueva Segovia (Carcache 1999: 41, Martínez-García 2019: 16, fig. 1a-d).

***Aspergillus parasiticus* Speare**

Hyphomycetes, isolated from grains of *Phaseolus vulgaris*. Chinandega, Matagalpa, Nueva Segovia (Carcache 1999: 41).

***Aspergillus spinosus* Kozak.**

Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Fennell 1965: 256, as *Aspergillus fischeri* var. *spinosus*, Samson *et al.* 2007: 193, fig. 34a-m, as *Neosartorya spinosa*, Delgado 2011: 6, as *A. fischeri* var. *spinosus*).

Aspergillus sydowii (Bainier & Sartory) Thom & Church
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 7).

Aspergillus tamarii Kita
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 7).

Aspergillus terreus Thom
Hyphomycetes, isolated from grains of *Phaseolus vulgaris*. Chinandega, Matagalpa, Nueva Segovia (Carcache 1999: 41).

Aspergillus ustus (Bainier) Thom & Church
Hyphomycetes, isolated from grains of *Phaseolus vulgaris*, and parasitic on *Pinus oocarpa*. Chinandega, León, Estelí, Jinotega, Matagalpa, Nueva Segovia, Rivas (Carcache 1999: 41, Delgado 2011: 8).

Aspergillus wentii Wehmer
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 8).

Genus *Penicillium* Link (16 species)

Penicillium atosanguineum B.X. Dong
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 16).

Penicillium brefeldianum B.O. Dodge
Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Thom 1949: 141, fig. 39a-f, Delgado 2011: 17, as *Penicillium dodgei*).

Penicillium brevicompactum Dierckx
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 16).

Penicillium chrysogenum Thom
Hyphomycetes, isolated from soil. León (Martínez-García 2019: 16, fig. 3a-d).

Penicillium citrinum Thom
Hyphomycetes, parasitic on *Phaseolus vulgaris*, *Pinus caribaea*. Atlántico Norte, Boaco, Carazo, Estelí, Matagalpa (Delgado 2011: 16, INTA 2013: 35, Marcenaro & Valkonen 2016: 7).

Penicillium dierckxii Biourge
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 16).

Penicillium digitatum (Pers.) Sacc.
Hyphomycetes, parasitic on *Citrus* sp. Locality unknown (IPSA 2021: 9).

Penicillium expansum Link
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 16).

Penicillium gladioli L. McCulloch & Thom

Hyphomycetes, saprobic from soil, and parasitic on ornamental plants. Locality unknown (Raper & Thom 1949: 263, fig. 70a, as *Penicillium asperum*, Delgado 2011: 16, IPSA 2021: 9).

Penicillium janthinellum Biourge

Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Thom 1949: 299, fig. 81a-b, Delgado 2011: 17, as *Penicillium simplicissimum*, in part).

Penicillium javanicum J.F.H. Beyma

Hyphomycetes, isolated from cocoa. Locality unknown (Delgado 2011: 16, as *Penicillium indonesiae*).

Penicillium parvum Raper & Fennell

Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Fennell 1948: 508, fig. 1a-d, Raper & Thom 1949: 138, fig. 37a-f, Delgado 2011: 17, as *Penicillium papuanum*).

Penicillium pulvillum Turfitt

Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Thom 1949: 277, fig. 74a-b, Delgado 2011: 17, as *Penicillium simplicissimum*, in part).

Penicillium simplicissimum (Oudem.) Thom

Hyphomycetes, on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 17, in part).

Penicillium verrucosum Dierckx

Hyphomycetes, on *Pinus maximinoi*. Locality unknown (Delgado 2011: 17).

Penicillium viridicatum Westling

Hyphomycetes, parasitic on *Pinus maximinoi*. Locality unknown (Delgado 2011: 16, as *Penicillium aurantiogriseum* var. *viridicatum*).

**Family TRICHOCOMACEAE E. Fisch.
(1 genus, 3 species)**

Genus *Talaromyces* C.R. Benj. (3 species)

Talaromyces flavus (Klöcker) Stolk & Samson

Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Thom 1949: 580, as *Penicillium vermiculatum*, Delgado 2011: 17, as *P. vermiculatum*).

Talaromyces rugulosus (Thom) Samson, N. Yilmaz, Frisvad & Seifert

Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 17, as *Penicillium rugulosum*).

Talaromyces variabilis (Sopp) Samson, N. Yilmaz, Frisvad & Seifert
Hyphomycetes, parasitic on *Pinus caribaea*. Atlántico Norte (Delgado 2011: 17, as *Penicillium variabile*).

Subclass MYCOCALICIOMYCETIDAE Tibell

Order MYCOCALICIALES Tibell & Wedin
(1 family, 1 genus, 1 species)

Family MYCOCALICIACEAE A.F.W. Schmidt
(1 genus, 1 species)

Genus *Sphinctrina* Fr. (1 species)

Sphinctrina tubaeformis A. Massal.
Lichenized, corticolous. Matagalpa (Tibell 1996: 61, Breuss 2002: 1055, Breuss 2023: 141).

Subclass SCLEROCOCCOMYCETIDAE Réblová, Unter. & W. Gams

Order SCLEROCOCCALES Réblová, Unter. & W. Gams
(1 family, 1 genus, 1 species)

Family DACTYLOSPORACEAE Bellem. & Hafellner
(1 genus, 1 species)

Genus *Fusichalara* S. Hughes & Nag Raj (1 species)

Fusichalara novae-zelandiae S. Hughes & Nag Raj
Hyphomycetes, on bark. Río San Juan (Delgado & Koukol 2016: 25, fig. 3f).

Class LABOULBENIOMYCETES Engler

Order LABOULBENIALES Lindau
(2 families, 10 genera, 19 species)

Family CERATOMYCETACEAE S. Colla
(2 genera, 2 species)

Genus *Autoicomycetes* Thaxt. (1 species)

Autoicomycetes falcatus (Thaxt.) I.I. Tav.
Parasitic on *Tropisternus* sp. Atlántico Norte (MyCoPortal 2024).

Genus *Ceratomyces* Thaxt. (1 species)

Ceratomyces ansatus Thaxt.

Parasitic on *Tropisternus* sp. Atlántico Norte (Kaishian 2021: 16624).

Family LABOULBENIACEAE G. Winter
(8 genera, 17 species)

Genus *Chaetomyces* Thaxt. (1 species)

Chaetomyces pinophili Thaxt.

Parasitic on *Pinophilus* sp. Chontales (Thaxter 1908: 429, Thaxter 1931: 273).

Genus *Cryptandromyces* Thaxt. (2 species)

Cryptandromyces pinguis Santam. & W. Rossi

Parasitic on *Euconnus*, Estelí (endemic) (Santamaria & Rossi 2021: 292, fig. 1d-e).

Cryptandromyces tricornis Santam. & W. Rossi

Parasitic on *Euconnus*, Estelí (endemic) (Santamaria & Rossi 2021: 292, fig. 1f-g).

Genus *Gloeandromyces* Thaxt. (1 species)

Gloeandromyces dickii Haelew.

Parasitic on *Trichobius joblingi*. Jinotega (Haelewaters & Pfister 2019: 22, fig. 3a).

Genus *Laboulbenia* Mont. & C.P. Robin (5 species)

Laboulbenia cristata Thaxt.

Parasitic on *Paederus* sp. Chontales (Thaxter 1893: 174, Thaxter 1895: 330).

Laboulbenia dentifera Thaxt.

Parasitic on *Notiobia* sp. Chontales (endemic) (Thaxter 1902: 34, Thaxter 1908: 356, pl. LXI, fig. 8).

Laboulbenia galeritae Thaxt.

Parasitic on *Galerita* sp. Chontales (Thaxter 1908: 394)

Laboulbenia melanotheca Thaxt.

Parasitic on *Galerita mexicana* and *G. ruficollis*. Chontales (Thaxter 1895: 335, Thaxter 1908: 387).

Laboulbenia mexicana Thaxt.

Parasitic on *Galerita* sp. Chontales (Thaxter 1893: 171, Thaxter 1895: 334).

Genus *Peyritschiella* Thaxt. (1 species)

Peyritschiella vulgata (Thaxt.) I.I. Tav.

Parasitic on *Philonthus parvimanus*. Chontales (Thaxter 1900: 424, as *Dichomyces vulgatus*, Thaxter 1908: 251, as *D. vulgatus*).

Genus *Prolixandromyces* R.K. Benj. (3 species)

Prolixandromyces lingulatus R.K. Benj.

Parasitic on *Paravelia brachialis*. Madriz (endemic) (Benjamin 1981: 3, fig. 3-9).

Prolixandromyces rhinoceralis R.K. Benj.

Parasitic on *Paravelia brachialis*. Madriz (endemic) (Benjamin 1981: 7, fig. 11-15).

Prolixandromyces veliae R.K. Benj.

Parasitic on *Paravelia brachialis*. Madriz (Benjamin 1981: 2, fig. 10).

Genus *Rickia* Cavares (3 species)

Rickia apiculifera Thaxt.

Parasitic on Passalidae. León (Thaxter 1916: 18, Thaxter 1926: 569, pl. 8, fig. 240).

Rickia bifida Thaxt.

Parasitic on Passalidae. León (Thaxter 1916: 19, Thaxter 1926: 457, pl. 9, fig. 224).

Rickia passalina Thaxt.

Parasitic on Passalidae. León (Thaxter 1916: 17, Thaxter 1926: 492).

Genus *Triceromyces* T. Majewski (1 species)

Triceromyces poissonii (R.K. Benj.) R.K. Benj.

Parasitic on *Mesovelgia mulsanti*. Rivas (Benjamin 1970: 172, as *Dioicomyces mesovelgiae*, Benjamin 1986: 263).

Class LECANOROMYCETES O.E. Erikss. & Winka

**Subclass LECANOROMYCETIDAE P.M. Kirk, P.F. Cannon, J.C. David & Stalpers
ex Miadl., Lutzoni & Lumbsch ex Miadl. & Lutzoni**

**Order CALICIALES Bessey
(2 families, 16 genera, 50 species)**

**Family CALICIACEAE Chevall.
(9 genera, 26 species)**

Genus *Amandinea* Scheid. & M. Mayrhofer (3 species)

***Amandinea diorista* (Nyl.) Marbach**

Lichenized, corticolous. Rivas (Breuss 2002: 1056, as *Amandinea diorista* var. *diorista*, Breuss 2023: 134).

***Amandinea efflorescens* (Müll. Arg.) Marbach**

Lichenized, corticolous. Rivas (Breuss 2002: 1056, Breuss 2023: 134).

***Amandinea multispora* (Kalb & Vězda) Marbach**

Lichenized, corticolous. Rivas (Breuss 2002: 1056, Breuss 2023: 134).

Genus *Baculifera* Marbach (2 species)

***Baculifera imshaugiana* (R.C. Harris) Marbach**

Lichenized, corticolous. Rivas (Breuss 2002: 1057, Breuss 2023: 134).

***Baculifera micromera* (Vain.) Marbach**

Lichenized, corticolous. León (Breuss 2002: 1057, Breuss 2023: 134).

Genus *Buellia* De Not. (2 species)

***Buellia sorediata* (Tuck.) H. Magn.**

Lichenized, corticolous. Río San Juan (Tuckerman 1872: 187, as *Buellia parasema* var. *triphragmia* f. *sorediata*, Imshaug 1955: 282, Imshaug 1956: 110, Nordin 2000: 90, Breuss 2002: 1054, Breuss 2023: 134).

***Buellia subdisciformis* (Leight.) Jatta**

Lichenized, corticolous. Granada (GBIF 2025).

Genus *Calicium* Pers. (2 species)

***Calicium hyperelloides* Nyl.**

Lichenized, corticolous. Matagalpa (Tibell & Kalb 1992: 22, Tibell 1996: 19, Breuss 2002: 1054, Breuss 2023: 135).

***Calicium salicinum* Pers.**

Lichenized, corticolous. Matagalpa (Tibell & Kalb 1992: 33, Tibell 1996: 25, Breuss 2002: 1054, Breuss 2023: 135).

Genus *Cratiria* Marbach (2 species)

***Cratiria americana* (Fée) Kalb & Marbach**

Lichenized, corticolous on *Bombax* sp. Granada (Imshaug 1955: 282, as *Buellia modesta*, Imshaug 1956: 110, as *B. modesta*, Breuss 2002: 1054, Breuss 2023: 136).

***Cratiria obscurior* (Stirt.) Marbach & Kalb**

Lichenized, corticolous, also on *Rhizophora mangle*. León, Granada, Rivas (Marbach 2000: 189, Breuss 2002: 1057, Breuss 2023: 136).

Genus *Dirinaria* (Tuck.) Clem. (7 species)

***Dirinaria applanata* (Fée) D.D. Awasthi**

Lichenized, corticolous. Granada, Rivas (Breuss 2002: 1058, Breuss 2023: 136).

***Dirinaria aspera* (H. Magn.) D.D. Awasthi**

Lichenized, corticolous. León (Thomson 1963: 162, as *Physcia aspera*, Awasthi 1975: 69, Breuss 2002: 1054, Breuss 2023: 136).

***Dirinaria confluens* (Fr.) D.D. Awasthi**

Lichenized, corticolous. Rivas (Breuss 2002: 1058, Breuss 2023: 136).

***Dirinaria confusa* D.D. Awasthi**

Lichenized, corticolous. León, Rivas (Breuss 2002: 1058, Breuss 2023: 136).

***Dirinaria papillulifera* (Nyl.) D.D. Awasthi**

Lichenized, corticolous. León, Río San Juan, Rivas (Awasthi 1975: 62, Breuss 2002: 1058, Breuss 2023: 136).

***Dirinaria picta* (Sw.) Clem. & Shear**

Lichenized, corticolous. León, Río San Juan, Rivas (Pfister & Sayre 1978: 84, as *Physcia picta*, Breuss 2002: 1058, Breuss 2023: 136).

***Dirinaria purpurascens* (Vain.) B.J. Moore**

Lichenized, corticolous. Chinandega (Thomson 1963: 161, as *Physcia purpurascens*, Awasthi 1975: 45, Breuss 2002: 1054, Breuss 2023: 136).

Genus *Gassicurtia* Fée (1 species)

Gassicurtia ferruginascens (Malme) Marbach & Kalb

Lichenized, corticolous. Rivas (Neuwirth 2017: 68, fig. 2a-b, Breuss 2023: 136).

Genus *Pyxine* Fr. (6 species)

Pyxine berteroa (Fée) Imshaug

Lichenized, corticolous, also on *Rhizophora mangle*. Río San Juan, Rivas (Tuckerman 1860: 400, as *Pyxine meissneri*, Imshaug 1956: 111, as *P. meissneri*, Imshaug 1957: 256, as *Pyxine berteroa* var. *berteroa*, Pfister & Sayre 1978: 84, as *P. meissneri*, Breuss 2002: 1061, Breuss 2023: 140).

Pyxine caesiopruinosa (Tuck.) Imshaug

Lichenized, corticolous. Rivas (Consortium of Lichen Herbaria 2024).

Pyxine cocoes (Sw.) Nyl.

Lichenized, corticolous on *Rhizophora mangle*. Granada, Río San Juan, Rivas (Tuckerman 1860: 401, Imshaug 1956: 110, Imshaug 1957: 258, Breuss 2002: 1061, Breuss 2023: 140).

Pyxine eschweileri (Tuck.) Vain.

Lichenized, corticolous. Rivas (Breuss 2002: 1061, Breuss 2023: 140).

Pyxine petricola Nyl.

Lichenized, corticolous. Granada, Rivas, Río San Juan (Imshaug 1957: 254, as *Pyxine endoleuca*, Breuss 2002: 1061, as *P. endoleuca*, Breuss 2002: 1061, Breuss 2023: 140, as *P. endoleuca*, Breuss 2023: 140).

Pyxine pungens Zahlbr.

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Genus *Stigmatochroma* Marbach (1 species)

Stigmatochroma gerontoides (Stirt.) Marbach

Lichenized, corticolous on *Bombax* sp. Granada (Imshaug 1955: 281, as *Buellia gerontoides*, Imshaug 1956: 109, as *B. gerontoides*, Breuss 2002: 1055, Breuss 2023: 141).

Family PHYSCIACEAE Zahlbr.
(7 genera, 24 species)

Genus *Heterodermia* Trevis. (4 species)

Heterodermia albicans (Pers.) Swinscow & Krog
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 83, as *P. stellaris* var. *domingensis*).

Heterodermia antillarum (Vain.) Swinscow & Krog
Lichenized, corticolous. Boaco (GBIF 2025).

Heterodermia granulifera (Ach.) W.L. Culb.
Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Heterodermia speciosa (Wulfen) Trevis.
Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Genus *Hyperphyscia* Müll. Arg. (2 species)

Hyperphyscia adglutinata (Flörke) H. Mayrhofer & Poel
Lichenized, corticolous. Masaya (Neuwirth 2017: 68, fig. 1e-f, Breuss 2023: 137).

Hyperphyscia isidiata Moberg
Lichenized, corticolous. Rivas (Breuss 2002: 1059, Breuss 2023: 137).

Genus *Klauskalbia* S.Y. Kondr., Lőkös, E. Farkas & Hur (2 species)

Klauskalbia flabellata (Fée) S.Y. Kondr., Lőkös, E. Farkas & Hur
Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Heterodermia flabellata*, Breuss 2023: 137, as *H. flabellata*).

Klauskalbia obscurata (Nyl.) S.Y. Kondr., Lőkös, E. Farkas & Hur
Lichenized, corticolous. Matagalpa (GBIF 2025, as *Heterodermia obscurata*).

Genus *Leucodermia* Kalb (3 species)

Leucodermia boryi (Fée) Kalb
Lichenized, corticolous. Masaya (Consortium of Lichen Herbaria 2024).

Leucodermia leucomelos (L.) Kalb
Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Heterodermia leucomelos*, Breuss 2023: 137, as *H. leucomelos*).

Leucodermia lutescens (Kurok.) Kalb
Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Genus *Physcia* (Schreb.) Michaux (9 species)

Physcia aipolia (Ehrh. ex Humb.) Fűrnr.
Lichenized, corticolous. Matagalpa (GBIF 2025).

Physcia atrostriata Moberg
Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Physcia clementei (Sm.) Lynge
Lichenized, corticolous. Río San Juan (Tuckerman 1860: 395, as *Physcia stellaris* var. *astroidea*, Pfister & Sayre 1978: 83, as *P. stellaris* var. *astroidea*, Imshaug 1956: 111, as *Physcia astroidea*, Breuss 2002: 1055, Breuss 2023: 139).

Physcia crispa Nyl.
Lichenized, corticolous. Rivas (Consortium of Lichen Herbaria 2024).

Physcia erumpens Moberg
Lichenized, corticolous, also on *Rhizophora mangle*. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Physcia integrata (Nyl.) Arnold
Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Physcia poncinsii Hue
Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Physcia solediosa (Vain.) Lynge
Lichenized, corticolous. León (Consortium of Lichen Herbaria 2024).

Physcia undulata Moberg
Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Genus *Polyblastidium* Kalb (3 species)

Polyblastidium albicans (Pers.) S.Y. Kondr., Lőkös & Hur
Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Heterodermia albicans*, Breuss 2023: 137, as *H. albicans*).

Polyblastidium casarettianum (A. Massal.) Kalb
Lichenized, corticolous. Matagalpa (GBIF 2025, as *Heterodermia casarettiana*).

Polyblastidium japonicum (M. Satô) Kalb
Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Genus *Rinodina* (Ach.) Gray (1 species)

Rinodina dolichospora Malme

Lichenized, corticolous. Rivas (Breuss 2002: 1061, Breuss 2023: 141).

Order LECANORALES Nannf.

(8 families, 29 genera, 115 species)

Family CATILLARIACEAE Hafellner

(1 genus, 1 species)

Genus *Catillaria* A. Massal. (1 species)

Catillaria endochroma (Fée) Zahlbr.

Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Family CLADONIACEAE Zenker

(3 genera, 20 species)

Genus *Cladia* Nyl. (1 species)

Cladia aggregata (Sw.) Nyl.

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Genus *Cladonia* Hill ex P. Browne (15 species)

Cladonia cartilaginea Müll. Arg.

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Cladonia ceratophylla (Sw.) Spreng.

Lichenized, corticolous. Granada, Jinotega, Matagalpa (Ahti 2000: 240, Breuss 2002: 1054, Breuss 2023: 135).

Cladonia chlorophaea (Flörke ex Sommerf.) Spreng.

Lichenized, corticolous. Locality unknown (Ahti 2000: 102, Breuss 2002: 1054, Breuss 2023: 135).

Cladonia didyma (Fée) Vain.

Lichenized, corticolous. Jinotega (Ahti 2000: 193, Breuss 2002: 1054, Breuss 2023: 135).

Cladonia fimbriata (L.) Fr.

Lichenized, corticolous. Locality unknown (Wainio 1894: 246, Imshaug 1956: 99, Breuss 2002: 1054, Breuss 2023: 135).

***Cladonia macilenta* Hoffm.**

Lichenized, corticolous. Rivas (Wainio 1894: 339, as *Cladonia balfourii*, Fink 1904: 26, as *C. fimbriata* var. *balfourii*, Imshaug 1956: 99, as *C. balfourii*, Breuss 2002: 1054, as *C. balfourii*, Breuss 2023: 135, as *C. balfourii*).

***Cladonia macrophylliza* Vain.**

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

***Cladonia nana* Vain.**

Lichenized, corticolous. Managua (Ahti 2000: 253, Breuss 2002: 1054, Breuss 2023: 135).

***Cladonia pulverulenta* (L. Scriba) Ahti**

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

***Cladonia pyxidata* (L.) Hoffm.**

Lichenized, corticolous. Rivas (Consortium of Lichen Herbaria 2024).

***Cladonia ramulosa* (With.) J.R. Laundon**

Lichenized, corticolous. Rivas (Consortium of Lichen Herbaria 2024).

***Cladonia subcariosa* Nyl.**

Lichenized, corticolous. Rivas (Consortium of Lichen Herbaria 2024).

***Cladonia subradiata* (Vain.) Sandst.**

Lichenized, corticolous. Locality unknown (Ahti 2000: 155, Breuss 2002: 1054, Breuss 2023: 135).

***Cladonia subsquamosa* Kremp.**

Lichenized, corticolous. Locality unknown (Wainio 1894: 336, as *Cladonia chlorophaeroides*, Fink 1904: 27, as *C. fimbriata* var. *chlorophaeroides*, Ahti 2000: 160, Breuss 2002: 1054, Breuss 2023: 135).

***Cladonia subtenuis* (Abbayes) Mattick**

Lichenized, corticolous. Jinotega (Ahti 2000: 80, as *Cladina subtenuis* f. *subtenuis*, Breuss 2002: 1054, as *Cladina subtenuis*, Breuss 2023: 135, as *C. subtenuis*).

Genus *Stereocaulon* Hoffm. (4 species)

***Stereocaulon cornutum* Müll. Arg.**

Lichenized, corticolous. Granada (GBIF 2025, as *Stereocaulon pityrizans*).

***Stereocaulon ramulosum* Raeusch.**

Lichenized, corticolous. Rivas (Pfister & Sayre 1978: 101).

***Stereocaulon vesuvianum* Pers.**

Lichenized, corticolous. León (Breuss 2002: 1062, Breuss 2023: 141).

***Stereocaulon virgatum* Ach.**

Lichenized, corticolous. Locality unknown (Lamb 1977: 257, Breuss 2002: 1055, Breuss 2023: 141).

**Family LECANORACEAE Körb.
(1 genus, 8 species)**

Genus *Lecanora* Ach. (8 species)

***Lecanora argentata* (Ach.) Röhl.**

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 137).

***Lecanora coronulans* Nyl.**

Lichenized, corticolous. Granada (Breuss 2011: 107, Breuss 2023: 137).

***Lecanora helva* Stizenb.**

Lichenized, corticolous. León, Rivas (Breuss 2011: 107, Neuwirth 2017: 71, fig. 4c, Breuss 2023: 137).

***Lecanora leprosa* Fée**

Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978:95, *Lecanora subfusca* var. *cinereocarnea*).

***Lecanora pallida* (Schreb.) Rabenh.**

Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 96).

***Lecanora praeferenda* (Nyl.) Nyl.**

Lichenized, corticolous. León, Matagalpa, Rivas (Consortium of Lichen Herbaria 2024).

***Lecanora thysanophora* R.C. Harris**

Lichenized, corticolous. León (Consortium of Lichen Herbaria 2024).

***Lecanora tropica* Zahlbr.**

Lichenized, corticolous. Granada (Breuss 2002: 1059, Breuss 2023: 137).

Family **MALMIDEACEAE** Kalb, Rivas Plata & Lumbsch
(1 genus, 6 species)

Genus *Malmidea* Kalb, Rivas Plata & Lumbsch (6 species)

Malmidea cineracea Breuss & Lücking

Lichenized, corticolous. Río San Juan (Breuss & Lücking 2015: 14, fig. 1e-f, 2c, 3a, Breuss 2023: 138).

Malmidea furfurosa (Tuck. ex Nyl.) Kalb & Lücking

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 138).

Malmidea granifera (Ach.) Kalb, Rivas Plata & Lumbsch

Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Malcolmiella granifera*, Breuss 2023: 138).

Malmidea leptoloma (Müll. Arg.) Kalb & Lücking

Lichenized, corticolous. Granada (Breuss 2011: 107, Breuss 2023: 138).

Malmidea rhodopis (Tuck.) Kalb, Rivas Plata & Lumbsch

Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Malcolmiella rhodopis*, Breuss 2023: 138).

Malmidea vinosa (Eschw.) Kalb, Rivas Plata & Lumbsch

Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Malcolmiella vinosa*, Breuss 2023: 138).

Family **PARMELIACEAE** Zenker
(9 genera, 42 species)

Genus *Bulbothrix* Hale (3 species)

Bulbothrix apophysata (Hale & Kurok.) Hale

Lichenized, corticolous. Rivas (Breuss 2002: 1057, Breuss 2023: 134).

Bulbothrix goebelii (Zenker) Hale

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Bulbothrix suffixa (Stirt.) Hale

Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Canoparmelia* Elix & Hale (3 species)

***Canoparmelia caroliniana* (Nyl.) Elix & Hale**

Lichenized, corticolous. Atlántico Norte, Rivas (Hale 1959: 17, as *Parmelia caroliniana*, Hale 1976: 22, as *Pseudoparmelia caroliniana*, Breuss 2002: 1054, Breuss 2023: 135).

***Canoparmelia cryptochlorophaea* (Hale) Elix & Hale**

Lichenized, corticolous. Matagalpa (GBIF 2025).

***Canoparmelia texana* (Tuck.) Elix & Hale**

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Genus *Crespoa* (D. Hawksw.) Lendemer & B.P. Hodk. (1 species)

***Crespoa crozalsiana* (B. de Lesd. ex Harm.) Lendemer & B.P. Hodk.**

Lichenized, corticolous. Matagalpa (GBIF 2025, as *Canoparmelia crozalsiana*).

Genus *Hypotrachyna* (Vain.) Hale (2 species)

***Hypotrachyna aspera* C.H. Ribeiro & Marcelli**

Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

***Hypotrachyna flavida* (Zahlbr.) Hale**

Lichenized, corticolous. Chinandega (GBIF 2025, as *Parmelia flavida*).

Genus *Parmeliopsis* (Nyl.) Nyl. (1 species)

***Parmeliopsis minarum* (Vain.) Elix & Hale**

Lichenized, corticolous. Granada, Rivas (Breuss 2002: 1060, Breuss 2023: 138).

Genus *Parmotrema* A. Massal. (22 species)

***Parmotrema conformatum* (Vain.) Hale**

Lichenized, corticolous. Jinotega (GBIF 2025, as *Parmelia conformata*).

***Parmotrema crinitum* (Ach.) M. Choisy**

Lichenized, corticolous. Jinotega, Masaya, Rivas (Hale 1965: 284, as *Parmelia crinita*, Breuss 2002: 1060, Breuss 2023: 138).

***Parmotrema cristiferum* (Taylor) Hale**

Lichenized, corticolous. Atlántico Norte, Rivas (Hale 1965: 241, as *Parmelia cristifera*, Breuss 2002: 1060, Breuss 2023: 138).

***Parmotrema dilatatum* (Vain.) Hale**

Lichenized, corticolous. Jinotega (Hale 1965: 245, as *Parmelia dilatata*, Breuss 2002: 1054, Breuss 2023: 138).

***Parmotrema dominicanum* (Vain.) Hale**

Lichenized, corticolous. Jinotega, Rivas (Hale 1965: 248, as *Parmelia dominicana*, Breuss 2002: 1060, Breuss 2023: 138).

***Parmotrema eciliatum* (Nyl.) Hale**

Lichenized, corticolous. Jinotega (Hale 1965: 289, as *Parmelia eciliata*, Breuss 2002: 1054, Breuss 2023: 138).

***Parmotrema endosulphureum* (Hillmann) Hale**

Lichenized, corticolous also on *Rhizophora mangle*. Managua, Rivas (Hale 1959: 20, as *Parmelia lindmanii*, Hale 1965: 251, as *Parmelia endosulphurea*, Breuss 2002: 1060, Breuss 2023: 138).

***Parmotrema flavescens* (Kremp.) Hale**

Lichenized, corticolous. Jinotega (GBIF 2025, as *Parmelia flavescens*).

***Parmotrema flavotinctum* (Hale) Hale**

Lichenized, corticolous. Atlántico Sur (GBIF 2025).

***Parmotrema hababianum* (Gyeln.) Hale**

Lichenized, corticolous. Jinotega (Hale 1965: 325, as *Parmelia hababiana*, Breuss 2002: 1054, Breuss 2023: 138).

***Parmotrema haitiense* (Hale) Hale**

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

***Parmotrema latissimum* (Fée) Hale**

Lichenized, corticolous. Managua, Rivas (Hale 1965: 253, as *Parmelia latissima*, Breuss 2002: 1060, Breuss 2023: 139).

***Parmotrema mesotropum* (Müll. Arg.) Hale**

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

***Parmotrema praesorediosum* (Nyl.) Hale**

Lichenized, corticolous. Jinotega, Rivas (Hale 1959: 22, as *Parmelia sanctae-crucis*, Hale 1965: 258, as *Parmelia praesorediosa*, Breuss 2002: 1060, Breuss 2023: 139).

***Parmotrema rampoddense* (Nyl.) Hale**

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024, as *Parmelia subinvoluta*).

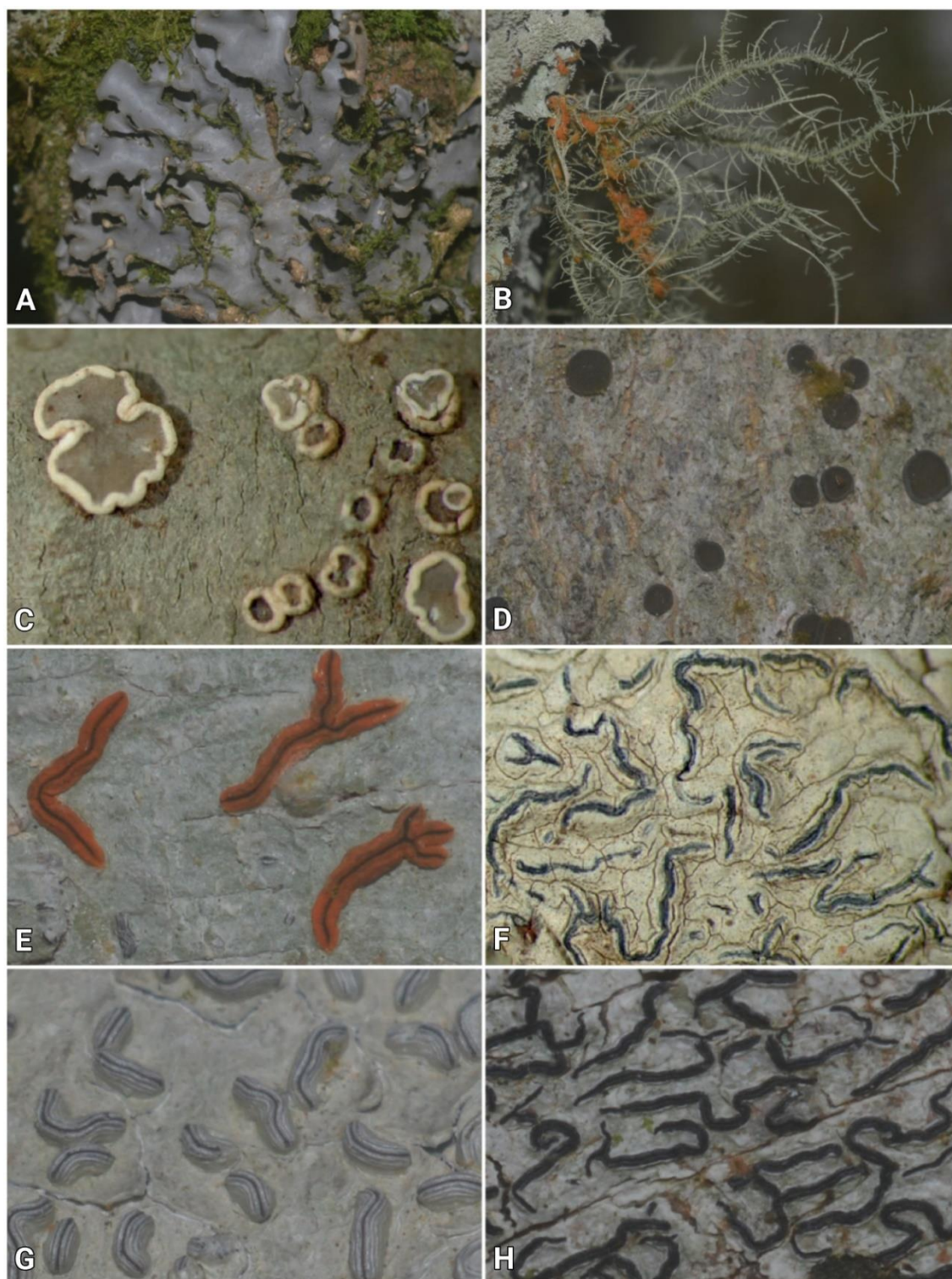


Figure 10. A: *Parmotrema* sp., Jinotega. B: *Usnea* sp., Jinotega. C: *Eugeniella palleola*, Granada. D: *Bacidina* sp., Jinotega. E: *Allographa chrysocarpa*, Jinotega. F: *Graphis paraschiffneri*, Rivas. G: *Graphis* sp., Jinotega. H: *Graphis* sp., Jinotega (photos by Ricardo Soza, C and F by Robert Lücking).

Parmotrema reticulatum (Taylor) M. Choisy

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Parmotrema robustum (Degel.) Hale

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Parmotrema rubifaciens (Hale) Hale

Lichenized, corticolous. Managua (Hale 1965: 261, pl. 4, fig. 17, as *Parmelia rubifaciens*, Breuss 2002: 1055, Breuss 2023: 139).

Parmotrema subrugatum (Kremp.) Hale

Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Parmotrema tinctorum (Despr. ex Nyl.) Hale

Lichenized, corticolous. Chontales, Jinotega, Rivas (Hale 1965: 264, as *Parmelia tinctorum*, Breuss 2002: 1060, Breuss 2023: 139).

Parmotrema xanthinum (Müll. Arg.) Hale

Lichenized, corticolous. Jinotega (Hale 1965: 275, as *Parmelia xanthina*, Breuss 2002: 1055, Breuss 2023: 139).

Parmotrema zollingeri (Hepp) Hale

Lichenized, corticolous. Matagalpa (GBIF 2025, as *Parmelia zollingeri*).

Genus *Remototrachyna* Divakar & A. Crespo (1 species)

Remototrachyna costaricensis (Nyl.) Divakar, Lumbsch, Ferencová & A. Crespo

Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024, as *Hypotrachyna costaricensis*).

Genus *Usnea* Dill. ex Adans. (7 species)

Usnea baileyi (Stirt.) Zahlbr.

Lichenized, corticolous. Rivas (Breuss 2002: 1062, Breuss 2023: 141).

Usnea ceratina Ach.

Lichenized, corticolous. Jinotega (GBIF 2025, as *Usnea subcomosa*).

Usnea cornuta Körb.

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Usnea jelskii Motyka

Lichenized, corticolous. Jinotega (GBIF 2025).

Usnea mexicana Vain.

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Usnea perplectata Motyka

Lichenized, corticolous. Rivas (Breuss 2002: 1062, Breuss 2023: 141).

Usnea rubicunda Stirt.

Lichenized, corticolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Genus *Xanthoparmelia* (Vain.) Hale (2 species)

Xanthoparmelia plittii (Gyeln.) Hale

Lichenized, corticolous. León (Breuss 2002: 1062, Breuss 2023: 142).

Xanthoparmelia subramigera (Gyeln.) Hale

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

**Family PILOCARPACEAE Zahlbr.
(8 genera, 20 species)**

Genus *Byssolecania* Vain. (1 species)

Byssolecania hymenocarpa (Vain.) Kalb, Vězda & Lücking

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Byssoloma* Trevis. (6 species)

Byssoloma chlorinum (Vain.) Zahlbr.

Lichenized, foliicolous. Río San Juan (Breuss 2011: 106, Breuss 2023: 135).

Byssoloma discordans (Vain.) Zahlbr.

Lichenized, foliicolous. Río San Juan (Breuss 2011: 106, Breuss 2023: 135).

Byssoloma leucoblepharum (Nyl.) Vain.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Byssoloma minutissimum Kalb & Vězda

Lichenized, foliicolous. Rivas (Breuss 2002: 1057, Breuss 2023: 135).

Byssoloma subdiscordans (Nyl.) P. James

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Byssoloma subpolychromum Vězda

Lichenized, foliicolous. Rivas (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Calopadia* Vězda (4 species)

***Calopadia foliicola* (Fée) Vězda**

Lichenized, foliicolous. Rivas (Breuss 2002: 1057, Breuss 2023: 135).

***Calopadia fusca* (Müll. Arg.) Vězda**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

***Calopadia lecanorella* (Nyl.) Kalb & Vězda**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

***Calopadia subcoerulescens* (Zahlbr.) Vězda**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Eugeniella* Lücking, Sérus. & Kalb (1 species)

***Eugeniella palleola* Breuss & Lücking**

Lichenized, corticolous. Granada (Breuss 2002: 1056, as *Bacidia* aff. *psychotriae*, Breuss & Lücking 2015: 9, fig. 1a-c, 2a, 3c, Breuss 2023: 136).

Genus *Fellhanera* Vězda (1 species)

***Fellhanera naevia* (Vain.) Lücking & M. Cáceres**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Fellhanera angustispora*, Breuss 2023: 136, as *F. angustispora*).

Genus *Lasioloma* R. Sant. (2 species)

***Lasioloma appendiculatum* Breuss**

Lichenized, foliicolous. Granada (endemic) (Breuss 2002: 1063, fig. 7, Breuss 2023: 137).

***Lasioloma arachnoideum* (Kremp.) R. Sant.**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 137).

Genus *Sporopodium* Mont. (1 species)

***Sporopodium lepreurii* Mont.**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Genus *Tapellaria* Müll. Arg. (4 species)

***Tapellaria albomarginata* Lücking**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, as *Tapellaria bilimboides*, Breuss 2011: 109, Breuss 2023: 141).

Tapellaria epiphylla (Müll. Arg.) R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Tapellaria nana (Fée) R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Tapellaria nigrata (Müll. Arg.) R. Sant.

Lichenized, foliicolous. Rivas (Breuss 2002: 1062, Breuss 2023: 141).

**Family RAMALINACEAE C. Agardh
(5 genera, 17 species)**

Genus *Bacidina* Vězda (3 species)

Bacidina medialis (Tuck ex Nyl.) Kistenich, Timdal, Bendiksbj & S. Ekman
Lichenized, corticolous. León, Río San Juan, Rivas (Nylander 1863: 61, as *Lecidea medialis*, Tuckerman 1864: 280, as *L. medialis*, Hue 1892: 203, as *L. medialis*, Imshaug 1956: 97, as *L. medialis*, Pfister & Sayre 1978: 114, as *Biatora medialis*, Ekman 1996: 86, as *Bacidia medialis*, Breuss 2002: 1056, as *B. medialis*, Breuss 2023: 134, as *B. medialis*).

Bacidina pallidocarpa (Müll. Arg.) Vězda

Lichenized, foliicolous. Rivas (Breuss 2002: 1057, Breuss 2023: 134).

Bacidina pseudohyphophorifera (Lücking & Sérus.) Lücking

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, as *Woessia pseudohyphophorifera*, Breuss 2023: 134).

Genus *Bacidiopsora* Kalb (1 species)

Bacidiopsora microphyllina Kalb

Lichenized, corticolous. Matagalpa (GBIF 2025).

Genus *Badimia* Vězda (1 species)

Badimia dimidiata (Bab. ex Leight.) Vězda

Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 134).

Genus *Phyllopsora* Müll. Arg. (4 species)

Phyllopsora confusa Swinscow & Krog

Lichenized, corticolous. Río San Juan (Brako 1991: 35, Breuss 2002: 1055, Breuss 2023: 139).

Phyllopsora gossypina (Sw.) Kistenich, Timdal, Bendiksby & S. Ekman
Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, as *Crocynia gossypina*, Breuss 2023: 136, as *C. gossypina*).

Phyllopsora rappiana (Brako) Elix
Lichenized, corticolous. Rivas (GBIF 2025).

Phyllopsora santensis (Tuck.) Swinscow & Krog
Lichenized, corticolous. León (GBIF 2025).

Genus *Ramalina* Ach. (8 species)

Ramalina alludens Nyl.
Lichenized, corticolous on *Coffea arabica*. Rivas (Breuss 2011: 108, fig. 1, Breuss 2023: 140).

Ramalina camptospora Nyl.
Lichenized, corticolous. Río San Juan (Landrón 1972: 228, Breuss 2002: 1055, Breuss 2023: 140).

Ramalina celastri (Spreng.) A. Massal.
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 70, *Ramalina linearis*).

Ramalina complanata (Sw.) Ach.
Lichenized, corticolous. Estelí (Consortium of Lichen Herbaria 2024).

Ramalina rectangularis Nyl.
Lichenized, corticolous. Rivas (Neuwirth 2017: 71, fig. 3a-e, Breuss 2023: 140).

Ramalina stenospora Müll. Arg.
Lichenized, corticolous. Rivas (GBIF 2025).

Ramalina subcalicaris (Nyl.) Zahlbr.
Lichenized, corticolous. Rivas (Breuss 2011: 109, Breuss 2023: 141).

Ramalina usnea (L.) R. Howe
Lichenized, corticolous. Rivas (Breuss 2002: 1061, Breuss 2023: 141).

**Family RAMBOLDIACEAE S. Stenroos, Miadl. & Lutzoni
(1 genus, 1 species)**

Genus *Ramboldia* Kantvilas & Elix (1 species)

Ramboldia russula (Ach.) Kalb, Lumbsch & Elix
Lichenized, corticolous. Rivas (Breuss 2002: 1061, as *Pyrrhospora russula*, Breuss 2023: 140, as *P. russula*).

Order LECIDEALES Vain.
(1 family, 1 genus, 1 species)

Family LECIDEACEAE Chevall.
(1 genus, 1 species)

Genus *Porpidia* Körb. (1 species)

Porpidia crustulata (Ach.) Hertel & Knoph
Lichenized, saxicolous. Masaya (Neuwirth 2017: 68, fig. 2c-d, Breuss 2023: 140).

Order MICROPELTIDALES X.Y. Zeng, H.X. Wu & K.D. Hyde
(1 family, 1 genus, 1 species)

Family MICROPELTIDACEAE Clem. & Shear
(1 genus, 1 species)

Genus *Micropeltis* Mont. (1 species)

Micropeltis subapplanata Speg.
Parasitic on living leaves of Solanaceae. Locality unknown (endemic) (Spegazzini 1889: 573).

Order PELTIGERALES W. Watson
(4 families, 10 genera, 25 species)

Family COCCOCARPIACEAE Henssen ex Henssen
(1 genus, 3 species)

Genus *Coccocarpia* Pers. (3 species)

Coccocarpia erythroxyli (Spreng.) Swinscow & Krog
Lichenized, corticolous. Atlántico Sur, Rivas (Pfister & Sayre 1978: 91, as *Pannaria parmelioides*, Arvidsson 1982: 62, Breuss 2002: 1057, Breuss 2023: 135).

Coccocarpia palmicola (Spreng.) Arv. & D.J. Galloway
Lichenized, corticolous, *Rhizophora mangle*. Atlántico Sur, Río San Juan, Rivas (Arvidsson 1982: 75, Breuss 2002: 1057, Breuss 2023: 135).

Coccocarpia pellita (Ach.) Müll. Arg.
Lichenized, corticolous. Granada, Rivas (Dodge 1933: 463, as *Coccocarpia cronia* var. *lividorufa*, Imshaug 1956: 93, Breuss 2002: 1057, Breuss 2023: 135).

Family COLLEMATACEAE Zenker
(2 genus, 11 species) (plural es genera)

Genus *Enchylium* (Ach.) Gray (1 species)

Enchylium conglomeratum (Hoffm.) Otálora, P.M. Jørg. & Wedin
Lichenized, corticolous. Jinotega (GBIF 2025, as *Collema conglomeratum*).

Genus *Leptogium* (Ach.) Gray (10 species)

Leptogium austroamericanum (Malme) C.W. Dodge
Lichenized, corticolous. Río San Juan (Consortium of Lichen Herbaria 2024).

Leptogium azureum (Sw.) Mont.
Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1059, Breuss 2023: 137).

Leptogium chloromelum (Ach.) Nyl.
Lichenized, corticolous. Río San Juan, Rivas (Pfister & Sayre 1978: 68, Breuss 2002: 1059, Breuss 2023: 137).

Leptogium cochleatum (Dicks.) P.M. Jørg. & P. James
Lichenized, corticolous. Rivas (Breuss 2002: 1059, Neuwirth 2017: 71, fig. 4f, Breuss 2023: 138).

Leptogium denticulatum Nyl.
Lichenized, corticolous. Granada, Río San Juan (Breuss 2002: 1059, Breuss 2023: 138).

Leptogium isidiosellum (Riddle) Sierk
Lichenized, corticolous. Granada (Consortium of Lichen Herbaria 2024).

Leptogium marginellum (Sw.) Gray
Lichenized, corticolous. Matagalpa (GBIF 2025).

Leptogium phyllocarpum (Pers.) Mont.
Lichenized, corticolous. Río San Juan, Rivas (Pfister & Sayre 1978: 68, Breuss 2002: 1059, Breuss 2023: 138).

Leptogium standleyi C.W. Dodge
Lichenized, corticolous. Rivas (Breuss 2002: 1059, Breuss 2023: 138).

Leptogium tremelloides (Ach.) Gray
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 68).

Family PANNARIACEAE Tuck.
(3 genera, 3 species)

Genus *Lepidocollema* Vain. (1 species)

Lepidocollema marianum (Fr.) P.M. Jørg.
Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, as *Parmeliella mariana*, Breuss 2023: 138, as *P. mariana*).

Genus *Parmeliella* Müll. Arg. (1 species)

Parmeliella pannosa (Sw.) Müll. Arg.
Lichenized, corticolous. Río San Juan, Rivas (Pfister & Sayre 1978: 92, as *Pannaria pannosa*).

Genus *Physma* A. Massal. (1 species)

Physma byrsaeum (Afzel. ex Ach.) Tuck.
Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 67, as *Collema byrsaeum*).

Family PELTIGERACEAE Dumort.
(4 genera, 8 species)

Genus *Lobariella* Yoshim. (1 species)

Lobariella crenulata (Hook.) Yoshim.
Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Genus *Peltigera* Willd. (1 species)

Peltigera dolichorhiza (Nyl.) Nyl.
Lichenized, corticolous. Atlántico Norte (GBIF 2025).

Genus *Pseudocyphellaria* Vain. (1 species)

Pseudocyphellaria aurata (Ach.) Vain.
Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Genus *Sticta* (Schreb.) Ach. (5 species)

Sticta beauvoisii Delise
Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024).

Sticta macrophylla Bory ex Delise
Lichenized, corticolous. Rivas (Breuss 2002: 1062, Breuss 2023: 141).

***Sticta swartzii* D.J. Galloway**

Lichenized, corticolous. Granada (Breuss 2002: 1062, as *Sticta* cf. *swartzii*, Breuss 2023: 141).

***Sticta weigeli* (Ach.) Vain.**

Lichenized, corticolous. Granada, Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

***Sticta xanthotropa* (Kremp.) D.J. Galloway**

Lichenized, corticolous. Jinotega (Consortium of Lichen Herbaria 2024, as *Sticta weigeli* var. *xanthotropa*).

Order RHIZOCARPALES Miadl. & Lutzoni ex Miadl. & Lutzoni
(1 family, 1 genus, 1 species)

Family RHIZOCARPACEAE M. Choisy & Hafellner
(1 genus, 1 species)

Genus *Rhizocarpon* Ramond ex DC. (1 species)

***Rhizocarpon reductum* Th. Fr.**

Lichenized, saxicolous. Masaya (Neuwirth 2017: 68, fig. 2e-f, Breuss 2023: 141).

Order TELOSCHISTALES D. Hawksw. & O.E. Erikss.
(3 families, 8 genera, 9 species)

Family BRIGANTIAEACEAE Hafellner & Bellem.
(1 genus, 1 species)

Genus *Letrouitia* Hafellner & Bellem. (1 species)

***Letrouitia vulpina* (Tuck ex Nyl.) Hafellner & Bellem.**

Lichenized, corticolous. Rivas (Breuss 2002: 1059, Breuss 2023: 138).

Family MEGALOSPORACEAE Vězda ex Hafellner & Bellem.
(1 genus, 1 species)

Genus *Megalospora* Meyen (1 species)

***Megalospora tuberculosa* (Fée) Sipman**

Lichenized, corticolous. Rivas (Breuss 2002: 1059, Breuss 2023: 138).

Family TELOSCHISTACEAE Zahlbr.
(6 genera, 7 species)

Genus *Athallia* Arup, Frödén & Söchting (1 species)

Athallia pyracea (Ach.) Arup, Frödén & Söchting
Lichenized, corticolous. Rivas (Pfister & Sayre 1978: 93, *Placodium pyraceum*).

Genus *Calogaya* Arup, Frödén & Söchting (1 species)

Calogaya lobulata (Flörke) Arup, Frödén & Söchting
Lichenized, corticolous. Rivas (Breuss 2002: 1060, as *Physcia lobulata*, Breuss 2023: 139, as *P. lobulata*).

Genus *Caloplaca* Th. Fr. (1 species)

Caloplaca erythrantha (Tuck.) Zahlbr.
Lichenized, corticolous on *Rhizophora mangle*. Rivas (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Lacrima* Bungartz, Arup & Söchting (1 species)

Lacrima epiphora (Taylor) Bungartz, Söchting & Arup
Lichenized, corticolous. León (GBIF 2025, as *Caloplaca epiphora*).

Genus *Oxneriopsis* S.Y. Kondr., Upreti & Hur (1 species)

Oxneriopsis bassiae (Ach.) S.Y. Kondr., Upreti & Hur
Lichenized, corticolous on *Rhizophora mangle*. Rivas (Breuss 2002: 1057, as *Caloplaca bassiae*, Breuss 2023: 138).

Genus *Teloschistes* Norman (2 species)

Teloschistes exilis (Michx.) Vain.
Lichenized, corticolous. Atlántico Norte (GBIF 2025).

Teloschistes flavicans (Sw.) Norman
Lichenized, corticolous. Matagalpa (GBIF 2025).

Subclass OSTROPOMYCETIDAE V. Reeb, Lutzoni & Cl. Roux

Order GRAPHIDALES Bessey
(5 families, 25 genera, 74 species)

Family DIPLOSCHISTACEAE Zahlbr.
(3 genera, 4 species)

Genus *Carbacanthographis* Staiger & Kalb (1 species)

Carbacanthographis triphoroides (M. Wirth & Hale) Lücking
Lichenized, corticolous. Rivas (Breuss 2002: 1058, as *Graphina triphora*, Breuss 2023: 135).

Genus *Ocellularia* G. Mey. (1 species)

Ocellularia rhodostroma (Mont.) Zahlbr.
Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 138).

Genus *Wirthiotrema* Rivas Plata, Kalb, Frisch & Lumbsch (2 species)

Wirthiotrema glaucopallens (Nyl.) Rivas Plata & Kalb
Lichenized, corticolous. Rivas (Breuss 2002: 1062, as *Thelotrema glaucopallens*, Breuss 2023: 141).

Wirthiotrema trypaneoides (Nyl.) Rivas Plata & Lücking
Lichenized, corticolous. Atlántico Norte (GBIF 2025, as *Myriotrema trypaneoides*).

Family FISSURINACEAE (Rivas Plata, Lücking & Lumbsch) B.P. Hodk.
(2 genus, 2 species)

Genus *Clandestinotrema* Rivas Plata, Lücking & Lumbsch (1 species)

Clandestinotrema stylothecium (Vain.) Rivas Plata, Lücking & Lumbsch
Lichenized, corticolous. Locality unknown (Rivas-Plata *et al.* 2011: 9, as *Ocellularia stylothecia*, Breuss 2023: 138, as *O. stylothecia*).

Genus *Dyplolabia* A. Massal. (1 species)

Dyplolabia afzelii (Ach.) A. Massal.
Lichenized, corticolous. Río San Juan (GBIF 2025).

Family GOMPHILLACEAE Walt. Watson
(6 genera, 14 species)

Genus *Aderkomyces* Bat. (2 species)

Aderkomyces albostrigosus (R. Sant.) Lücking, Sérus. & Vězda
Lichenized, foliicolous. Gandana (Breuss 2002: 1062, as *Tricharia albostrigosa*, Breuss 2023: 133).

Aderkomyces dilatatus (Vězda) Lücking, Sérus. & Vězda
Lichenized, foliicolous. Granada, Río San Juan (Breuss 2002: 1062, as *Tricharia dilatata*, Breuss 2023: 141, as *T. dilatata*).

Genus *Asterothyrium* Müll. Arg. (2 species)

Asterothyrium pittieri Müll. Arg.
Lichenized, foliicolous. Masaya (Santesson 1952: 328, Imshaug 1956: 88, Lücking 2008: 403, Breuss 2002: 1059, Breuss 2023: 138).

Asterothyrium rotuliforme (Müll. Arg.) Sérus.
Lichenized, foliicolous. Masaya (Santesson 1952: 359, as *Gyalectidium rotuliforme*, Imshaug 1956: 89, as *G. rotuliforme*, Lücking 2008: 410, Breuss 2002: 1059, Breuss 2023: 138).

Genus *Calenia* Müll. Arg. (2 species)

Calenia depressa Müll. Arg.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Calenia lueckingii C. Hartmann
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Echinoplaca* Fée (3 species)

Echinoplaca diffluens (Müll. Arg.) R. Sant.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, Breuss 2023: 136).

Echinoplaca leucotrichoides (Vain.) R. Sant.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, Breuss 2023: 136).

Echinoplaca pellicula (Müll. Arg.) R. Sant.
Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, Breuss 2023: 136).

Genus *Gyalectidium* Müll. Arg. (2 species)

***Gyalectidium caucasicum* (Elenkin & Woron.) Vězda**

Lichenized, foliicolous. Masaya (Ferraro *et al.* 2001: 327, Lücking 2008: 542, Breuss 2023: 137).

***Gyalectidium filicinum* Müll. Arg.**

Lichenized, foliicolous. Masaya (Santesson 1952: 357, Ferraro *et al.* 2001: 331, Breuss 2002: 1054, Breuss 2023: 137).

Genus *Tricharia* Fée (3 species)

***Tricharia carnea* (Müll. Arg.) R. Sant.**

Lichenized, foliicolous. Masaya, Río San Juan (Santesson 1952: 386, Breuss 2002: 1062, Breuss 2023: 141).

***Tricharia urceolata* (Müll. Arg.) R. Sant.**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

***Tricharia vainioi* R. Sant.**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

**Family GRAPHIDACEAE Dumort.
(10 genera, 49 species)**

Genus *Allographa* Chevall. (12 species)

***Allographa acharii* (Fée) Lücking & Kalb**

Lichenized, corticolous. Granada (Breuss 2002: 1058, as *Graphina acharii*, Breuss 2023: 136, as *Graphis acharii*).

***Allographa chrysocarpa* (Raddi) Lücking & Kalb**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1058, as *Graphina chrysocarpa*, Neuwirth 2017: 71, fig. 4d, as *Graphis chrysocarpa*, Breuss 2023: 136, as *G. chrysocarpa*).

***Allographa consanguinea* (Müll. Arg.) Lücking & Kalb**

Lichenized, corticolous. Granada, Rivas (Breuss 2002: 1058, as *Graphina nylanderiana*, Breuss 2023: 137, as *Graphis consanguinea*).

***Allographa farinulenta* (Müll. Arg.) Lücking & Kalb**

Lichenized, corticolous. Rivas (Breuss 2011: 106, as *Graphis farinulenta*, Breuss 2023: 137, as *G. farinulenta*).

***Allographa longula* (Kremp.) Lücking & Kalb**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, as *Graphis longula*, Breuss 2023: 137, as *G. longula*).

***Allographa ovata* (Fée) Lücking & Kalb**

Lichenized, corticolous. Granada (Breuss 2011: 107, as *Graphis ovata*, Breuss 2023: 137, as *G. ovata*).

***Allographa rhizicola* (Fée) Lücking & Kalb**

Lichenized, corticolous. Locality unknown (Rivas-Plata *et al.* 2011: 9, as *Graphis rhizicola*, Breuss 2023: 137, as *G. rhizicola*).

***Allographa rimulosa* (Mont.) Lücking & Kalb.**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1059, as *Graphis rimulosa*, Breuss 2023: 137, as *G. rimulosa*).

***Allographa rustica* (Kremp.) Lücking & Kalb**

Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Graphis turgidula*, Breuss 2023: 137, as *Graphis rustica*).

***Allographa striatula* (Ach.) Lücking & Kalb**

Lichenized, corticolous. Locality unknown (Pfister & Sayre 1978: 121, as *Graphis striatula*).

***Allographa vestitoides* (Fink) Lücking & Kalb**

Lichenized, corticolous. Granada, Río San Juan (Breuss 2002: 1058, as *Graphina vestitoides*, Breuss 2023: 137, as *Graphis vestitoides*).

***Allographa xanthospora* (Müll. Arg.) Lücking & Kalb**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, as *Graphis xanthospora*, Breuss 2023: 137, as *G. xanthospora*).

Genus *Diorygma* Eschw. (4 species)***Diorygma confluens* (Fée) Kalb, Staiger & Elix**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1058, as *Graphina confluens*, Neuwirth 2017: 71, fig. 4a-b, Breuss 2023: 136).

***Diorygma poitaei* (Fée) Kalb, Staiger & Elix**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1058, as *Graphina virginea*, Rivas-Plata *et al.* 2011: 8, Breuss 2023: 136).

***Diorygma pruinosum* (Eschw.) Kalb, Staiger & Elix**

Lichenized, corticolous. Granada (Neuwirth 2017: 68, fig. 1c-d, Breuss 2023: 136).

***Diorygma tibellii* Kalb, Staiger & Elix**

Lichenized, corticolous. Locality unknown (GBIF 2025).

Genus *Glyphis* Ach. (3 species)

***Glyphis cicatricosa* Ach.**

Lichenized, corticolous. Rivas (Pfister & Sayre 1978: 123, Breuss 2002: 1058, Breuss 2023: 136).

***Glyphis substriatula* (Nyl.) Staiger**

Lichenized, corticolous. Río San Juan (Nylander 1863: 78, as *Graphis substriatula*, Hue 1892: 238, as *G. substriatula*, Zahlbruckner 1904: 269, as *Graphina bakeri*, Imshaug 1956: 84, as *G. bakeri*, Imshaug 1956: 85, as *G. substriatula*, Pfister & Sayre 1978: 121, as *G. substriatula*, Breuss 2002: 1054, as *G. bakeri*, Breuss 2002: 1054, as *Graphina substriatula*, Staiger 2002: 179, Lücking et al. 2009: 434, Breuss 2023: 136, as *G. bakeri*, Breuss 2023: 136).

***Glyphis scyphulifera* (Ach.) Staiger**

Lichenized, corticolous. Río San Juan (Pfister & Sayre 1978: 101, as *Gyrostomum scyphuliferum*).

Genus *Graphis* Adans. (16 species)

***Graphis anfractuosa* (Eschw.) Eschw.**

Lichenized, corticolous. Granada, Río San Juan, Rivas (Breuss 2002: 1058, Breuss 2023: 136).

***Graphis assimilis* Nyl.**

Lichenized, corticolous. Granada, Río San Juan, Rivas (Pfister & Sayre 1978: 121, Breuss 2002: 1058, Breuss 2023: 136).

***Graphis conferta* Zenker**

Lichenized, corticolous. Río San Juan (Breuss 2011: 106, Breuss 2023: 136).

***Graphis desquamescens* (Fée) Zahlbr.**

Lichenized, corticolous. Rivas (Breuss 2002: 1058, Breuss 2023: 137).

***Graphis furcata* Fée**

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 137).

***Graphis glaucescens* Fée**

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1058, Breuss 2023: 137).

***Graphis hiascens* (Fée) Nyl.**

Lichenized, corticolous. Rivas (Breuss 2002: 1058, as *Graphina hiascens*, Breuss 2023: 137).

***Graphis leptocarpa* Fée**

Lichenized, corticolous, also on *Rhizophora mangle*. León, Río San Juan, Rivas (Breuss 2002: 1058, Breuss 2023: 137).

***Graphis leptoclada* Müll. Arg.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, as *Graphis rigidula*, Breuss 2023: 137).

***Graphis librata* C. Knight**

Lichenized, corticolous. Rivas (Breuss 2002: 1059, Breuss 2023: 137).

***Graphis lineola* Ach.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 137).

***Graphis oxyclada* Müll. Arg.**

Lichenized, corticolous. Locality unknown (Neuwirth 2017: 71, fig. 4e, Breuss 2023: 137).

***Graphis paraschiffneri* Lücking & Breuss**

Lichenized, corticolous. Rivas (endemic) (Breuss & Lücking 2015: 13, fig. 1d, 2b, 3b, Breuss 2023: 137).

***Graphis platycarpella* Müll. Arg.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 137).

***Graphis scripta* (L.) Ach.**

Lichenized, corticolous. Rivas (Pfister & Sayre 1978: 121).

***Graphis tenella* Ach.**

Lichenized, corticolous. Granada (Consortium of Lichen Herbaria 2024).

Genus *Hemithecium* Trevis. (1 species)

***Hemithecium implicatum* (Fée) Staiger**

Lichenized, corticolous. Locality unknown (Rivas-Plata *et al.* 2011: 9, Breuss 2023: 137).

Genus *Leiorreuma* Eschw. (1 species)

***Leiorreuma exaltatum* (Mont. & Bosch) Staiger**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, as *Phaeographis exaltata*, Breuss 2023: 137).

Genus *Phaeographis* Müll. Arg. (8 species)

Phaeographis caesiodisca Staiger

Lichenized, corticolous. Río San Juan (Breuss 2011: 107, Breuss 2023: 139).

Phaeographis caesiohians (Nyl.) Luch & Lücking

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, as *Phaeographina caesiohians*, Breuss 2023: 139).

Phaeographis dendritica (Ach.) Müll. Arg.

Lichenized, corticolous. Granada (Breuss 2002: 1060, Breuss 2023: 139).

Phaeographis epruinosa (Redinger) Staiger

Lichenized, corticolous. Río San Juan (Breuss 2011: 107, Breuss 2023: 139).

Phaeographis intricans (Nyl.) Staiger

Lichenized, corticolous. Locality unknown (Rivas-Plata *et al.* 2013: 64, as *Phaeographis* aff. *intricans*).

Phaeographis neotricosa Redinger

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 139).

Phaeographis punctiformis (Eschw.) Müll. Arg.

Lichenized, corticolous. Río San Juan (GBIF 2025).

Phaeographis schizoloma (Müll. Arg.) Müll. Arg.

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 139).

Genus *Platythecium* Staiger (1 species)

Platythecium colliculosum (Mont.) Staiger

Lichenized, corticolous. Rivas (Breuss 2002: 1058, as *Graphina colliculosa*, Breuss 2023: 139).

Genus *Sarcographa* Fée (1 species)

Sarcographa labyrinthica (Ach.) Müll. Arg.

Lichenized, corticolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 141).

Genus *Thalloloma* Trevis. (2 species)

Thalloloma cinnabarinum (Fée) Staiger

Lichenized, corticolous. Río San Juan (Breuss 2002: 1058, as *Graphis* cf. *haemolobata*, Breuss 2023: 141). (los cf. van en cursive, es locucion latina confer).

Thalloloma hypoleptum (Nyl.) Staiger

Lichenized, corticolous. Río San Juan (Breuss 2011: 109, Breuss 2023: 141).

Family THELOTREMATACEAE Stizenb.
(4 genera, 5 species)

Genus *Chapsa* A. Massal. (1 species)

Chapsa sublilacina (Ellis & Everh.) M. Cáceres & Lücking

Lichenized, corticolous. Río San Juan (Ellis & Everhart 1896: 69, as *Karstenia sublilacina*, Hale 1978: 31, as *Ocellularia sublilacina*, Breuss 2002: 1054, as *O. sublilacina*, Breuss 2023: 135).

Genus *Chroodiscus* (Müll. Arg.) Müll. Arg. (1 species)

Chroodiscus coccineus (Leight.) Müll. Arg.

Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

Genus *Leucodecton* A. Massal. (2 species)

Leucodecton compunctellum (Nyl.) Frisch

Lichenized, corticolous. Rivas (Breuss 2002: 1059, as *Myriotrema reclusum*, Breuss 2023: 138).

Leucodecton glaucescens (Nyl.) Frisch

Lichenized, corticolous. Carazo (GBIF 2025, as *Myriotrema glaucescens*).

Genus *Thelotrema* Ach. (1 species)

Thelotrema porinoides Mont. & Bosch

Lichenized, corticolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Order GYALECTALES Henssen ex D. Hawksw. & O.E. Erikss.
(3 families, 4 genera, 47 species)

Family COENOGONIACEAE (Fr.) Stizenb.
(1 genus, 11 species)

Genus *Coenogonium* Ehrenb. ex Nees (11 species)

Coenogonium dilucidum (Kremp.) Kalb & Lücking

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella dilucida*, Breuss 2023: 135).

***Coenogonium epiphyllum* Vain.**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella epiphylla*, Breuss 2023: 135).

***Coenogonium geralense* (Henn.) Lücking**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1058, as *Dimerella flavicans*, Breuss 2023: 135).

***Coenogonium interpositum* Nyl.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 135).

***Coenogonium isidiosum* (Breuss) Rivas Plata, Lücking, L. Umaña & Chaves**

Lichenized, corticolous. Rivas (Breuss 2002: 1063, as *Dimerella isidiosa*, Breuss 2023: 135).

***Coenogonium leprieurii* (Mont.) Nyl.**

Lichenized, corticolous. Atlántico Sur (Consortium of Lichen Herbaria 2024).

***Coenogonium linkii* Ehrenb.**

Lichenized, corticolous and foliicolous. Río San Juan (Breuss 2002: 1057, Breuss 2023: 136).

***Coenogonium lisowskii* (Vězda) Lücking**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella lisowskii*, Breuss 2023: 136).

***Coenogonium minimum* (Müll. Arg.) Lücking**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella minima*, Breuss 2023: 136).

***Coenogonium subzonatum* (Lücking) Lücking & Kalb**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella subzonata*, Breuss 2023: 136).

***Coenogonium usambarens* (Vězda & Farkas) Lücking & Kalb**

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1058, as *Dimerella usambarensis*, Breuss 2023: 136).

Family GYALECTACEAE (A. Massal.) Stizenb.

(1 genus, 1 species)

Genus *Gyalecta* Ach. (1 species)

***Gyalecta nana* Tuck.**

Lichenized, corticolous. Río San Juan (Breuss 2002: 1059, Breuss 2023: 137).

Family TRICHOTHELIACEAE Bitter & F. Schill.
(2 genera, 35 species)

Genus *Porina* Müll. Arg. (29 species)

Porina africana Müll. Arg.

Lichenized, corticolous. Granada (Breuss 2002: 1060, Breuss 2023: 139).

Porina alba (R. Sant.) Lücking

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1060, as *Phyllophiale alba* and *Porina mirabilis*, Breuss 2023: 139, as *P. mirabilis*, Breuss 2023: 139).

Porina atriceps (Vain.) Vain.

Lichenized, foliicolous. Rivas (Consortium of Lichen Herbaria 2024).

Porina atrocoerulea Müll. Arg.

Lichenized, foliicolous. Rivas (Breuss 2002: 1060, Breuss 2023: 140, *Pseudosagedia atrocoerulea*).

Porina distans Vězda & Vivant

Lichenized, foliicolous. Rivas (Consortium of Lichen Herbaria 2024).

Porina dolichophora (Nyl.) Müll. Arg.

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 139).

Porina epimelaena Vain. ex Redinger

Lichenized, corticolous. Río San Juan, Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Porina epiphylla Fée

Lichenized, foliicolous. Río San Juan, Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Porina farinosa C. Knight

Lichenized, corticolous. Río San Juan (Breuss 2002: 1060, Neuwirth 2017: 71, fig. 4g-h, Breuss 2023: 139).

Porina fulvella Müll. Arg.

Lichenized, foliicolous. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Porina karnatakensis Makhija

Lichenized, foliicolous. Rivas (Consortium of Lichen Herbaria 2024).

Porina limbulata (Kremp.) Vain.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 139).

Porina lucida R. Sant.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1060, Breuss 2023: 139).

Porina mastoidea (Ach.) Müll. Arg.

Lichenized, corticolous. Río San Juan (Nylander 1863: 113, Breuss 2002: 1055, Breuss 2023: 135, as *Clathroporina mastoidea*).

Porina moralesiae Lücking

Lichenized, foliicolous. Rivas (Breuss 2002: 1061, Breuss 2023: 139).

Porina nitidula Müll. Arg.

Lichenized, foliicolous. Río San Juan, Rivas (Breuss 2002: 1061, Breuss 2023: 140, as *Pseudosagedia nitidula*).

Porina nucula Ach.

Lichenized, corticolous. Granada, Rivas (Breuss 2002: 1061, Breuss 2023: 139).

Porina octomera (Müll. Arg.) F. Schill.

Lichenized, foliicolous. Rivas (Breuss 2002: 1061, Breuss 2023: 141, as *Segestria octomera*).

Porina pseudomalmei Breuss

Lichenized, corticolous. Rivas (endemic) (Breuss 2002: 1064, fig. 8, Breuss 2023: 139).

Porina rubentior (Stirt.) Müll. Arg.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 141, as *Segestria rubentior*).

Porina rubescens (Lücking) Hafellner & Kalb

Lichenized, foliicolous. Rivas (Breuss 2002: 1062, as *Trichothelium rubescens*, Breuss 2023: 139).

Porina rudiusscula (Nyl.) Müll. Arg.

Lichenized, foliicolous or corticolous. Rivas (Breuss 2002: 1061, Breuss 2023: 139).

Porina rufula (Kremp.) Vain.

Lichenized, foliicolous. Río San Juan, Rivas (Breuss 2002: 1061, Breuss 2023: 139).

Porina subcarpineae Malme

Lichenized, corticolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

Porina subepiphylla Lücking & Vězda

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

Porina subinterstes (Nyl.) Müll. Arg.

Lichenized, foliicolous. Rivas (Consortium of Lichen Herbaria 2024).

Porina tetracerae (Ach.) Müll. Arg.

Lichenized, corticolous. Granada, Río San Juan (Hue 1892: 285, as *Verrucaria tetracerae*, Imshaug 1956: 75, Pfister & Sayre 1978: 125, as *V. tetracerae*, Breuss 2002: 1061, Breuss 2023: 140).

Porina tetramera (Malme) R. Sant.

Lichenized, foliicolous. Rivas (Breuss 2002: 1061, Breuss 2023: 140).

Porina tijucana Vain.

Lichenized, corticolous. Granada, Río San Juan (Breuss 2002: 1061, Breuss 2023: 140).

Genus *Trichothelium* Müll. Arg. (6 species)

Trichothelium alboatrum Vain.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Trichothelium bipindense F. Schill.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, as *Trichothelium amazonense*, Breuss 2023: 141).

Trichothelium epiphyllum Müll. Arg.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Trichothelium intermedium Lücking

Lichenized, foliicolous. Rivas (Consortium of Lichen Herbaria 2024).

Trichothelium minus Vain.

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Trichothelium sipmanii Lücking

Lichenized, foliicolous. Río San Juan (Breuss 2002: 1062, Breuss 2023: 141).

Order PERTUSARIALES M. Choisy ex D. Hawksw. & O.E. Erikss.
(1 family, 1 genus, 6 species)

Family PERTUSARIACEAE Körb. Ex Körb.
(1 genus, 6 species)

Genus *Pertusaria* DC. (6 species)

Pertusaria dehiscens Müll. Arg.

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 139).

Pertusaria depressa (Fée) Mont. & Bosch

Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Pertusaria flavens Nyl.

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 139).

Pertusaria sinusmexicani Dibben

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 139).

Pertusaria tetrathalamia (Fée) Nyl.

Lichenized, corticolous. Rivas (Breuss 2011: 107, Breuss 2023: 139).

Pertusaria texana Müll. Arg.

Lichenized, corticolous. Rivas (Breuss 2002: 1060, Breuss 2023: 139).

Order THELENELLALES Lumbsch & Leavitt
(1 family, 1 genus, 2 species)

Family THELENELLACEAE O.E. Erikss. ex H. Mayrhofer
(1 genus, 2 species)

Genus *Aspidothelium* Vain. (2 species)

Aspidothelium cinerascens Vain.

Lichenized, corticolous or foliicolous. Río San Juan (Breuss 2002: 1056, Breuss 2023: 134).

Aspidothelium fugiens (Müll. Arg.) R. Sant.

Lichenized, foliicolous. Matagalpa (Consortium of Lichen Herbaria 2024).

Class LEOTIOMYCETES O.E. Erikss. & Winka

**Order HELOTIALES Nannf. Ex Korf & Lizoñ
(8 families, 14 genera, 18 species)**

**Family ASCODICHAENACEAE D. Hawksw. & Sherwood
(1 genus, 1 species)**

Genus *Ascodichaena* Butin (1 species)

***Ascodichaena rugosa* Butin**
Coelomycetes, saprobic. Río San Juan (Berkeley 1875: 158, as *Dichaena quercina*).

**Family CENANGIACEAE Rehm
(1 genus, 1 species)**

Genus *Encoelia* (Fr.) P. Karst. (1 species)

***Encoelia nicaraguensis* (E.J. Durand) W.Y. Zhuang**
Saprobic on rotten logs. Granada (endemic) (Durand 1923: 11, as *Ionomidotis nicaraguensis*, Seaver 1951: 53, as *Midotis nicaraguensis*, Zhuang 1988: 275).

**Family CHLOROCIBORIACEAE Baral & P.R. Johnst.
(1 genus, 1 species)**

Genus *Chlorociboria* Seaver ex C.S. Ramamurthi, Korf & L.R. Batra (1 species)

***Chlorociboria aeruginascens* (Nyl.) Kanouse ex C.S. Ramamurthi, Korf & L. Batra**
Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on dead wood. Matagalpa (New country record).

**Family ERYSHIPACEAE Tul. & C. Tul.
(5 genera, 9 species)**

Genus *Blumeria* Golovin ex Speer (1 species)

***Blumeria graminis* (DC.) Speer**
Parasitic on leaves of *Triticum aestivum*. Locality unknown (Wellman 1977: 437, as *Oidium monilioides*, Delgado 2011: 15, as *O. monilioides*).



Figure 11. A: *Chlorociboria aeruginascens*, Matagalpa. B: *Ascocoryne sarcoides*, Jinotega. C: *Erioscyphella abnormis*, Jinotega. D: *Helvella atra*, Jinotega. E-F: *Scutellinia scutellata*, Jinotega. G-H: *Cookeina speciosa*, Río San Juan (photos by Ricardo Soza).

Genus *Erysiphe* DC. (3 species)

***Erysiphe betae* (Vaňha) Weltzien**

Parasitic on leaves of *Phaseolus vulgaris*. Locality unknown (IPSA, 2021: 6).

***Erysiphe polygoni* DC.**

Parasitic on *Phaseolus vulgaris*, *Vigna unguiculata*. Chinandega, Estelí, Jinotega, León, Managua, Matagalpa, Nueva Segovia (Litzenberger & Stevenson 1957: 14, McGuire & Crandall 1967: 120).

***Erysiphe quercicola* S. Takam. & U. Braun**

Parasitic on *Bixa orellana*. Locality unknown (IPSA, 2021: 9, as *Oidium bixae*).

Genus *Golovinomyces* (U. Braun) Heluta (1 species)

***Golovinomyces cichoracearum* (DC.) V.P. Heluta**

Parasitic on *Cucumis sativus*, *Cucurbita pepo*, *Sechium edule*. Estelí, Jinoega, León, Managua, Matagalpa, Nueva Segovia (Litzenberger & Stevenson 1957: 7, as *Erysiphe cichoracearum*, McGuire & Crandall 1967: 141, as *E. cichoracearum*, González *et al.* 1985: 127, as *E. cichoracearum*, Ipsa 2021: 7).

Genus *Leveillula* G. Arnaud (1 species)

***Leveillula taurica* (Lév.) G. Arnaud**

Parasitic on *Sechium edule*, *Lycopersicon esculentum*. Managua (Litzenberger & Stevenson 1957: 8, González *et al.* 1985b: 127, Lenné 1990: 81, Berlin & Eitrem 2005: 21, Delgado 2011: 15, as *Oidiopsis taurica*, Ipsa 2021: 8)

Genus *Podosphaera* Kunze (3 species)

***Podosphaera macularis* (Wallr.) U. Braun & S. Takam.**

Parasitic on leaves of *Pisum sativum*. Locality unknown (McGuire & Crandall 1967: 142, as *Sphaerotheca humuli*).

***Podosphaera pannosa* (Wallr.) de Bary**

Parasitic on leaves of *Rosa* spp. Jinotega, Masaya, Matagalpa (Litzenberger & Stevenson 1957: 15, as *Sphaerotheca pannosa*).

***Podosphaera xanthii* (Castagne) U. Braun & Shishkoff**

Parasitic on *Calibrachoa*. Locality unknown (Brielmaier-Liebetanz *et al.*, 2015: 4).

Family GELATINODISCACEAE S.E. Carp
(1 genus, 1 species)

Genus *Ascocoryne* J.W. Groves & D.E. Wilson (1 species)

Ascocoryne sarcoides (Jacq.) J.W. Groves & D.E. Wilson

Specimens examined: **Nicaragua**: Jinotega, Reserva Silvestre Privada El Jaguar (13° 14'20"N, 86° 03'05"W, 1307 m), 18 Feb. 2021, R. Soza (no coll.).
Saprobic on dead wood. Jinotega (New country record).

Family LACHNACEAE (Nannf.) Raitv.
(1 genus, 1 species)

Genus *Erioscyphella* Kirschst. (1 species)

Erioscyphella abnormis (Mont.) Baral, Šandová & B. Perić

Specimens examined: **Nicaragua**: Jinotega, Reserva Silvestre Privada El Jaguar (13° 14'20"N, 86° 03'05"W, 1307 m), 18 Feb. 2021, R. Soza (no coll.).
Saprobic on dead wood. Jinotega (New country record).

Family PLOETTNERULACEAE Kirschst.
(1 genus, 1 species)

Genus *Cadophora* Lagerb. & Melin (1 species)

Cadophora gregata (Allington & D.W. Chamb.) T.C. Harr. & McNew

Hyphomycetes, parasitic on *Glycine max*. Chinandega, Managua, Masaya (Perera 1985: 16, *Cephalosporium gregatum*, Delgado 2011: 9, IPSA 2021: 4)

Family SCLEROTINIACEAE Whetzel ex Whetzel
(3 genera, 3 species)

Genus *Amphobotrys* Hennebert (1 species)

Amphobotrys ricini (N.F. Buchw.) Hennebert

Hyphomycetes, parasitic on *Ricinus communis*. Managua (Litzenberger & Stevenson 1957: 15, as *Sclerotinia ricini*).

Genus *Botrytis* P. Micheli ex Pers. (1 species)

Botrytis cinerea Pers.

Hyphomycetes, parasitic on *Capsicum annuum*. Locality unknown (McGuire & Crandall 1967: 138, Delgado 2011: 9).

Genus *Sclerotinia* Fuckel (1 species)

Sclerotinia sclerotiorum (Lib.) de Bary

Parasitic on *Phaseolus vulgaris*. Locality unknown (McGuire & Crandall 1967: 121, IPSA 2021: 11).

**Order LEOTIALES Korf & Lizoñ
(1 family, 1 genus, 1 species)**

**Family LEOTIACEAE Corda
(1 genus, 1 species)**

Genus *Leotia* Pers. (1 species)

Leotia lubrica (Scop.) Pers.

Saprobic on soil. Jinotega (Saldívar 2015: 39).

**Order PHACIDIALES C.E. Bessey
(1 family, 1 genus, 1 species)**

**Family PHACIDIACEAE Fr.
(1 genus, 1 species)**

Genus *Allantophomopsiella* Crous (1 species)

Allantophomopsiella pseudotsugae (M. Wilson) Crous

Coelomycetes, parasitic on *Pinus oocarpa*. Estelí (HerbIMI 2024).

**Order RHYTISMATALES M.E. Barr ex Minter
(1 family, 2 genera, 2 species)**

**Family RHYTISMATACEAE Chevall.
(2 genera, 2 species)**

Genus *Lophodermium* Chevall. (1 species)

Lophodermium platyplacum (Berk. & M.A. Curtis) Sacc.

Saprobic on fallen leaves of *Clusia* sp. Río San Juan (Ellis & Everhart 1892: 252, pl. 5, fig. 7, as *Montagnella platyplaca*).

Genus *Ploioderma* Darker. (1 species)

Ploioderma hedgcockii (Dearn.) Darker

Parasitic on pine needles of *Pinus caribaea*. Atlántico Norte (HerbIMI 2024).

Class ORBILIOMYCETES O.E. Erikss. & Baral

Order ORBILIALES Baral, O.E. Erikss., G. Marson & E. Weber
(1 family, 2 genera, 2 species)

Family ORBILIACEAE Nannf.
(2 genera, 2 species)

Genus *Arthrobotrys* Corda (1 species)

Arthrobotrys musiformis Drechsler
Hyphomycetes, nematophagous fungi on soil. Masaya (Persmark *et al.* 1995: 120, Delgado 2011: 5).

Genus *Dactylellina* M. Morelet (1 species)

Dactylellina haptotyla (Drechsler) M. Scholler, Hagedorn & A. Rubner
Hyphomycetes, nematophagous fungi on soil. Masaya (Persmark *et al.* 1995: 120, as *Dactylaria sclerohypha*, Delgado 2011: 5, as *Arthrobotrys sclerohypha*).

Class PEZIZOMYCETES O.E. Erikss. & Winka

Order PEZIZALES J. Schröt.
(6 families, 9 genera, 15 species)

Family ASCOBOLACEAE Boud. Ex Sacc.
(1 genus, 1 species)

Genus *Ascobolus* Pers. (1 species)

Ascobolus scatigenus (Berk. & M.A. Curtis) Brumm.
Saprobic on dung, gregarious. Atlántico Sur (Soza 2025: *in press*).

Family GLAZIELLACEAE J.L. Gibson
(1 genus, 1 species)

Genus *Glaziella* Berk. (1 species)

Glaziella aurantiaca (Berk. & M.A. Curtis) Sacc.
Saprobic on soil, gregarious. Río San Juan (Smith 1893: 399, as *Glaziella vesiculosa*, Soza, 2023: 5).

Family HELVELLACEAE Fr.
(1 genus, 1 species)

Genus *Helvella* L. (1 species)

Helvella atra J. König

Saprobic on soil, solitary. Jinotega (Saldívar 2015: 39, Soza 2023a: 5, fig. 1a, b).

Family PYRONEMATACEAE Corda
(2 genera, 5 species)

Genus *Anthracobia* Boud. (1 species)

Anthracobia melaloma (Alb. & Schwein.) Arnould

Saprobic on burned ground, gregarious. Locality unknown (Stchigel 2000: 215, Soza 2023a: 6).

Genus *Scutellinia* (Cooke) Lambotte (4 species)

Scutellinia blumenaviensis (Henn.) Le Gal

Saprobic on rotted wood, gregarious. Río San Juan (Seaver 1942: 104, as *Melastiza asperrima*, Denison 1956: 617, as *Scutellinia asperrima*, Denison 1959: 27, as *S. asperrima*, Schumacher 1990: 77, Soza 2023a: 6).

Scutellinia cubensis (Berk. & M.A. Curtis) Gamundí

Saprobic on dead wood, gregarious. Río San Juan (Soza 2023a: 6).

Scutellinia erinaceus (Schwein.) Kuntze

Saprobic on rotted wood, gregarious. Río San Juan (Seaver 1942: 166, as *Patella setosa*, Denison 1956: 627, Denison 1959: 44, Schumacher 1990: 70, as *Scutellinia setosa*, Soza 2023a: 7).

Scutellinia scutellata (L.) Lambotte

Saprobic on dead wood, gregarious. Chinandega, León, Jinotega, Managua, Matagalpa (Saldívar 2015: 40, Soza *et al.* 2023: 11, Soza 2023a: 7, fig. 2a, b).

Family SARCOSCYPHACEAE LeGal ex Eckblad
(3 genera, 6 species)

Genus *Cookeina* Kuntze (3 species)

Cookeina speciosa (Fr.) Dennis

Saprobic on dead trunks, gregarious. Atlántico Norte, Atlántico Sur, Carazo, Jinotega, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2015: 39, Saldívar 2018: 48, Soza 2023a: 8, fig. 5a-d).



Figure 12. A: *Cookeina tricholoma*, Atlántico Sur. B-C: *C. venezuelae*, Jinotega. D: *Geodina guanacastensis*, León. E: *Phillipsia domingensis*, Managua. F: *P. lutea*, Atlántico Norte. G: *Moelleriella phyllogena*, Jinotega. H: *Corallonectria jatrophae*, Atlántico Sur (photos by Ricardo Soza, F by Joseph Rojas).

***Cookeina tricholoma* (Mont.) Kuntze**

Saprobic on dead trunks, gregarious. Atlántico Norte, Atlántico Sur, Carazo, Chinandega, Jinotega, Managua, Río San Juan (Ellis & Everhart 1896: 69, as *Peziza striispora*, Seaver 1913: 188, González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2018: 48, Soza *et al.* 2023: 11, Soza 2023a: 9, fig. 6a, b).

***Cookeina venezuelae* (Berk. & M.A. Curtis ex Cooke) Le Gal,**

Saprobic on dead trunks, gregarious. Jinotega (Soza 2023a: 11, fig. 6c, d).

Genus *Geodina* Denison (1 species)

***Geodina guanacastensis* Denison**

Saprobic on soil, gregarious. León (Soza 2023a: 11, fig. 7a, b).

Genus *Phillipsia* Berk. (2 species)

***Phillipsia domingensis* (Berk.) Berk. Ex Denison**

Saprobic on trunks, solitary. Chinandega, Jinotega, Managua, Matagalpa (Saldívar 2015: 39, Soza *et al.* 2023: 11, Soza 2023a: 12, fig. 8a-c).

***Phillipsia lutea* Denison**

Saprobic on dead wood, solitary. Atlántico Norte (Soza 2023a: 23, fig. 8d).

**Family SARCOSOMATACEAE Kobayasi
(1 genus, 1 species)**

Genus *Pseudoplectania* Fuckel (1 species)

***Pseudoplectania carranzae* (Calonge & M. Mata) M Carbone, Agnello & P. Alvarado**

Saprobic on dead wood, gregarious. Atlántico Sur (Soza 2025: *in press*).

Class SORDARIOMYCETES O.E. Erikss. & Winka

Subclass DIAPORTHOMYCETIDAE Senan., Maharachch. & K.D. Hyde

**Order DIAPORTHALES Nannf
(3 families, 5 genera, 9 species)**

**Family CYTOSPORACEAE Fr.
(1 genus, 3 species)**

Genus *Cytospora* Ehrenb. (3 species)

***Cytospora pinastri* Fr.**

Coelomycetes, parasitic on *Pinus oocarpa*. Estelí (HerbIMI 2024).

***Cytospora pini* Desm.**

Coelomycetes, parasitic on *Pinus oocarpa*. Estelí (HerbIMI 2024).

***Cytospora sacchari* E.J. Butler**

Coelomycetes, parasitic on *Saccharum officinarum*. Locality unknown (Wellman 1977: 369, Saumtally 2000: 177, IPSA 2021: 6).

**Family DIAPORTHACEAE Höhn. ex Wehm.
(3 genera, 5 species)**

Genus *Diaporthe* Nitschke (3 species)

***Diaporthe citri* (H.S. Fawc.) F.A. Wolf**

Coelomycetes, parasitic on *Citrus* spp. Locality unknown (González *et al.* 1985b: 127, as *Phomopsis citri*, IPSA 2021: 6).

***Diaporthe phaseolorum* (Cooke & Ellis) Sacc.**

Coelomycetes, parasitic on *Glycine max*. Locality unknown (IPSA, 2021: 6, as *Diaporthe phaseolorum* var. *sojae*)

***Diaporthe rudis* (Fr.) Nitschke**

Coelomycetes, saprobic on logs. Rivas (Smith 1893: 404, as *Diaporthe crinigera*).

Genus *Phomopsis* (Sacc.) Sacc. (1 species)

***Phomopsis cedrelae* Sousa da Câmara**

Coelomycetes, parasitic on *Cedrela odorata*. León (HerbIMI 2024).

Genus *Stenocarpella* Syd. & P. Syd. (1 species)

Stenocarpella maydis (Berk.) B. Sutton

Coelomycetes, parasitic on *Zea mays*. Locality unknown (McGuire & Crandall 1967: 118, as *Diplodia oryzae*, IICA 1993: 41, as *Diplodia maydis*, IPSA 2021: 12).

Family ERYTHROGLOEACEAE Senan., Maharachch. & K.D. Hyde
(1 genus, 1 species)

Genus *Erythrogloeum* Petr. (1 species)

Erythrogloeum pini-acicola H.C. Evans

Coelomycetes, parasitic on pine needles of *Pinus oocarpa*. Estelí (endemic) (Evans 1984: 94).

Order DISTOSEPTISPORALES Z.L. Luo, K.D. Hyde & H.Y. Su
(1 family, 1 genus, 1 species)

Family DISTOSEPTISPORACEAE K.D. Hyde & McKenzie
(1 genus, 1 species)

Genus *Distoseptispora* K.D. Hyde, McKenzie & Maharachch. (1 species)

Distoseptispora adscendens (Berk.) R. Zhu & H. Zhang

Hyphomycetes, saprobic on decaying wood. Río San Juan (Delgado & Koukol 2016: 24, as *Ellisembia adscendens*).

Order JOBELLISIALES M.J. D'souza & K.D. Hyde
(1 family, 1 genus, 1 species)

Family JOBELLISIACEAE Réblová
(1 genus, 1 species)

Genus *Jobellisia* M.E. Barr (1 species)

Jobellisia nicaraguensis (Ellis & Everh.) M.E. Barr

Saprobic on rotten wood. Rivas (endemic) (Smith 1893: 400, as *Herpotrichia nicaraguensis*, Barr 1993: 61, fig. 2p-q, Huhndorf *et al.* 1999: 192, fig. 30-34).

Order MAGNAPORTHALES Thongk., Vijaykr. & K.D. Hyde
(3 families, 6 genera, 7 species)

Family MAGNAPORTHACEAE P.F. Cannon
(3 genera, 3 species)

Genus *Gaeumannomyces* Arx & D.L. Olivier (1 species)

Gaeumannomyces graminis (Sacc.) Arx & D.L. Olivier
Parasitic on *Oryza sativa*. Locality unknown (IPSA 2021: 7).

Genus *Magnaporthiopsis* J. Luo & N. Zhang (1 species)

Magnaporthiopsis maydis (Samra, Sabet & Hing.) Klaubauf, M.-H. Lebrun & Crous
Hyphomycetes, parasitic on *Zea mays*. Locality unknown (IICA 1993: 41, as *Cephalosporium maydis*).

Genus *Nakataea* Hara (1 species)

Nakataea oryzae (Catt.) J. Luo & N. Zhang
Hyphomycetes, parasitic on *Oryza sativa*. Locality unknown (Wellman 1977: 281, as *Helminthosporium sigmoideum*, Delgado 2011: 15, as *Nakataea sigmoidea*).

Family OPHIOCERACEAE Klaubauf, E.G. LeBrun & Crous
(1 genus, 1 species)

Genus *Ophioceras* Sacc. (1 species)

Ophioceras castillensis (C.L. Sm.) H.B. Jiang, Phookamsak & K.D. Hyde
Saprobic on dead wood. Río San Juan (Smith 1893: 403, as *Ceratosphaeria castillensis*, Huhndorf et al. 2008: 944, fig. 3-15, as *Ceratosphaerella castillensis*, Jiang et al. 2021: 11, fig. 6a-g).

Family PYRICULARIACEAE Klaubauf, E.G. LeBrun & Crous
(2 genera, 3 species)

Genus *Neocordana* Hern.-Rest. & Crous (1 species)

Neocordana musae (Zimm.) Hern.-Restr. & Crous
Hyphomycetes, parasitic on *Musa paradisiaca*. Locality unknown (IPSA 2021: 6, as *Cordana musae*).

Genus *Pyricularia* Sacc. (2 species)

***Pyricularia grisea* Cooke ex Sacc.**

Hyphomycetes, parasitic on *Digitaria decumbens*, *Pennisetum clandestinum*, *Stenotaphrum secundatum*. Managua (Litzenberger & Stevenson 1957: 8, McGuire & Crandall 1967: 152, Wellman 1977: 412, Lenné 1990: 53, as *Ceratosphaeria grisea*, Lenné 1990: 108, as *Magnaporthe grisea*, Delgado 2011: 18).

***Pyricularia oryzae* Cavara**

Hyphomycetes, parasitic on *Oryza sativa*. Chinandega, León, Managua, Rivas (Litzenberger & Stevenson 1957: 13, McGuire & Crandall 1967: 124, Delgado 2011: 18, IPSA 2021: 10, as *Magnaporthe oryzae*).

**Order SPORIDESMIALES Crous
(1 family, 1 genus, 1 species)**

**Family SPORIDESMIACEAE Fr.
(1 genus, 1 species)**

Genus *Sporidesmium* Link (1 species)

***Sporidesmium nodipes* (Penz. & Sacc.) S. Hughes**

Hyphomycetes, saprobic on dead bamboo stems. Río San Juan (Delgado & Koukol 2016: 28, fig. 4h).

Subclass HYPOCREOMYCETIDAE O.E. Erikss. & Winka

**Order CORONOPHORALES Nannf.
(2 families, 3 genera, 3 species)**

**Family NITSCHKIACEAE (Fitzp.) Nannf.
(2 genera, 2 species)**

Genus *Acanthonitschkea* Speg. (1 species)

***Acanthonitschkea horrida* (Ellis & Everh.) M.E. Barr**

Saprobic on bark. Rivas (endemic) (Ellis & Everhart 1893: 399, as *Trichosphaeria horrida*, Barr 1993: 49, fig. 1j-l).

Genus *Fracchiaea* Sacc. (1 species)

***Fracchiaea heterogenea* Sacc.**

Saprobic on dead wood. Río San Juan (Fitzpatrick 1924: 104, Nannfeldt 1975: 308, as *Nitschkia broomeiana*).

Family SCORTECHINIACEAE Huhndorf, A.N. Mill. & F.A. Fernández
(1 genus, 1 species)

Genus *Scortechinia* Sacc. (1 species)

Scortechinia culcitella (Berk. & Ravenel) Speg.

Saprobic on dead wood. Río San Juan (Berkeley & Curtis 1860: 128, as *Sphaeria culcitella*, Nannfeldt 1975: 307, as *Nitschkia acanthostroma*).

Order GLOMERELLALES Chadeff. ex Réblová, W. Gams & Seifert
(2 families, 3 genera, 17 species)

Family GLOMERELLACEAE Locq. ex Seifert & W. Gams
(1 genus, 15 species)

Genus *Colletotrichum* Corda (15 species)

Colletotrichum capsici (Syd. & P. Syd.) E.J. Butler & Bisby

Coelomycetes, parasitic on *Capsicum annuum*, *Phaseolus vulgaris*. Boaco, Matagalpa (Marcenaro & Valkonen 2016: 7, INTA 2013: 22, IPSA 2021: 5).

Colletotrichum coccodes (Wallr.) S. Hughes

Coelomycetes, parasitic on *Psidium guajava*. Locality unknown (IPSA 2021: 7).

Colletotrichum coffeanum F. Noack

Coelomycetes, parasitic on branches and fruits of *Coffea arabica*. Jinotega, Matagalpa (Litzenberger & Stevenson 1957: 6, McGuire & Crandall 1967: 145, IPSA 2021: 5).

Colletotrichum dematium (Pers.) Grove

Coelomycetes, parasitic on *Dianthus caryophyllus*, *Lupinus angustifolius*, *Medicago sativa*. Managua, Matagalpa (Litzenberger & Stevenson 1957: 8, McGuire & Crandall 1967: 151, IPSA 2021: 5).

Colletotrichum falcatum Went

Coelomycetes, parasitic on *Saccharum officinarum*, *Sorghum bicolor*. Chinandega, Managua (Litzenberger & Stevenson 1957: 15, McGuire & Crandall 1967: 122, Lenné 1990:131, Singh & Lal 2000: 153, IPSA 2021: 5, as *Glomerella tucumanensis*).

Colletotrichum gloeosporioides (Penz.) Penz. & Sacc.

Coelomycetes, parasitic on *Coffea arabica*, *Ipomoea batatas*, *Mangifera indica*, *Phaseolus vulgaris*. Boaco, Estelí, Managua, Matagalpa (Litzenberger & Stevenson 1957: 11, McGuire & Crandall 1967: 13, McGuire & Crandall 1967: 131, as *Glomerella cingulata*, González *et al.* 1985b: 128, as *G. cingulata*, INTA 2013: 20, Marcenaro & Valkonen 2016: 7, IPSA 2021: 7, as *G. cingulata*).

***Colletotrichum gossypii* Southw.**

Coelomycetes, parasitic on *Gossypium hirsutum*. Locality unknown (McGuire & Crandall 1967: 147, as *Glomerella gossypii*, IPSA 2021: 5).

***Colletotrichum graminicola* (Ces.) G.W. Wilson**

Coelomycetes, parasitic on *Medicago sativa*, *Sorghum bicolor*. Managua (Litzenberger & Stevenson 1957: 12, McGuire & Crandall 1967: 122, IICA 1993: 41, Lenné 1990: 131, IPSA 2021: 5).

***Colletotrichum lindemuthianum* (Sacc. & Magnus) Briosi & Cavara**

Coelomycetes, parasitic on *Phaseolus vulgaris*. Chinandega, Estelí, Jinotega, León, Managua, Matagalpa, Nueva Segovia, Rivas (Litzenberger & Stevenson 1957: 14, McGuire & Crandall 1967: 120, CATIE 1981: 13, IICA 1993: 41, Rava *et al.* 1993: 389, Carcache 1999: 41, IPSA 2021: 5).

***Colletotrichum lineola* Corda**

Coelomycetes, parasitic on *Sorghum bicolor*. Locality unknown (IPSA 2021: 5).

***Colletotrichum lini* (Westerd.) Tochinai**

Coelomycetes, parasitic on *Linum usitatissimum*. Estelí (CATIE 1981: 13).

***Colletotrichum musae* (Berk. & M.A. Curtis) Arx**

Coelomycetes, parasitic on *Musa paradisiaca*. Locality unknown (IPSA 2021: 5).

***Colletotrichum nigrum* Ellis & Halst.**

Coelomycetes, parasitic on *Capsicum annuum*. Locality unknown (McGuire & Crandall 1967: 138)

***Colletotrichum orbiculare* (Berk.) Arx**

Coelomycetes, parasitic on *Citrullus lanatus*, *Cucumis melo*, *C. sativus*. Managua (Litzenberger & Stevenson 1957: 6, as *Colletotrichum lagenarium*, McGuire & Crandall 1967: 141, as *C. lagenarium*, IPSA 2021: 7).

***Colletotrichum truncatum* (Schwein.) Andrus & W.D. Moore**

Coelomycetes, parasitic on *Phaseolus vulgaris*. Managua (Litzenberger & Stevenson 1957: 15, McGuire & Crandall 1967: 120, Wellman 1977: 314, IICA 1993: 41, Carcache 1999: 46, IPSA 2021: 6).

**Family PLECTOSPHAERELLACEAE W. Gams, Summerb. & Zare
(2 genera, 2 species)**

Genus *Musicillium* Zare & W Gams (1 species)

***Musicillium theobromae* (Turconi) Zare & W. Gams**

Hyphomycetes, parasitic on *Musa* spp. Locality unknown (Delgado 2011: 15).

Genus *Verticillium* Nees (1 species)

Verticillium alboatrum Reinke & Berthold

Hyphomycetes, parasitic on *Gossypium hirsutum*. Chinandega, León, Managua, Masaya, Rivas (Litzenberger & Stevenson 1957: 10, McGuire & Crandall 1967: 142, Delgado 2011: 20).

Order HYPOCREALES Lindau
(9 families, 29 genera, 58 species)

Family BIONECTRIACEAE Samuels & Rossman
(1 genus, 1 species)

Genus *Gliomastix* Guég. (1 species)

Gliomastix roseogrisea (S.B. Saksena) Summerb.

Hyphomycetes, parasitic on *Musa* sp. Locality unknown (Delgado 2011: 5, as *Acremonium roseogriseum*).

Family CLAVICIPITACEAE (Lindau) Earle ex Rogerson
(6 genera, 13 species)

Genus *Balansia* Speg. (3 species)

Balansia nigricans (Speg.) J.F. White, T.E. Drake & T.I. Martin

Parasitic on *Panicum pilosum*. Managua (Litzenberger & Stevenson 1957: 14, as *Dothichloe nigricans*).

Balansia oryzae-sativae Hashioka

Parasitic on *Oryza sativa*. Locality unknown (IICA 1993: 41, as *Balansia oryzae*).

Balansia strangulans (Mont.) Diehl

Parasitic on *Panicum polygonatum*. Managua (Litzenberger & Stevenson 1957: 13, Diehl 1950: 29).

Genus *Claviceps* Tul. (1 species)

Claviceps tripsaci F. Stevens & J.G. Hall

Parasitic on *Zea mays* sub. *mexicana*. Managua (Litzenberger & Stevenson 1957: 9).

Genus *Metarhizium* Sorokīn (2 species)

***Metarhizium anisopliae* (Metschn.) Sorokīn**

Hyphomycetes, parasitic on *Aeneolamia varia*, *Dalbulus maidis*, *Leucoptera coffeella*, *Phyllophaga* sp. Chinandega, Managua (Hruska 1992: 2, Guharay 1994: 63, Lacayo *et al.* 1994: 49, Monzón 2001: 96, Delgado 2011: 14).

***Metarhizium rileyi* (Farl.) Kepler, S.A. Rehner & Humber**

Hyphomycetes, parasitic on *Heliothis zea*, *Spodoptera frugiperda*, *Spodoptera sunia*. Locality unknown (Monzón 2001: 96, Delgado 2011: 15, as *Nomuraea rileyi*).

Genus *Moelleriella* Bres. (3 species)

***Moelleriella epiphylla* (Masee) P. Chaverri & K.T. Hodge**

Parasitic on scale insects on leaf. Atlántico Norte (Chaverri *et al.* 2008: 38).

Notes: *Moelleriella epiphylla* is known in Nicaragua from a specimen collected in Alamikamba (H.C. Evans, CUP 067762); however, in Chaverri *et al.* (2008) this locality is erroneously cited for Honduras. Alamikamba is a community in the municipality of Prinzapolka, in the Región Autónoma de la Costa Caribe Norte de Nicaragua.

***Moelleriella phyllogena* (Mont.) P. Chaverri & K.T. Hodge**

Specimens examined: **Nicaragua:** Jinotega, Reserva Silvestre Privada El Jaguar (13° 14'20"N, 86° 03'05"W, 1307 m), 18 Feb. 2021, R. Soza (no coll.).

Parasitic on scale insects on leaves. Jinotega (**New country record**).

***Moelleriella turbinata* (Petch) Chaverri & K.T. Hodge**

Parasitic on scale insects. Matagalpa, Río San Juan (Pfister & Sayre 1978: 48, as *Aschersonia turbinata*, Chaverri *et al.* 2008: 50).

Genus *Myriogenospora* G.F. Atk. (3 species)

***Myriogenospora atramentosa* (Berk. & M.A. Curtis) Diehl**

Parasitic on *Paspalum* sp. Locality unknown (Myco Portal 2024).

***Myriogenospora bresadolana* Henn.**

Parasitic on *Paspalum* sp. Locality unknown (Wellman 1977: 299).

***Myriogenospora paspali* G.F. Atk.**

Parasitic on *Paspalum conjugatum*. Atlántico Sur (Lenné 1990: 102, Litzenberger & Stevenson 1957: 14).

Genus *Ustilaginoidea* Bref. (1 species)

***Ustilaginoidea virens* (Cooke) Takah.**

Hyphomycetes, parasitic on *Oryza sativa*, *Zea mays*. Granada, Masaya (Litzenberger & Stevenson 1957: 13, McGuire & Crandall 1967: 124, Delgado 2011: 20).

**Family CORDYCIPTACEAE Kreisel ex G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora
(4 genera, 4 species)**

Genus *Ascopolyporus* Möller (1 species)

***Ascopolyporus philodendri* J.F. Bisch.**

Stem of lianoid *Philodendron* sp. Atlántico Sur (Soza 2025: *in press*).

Genus *Akanthomyces* Lebert (1 species)

***Akanthomyces lecanii* (Zimm.) Spatafora, Kepler & B. Shrestha**

Hyphomycetes, parasitic on Aphididae. Locality unknown (Monzón 2001: 96, as *Verticillium lecanii*, Delgado 2011: 14, as *Lecanicillium lecanii*).

Genus *Beauveria* Vuill. (1 species)

***Beauveria bassiana* (Bals.-Criv.) Vuill.**

Hyphomycetes, parasitic on *Cosmopolites sordidus*, *Hypothenemus hampei*, *Leucoptera coffeella*, *Plutella xylostella*. Chinandega, Managua (Humber 1992: 23, Guharay 1994: 63, Lacayo *et al.* 1994: 49, Lacayo 1995: 71, Monzón 2001: 96, Monzón *et al.* 2008: 136, Delgado 2011: 8).

Genus *Cordyceps* (Fr.) Link (1 species)

***Cordyceps militaris* (L.) Fr.**

Specimens examined: Nicaragua: Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Parasitic on insects. Matagalpa (New country record).

**Family HYPOCREACEAE De Not.
(3 genera, 5 species)**

Genus *Gliocladium* Corda (1 species)

***Gliocladium caespitosum* Petch**

Hyphomycetes, parasitic on *Musa* sp. Locality unknown (Delgado 2011: 13).

Genus *Hypocrea* Fr. (2 species)

Hypocrea alutacea (Pers.) Tul. & C. Tul.

Saprobic on rotten wood. Jinotega (Saldívar 2015: 39, as *Podostroma alutaceum*).

Hypocrea substipitata (Seaver) Chaverri & Samuels

Saprobic on decaying bark. Río San Juan (Seaver 1910a: 59, as *Chromocrea substipitata*, Seaver 1910b: 36, as *C. substipitata*, Chaverri & Samuels 2003: 90, figs. 357-366, 495).

Genus *Hypomyces* (Fr.) Tul. & C. Tul. (2 species)

Hypomyces lactifluorum (Schwein.) Tul. & C. Tul.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Fungicolous, on fruitbodies of *Lactarius* sp. Estelí (New country record).

Hypomyces microspermus Rogerson & Samuels

Fungicolous, on basidiomes of *Boletellus coccineus*. Atlántico Norte (MyCoPortal 2024).

**Family MYROTHECIOMYCETACEAE Crous
(1 genus, 1 species)**

Genus *Trichothecium* Link (1 species)

Trichothecium roseum (Pers.) Link

Hyphomycetes, parasitic on *Pinus caribaea*. Locality unknown (Delgado 2011: 20).

**Family NECTRIACEAE Tul. & C. Tul.
(9 genera, 27 species)**

Genus *Albonectria* Rossman & Samuels (1 species)

Albonectria rigidiuscula (Berk. & Broome) Rossman & Samuels

Hyphomycetes, parasitic on *Theobroma cacao*. Locality unknown (Hansen 1966: 231, as *Fusarium decemcellulare*, McGuire & Crandall 1967: 148, as *F. decemcellulare*, Delgado 2011: 12, as *F. decemcellulare*).

Genus *Bisifusarium* L. Lombard, Crous & W. Gams (1 species)

Bisifusarium dimerum (Penz.) L. Lombard & Crous

Hyphomycetes, parasitic on *Musa paradisiaca*. Locality unknown (Delgado 2011: 13, as *Fusarium pusillum*).

Genus *Calostilbe* Sacc. & Syd. (1 species)

***Calostilbe striispora* (Ellis & Everh.) Seaver**

Saprobic on decaying wood. Río San Juan (Smith 1893: 398, as *Nectria striispora*, Seaver 1910b: 24, as *Macbridella striispora*, Spaulding 1961: 38, Samuels 1973: 1281, as *N. striispora*, Wellman 1977: 424, Rossman *et al.* 1999: 111, pl. 27b).

Genus *Corallomycetella* Henn. (1 species)

***Corallomycetella elegans* (Berk. & M.A. Curtis) C. Herrera & P. Chaverri**

Saprobic on decaying wood. Locality unknown (Herrera *et al.* 2013: 533).

Genus *Corallonectria* C. Herrera & P. Chaverri (1 species)

***Corallonectria jatrophae* (Möller) C.S. Herrera & P. Chaverri**

Saprobic on dead wood. Río San Juan (Samuels 1973: 1278, as *Nectria amazonensis*, Samuels & Dumont 1982: 395, as *Nectria jatrophae*, Rossman *et al.* 1999: 114, as *Corallomycetella jatrophae*, Herrera *et al.* 2013: 539).

Genus *Cosmospora* Rabenh. (1 species)

***Cosmospora episphaeria* (Tode) Rossman & Samuels**

Saprobic on bark and fungicolous on *Xylaria corniformis*. Río San Juan (Smith 1893: 398, as *Nectria episphaeria*, Seaver 1909a: 65, as *N. episphaeria*, Seaver 1910b: 10, as *N. episphaeria*).

***Cosmospora flavoviridis* (Fuckel) Rossman & Samuels**

Saprobic on bark of decaying tree. Río San Juan (Smith 1893: 398, as *Nectria sanguinea*).

Notes. *Nectria sanguinea* is commonly reported from the tropics and according to Booth (1959), the species concept is confused and may be *N. flavoviridis*.

Genus *Fusarium* Link (16 species)

***Fusarium acuminatum* Ellis & Everh.**

Hyphomycetes, host unknown. Locality unknown (GBIF 2025).

***Fusarium chlamydosporum* Wollenw. & Reinking**

Hyphomycetes, parasitic on *Phaseolus vulgaris*. Boaco, Estelí, Matagalpa (INTA 2013: 30, Marcenaro & Valkonen 2016: 7).

***Fusarium circinatum* Nirenberg & O'Donnell**

Hyphomycetes, parasitic on *Pinus oocarpa*. Nueva Segovia (Barnes *et al.* 2016: 14).

***Fusarium equiseti* (Corda) Sacc.**

Hyphomycetes, parasitic on *Phaseolus vulgaris*. Boaco, Estelí, Matagalpa (INTA 2013: 30, Marcenaro & Valkonen 2016: 7, Méndez-Úbeda *et al.* 2017: 104).

***Fusarium fujikuroi* Nirenberg**

Hyphomycetes, parasitic on *Musa paradisiaca*, *Zea mays*. Locality unknown (McGuire & Crandall 1967: 118, IICA 1993: 41, IPSA 2021: 7).

***Fusarium graminearum* Schwabe**

Hyphomycetes, parasitic on *Triticum aestivum*, *Zea mays*. Estelí, Jinotega, Matagalpa (Litzenberger & Stevenson 1957: 18, as *Gibberella zeae*, McGuire & Crandall 1967: 118, McGuire & Crandall 1967: 118, as *G. zeae*, Wellman 1977: 436, Delgado 2011: 12, IPSA 2021: 7, as *G. zeae*).

***Fusarium incarnatum* (Roberge ex Desm.) Sacc.**

Hyphomycetes, parasitic on *Phaseolus vulgaris*, *Theobroma cacao*. Boaco, Estelí, Matagalpa (Delgado 2011: 12, INTA 2013: 30, Marcenaro & Valkonen 2016: 7).

***Fusarium lateritium* Nees**

Hyphomycetes, parasitic on *Theobroma cacao*. Granada (Bourret & Ford 1965: 12).

***Fusarium musae* Van Hove, Waalwijk, Munaut, Logrieco & Ant. Moretti**

Hyphomycetes, parasitic on *Musa* sp. fruit. Locality unknown (van Hove *et al.* 2011: 579).

***Fusarium oxysporum* Schltdl.**

Hyphomycetes, parasitic on *Allium cepa*, *Capsicum annuum*, *Citrullus lanatus*, *Cucumis melo*, *Elaeis guineensis*, *Gossypium hirsutum*, *Hylocereus undatus*, *Lycopersicon esculentum*, *Musa paradisiaca*, *Phaseolus vulgaris*, *Sesamum indicum*, *Vigna radiata*. Chinandega, León, Estelí, Jinotega, Madriz, Managua, Matagalpa (Litzenberger & Stevenson 1957: 14, as *Fusarium oxysporum* f. *vasinfectum*, McGuire & Crandall 1967: 139, as *F. annum*, McGuire & Crandall 1967: 147, as *F. oxysporum* f. *lycopersici*, *F. oxysporum* f. *niveum*, *F. oxysporum* f. *phaseoli*, McGuire & Crandall 1967: 147, as *F. vasinfectum*, Wellman 1977: 130, as *F. oxysporum* f. *elaeidis*, *F. oxysporum* f. *sesami*, IICA 1993: 41, Carcache 1999: 46, Berlin & Eitrem 2005: 14, Delgado 2011: 12, *F. oxysporum* f. *cepae*, *F. oxysporum* f. *cubense*, *F. oxysporum* f. *elaeidis*, *F. oxysporum* f. *lycopersici*, *F. oxysporum* f. *nicotianae*, *F. oxysporum* f. *niveum*, *F. oxysporum* f. *oxysporum*, *F. oxysporum* f. *phaseoli*, *F. oxysporum* f. *sesami*, *F. oxysporum* f. *vasinfectum*, IPSA 2021: 6).

***Fusarium poae* (Peck) Wollenw.**

Hyphomycetes, parasitic on *Phaseolus vulgaris*. Chinandega, León, Matagalpa, Nueva Segovia, Madriz (Carcache 1999: 46).

Fusarium proliferatum (Matsush.) Nirenberg ex Gerlach & Nirenberg
Hyphomycetes, parasitic on (Martínez-García 2019: 16).

Fusarium sambucinum Fuckel

Hyphomycetes, parasitic on *Gossypium hirsutum*, *Theobroma cacao*. Chinandega (Litzenberger & Stevenson 1957: 10, as *Fusarium roseum*, McGuire & Crandall 1967: 147, as *F. roseum*, Wellman 1977: 425, as *F. roseum*, Delgado 2012: 13, as *F. roseum*).

Fusarium subglutinans (Wollenw. & Reinking) P.E. Nelson, Toussoun & Marasas
Hyphomycetes, parasitic on *Zea mays*. Chinandega (Desjardins *et al.* 2000: 868).

Fusarium tricinctum (Corda) Sacc.

Hyphomycetes, parasitic on *Phaseolus vulgaris*. Chinandega, León, Matagalpa, Nueva Segovia, Madriz (Carcache 1999: 46).

Fusarium verticillioides (Sacc.) Nirenberg

Hyphomycetes, parasitic on *Gossypium hirsutum*, *Musa* sp., *Saccharum officinarum*, *Zea mays*. Chinandega, Managua (Litzenberger & Stevenson 1957: 10, as *Fusarium moniliforme*, McGuire & Crandall 1967: 147, as *F. moniliforme*, Croft 2000a: 107, as *F. moniliforme*, Delgado 2011: 13).

Genus ***Fusicolla*** Bonord (1 species)

Fusicolla merismoides (Corda) Gräfenhan, Seifert & Schroers

Hyphomycetes, parasitic on *Nicotiana tabacum*. Estelí (Miller 1969: 824, as *Fusarium oxysporum* var. *nicotianae*).

Genus ***Neocosmospora*** E.F. Sm. (3 species)

Neocosmospora phaseoli (Burkh.) L. Lombard & Crous

Hyphomycetes, parasitic on *Phaseolus vulgaris*. Locality unknown (McGuire & Crandall 1967: 120, as *Fusarium solani* f. *phaseoli*, Wellman 1977: 316, as *F. solani* f. *phaseoli*, Delgado 2011: 13, as *F. solani* f. *phaseoli*).

Neocosmospora solani (Mart.) L. Lombard & Crous

Hyphomycetes, parasitic on *Gossypium hirsutum*, *Helianthus annuus*, *Hibiscus cannabinus*, *Sesamum indicum*, *Phaseolus vulgaris*. Chinandega, Estelí, Jinotega, Managua, Matagalpa, Nueva Segovia, Rivas (Litzenberger & Stevenson 1957: 10, McGuire & Crandall 1967: 147, Gómez *et al.* 1990: 3, Carcache 1999: 46, Augusto *et al.* 2010: 3, Delgado 2011: 13, all as *Fusarium solani*; Litzenberger & Stevenson 1957: 4, as *Fusarium mallii*, Delgado 2011: 12, as *F. mallii*).

Neocosmospora vasinfecta E.F. Sm.

Hyphomycetes, saprobic on soil. Locality unknown (Stchigel 2000: 214, as *Neocosmospora vasinfecta* var. *vasinfecta*)

Family OPHIOCORDYCEITACEAE G.H. Sung, J.M. Sung, Hywel-Jones &
Spatafora
(3 genera, 4 species)

Genus *Harposporium* Lohde (1 species)

Harposporium harposporiferum (Samuels) Spatafora & Kepler
Hyphomycetes, nematophagous fungi on soil. Masaya (Persmark *et al.* 1995: 120,
as *Harposporium anguillulae*, Delgado 2011: 14, as *H. anguillulae*).

Genus *Ophiocordyceps* Petch (2 species)

Ophiocordyceps dipterigena (Berk. & Broome) G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora
Parasitic on Diptera. Atlántico Sur (Mains 1958: 201, as *Cordyceps dipterigena*,
Mains 1950: 581, as *Hymenostilbe dipterigena*, Delgado 2011: 14,
H. dipterigena).

Ophiocordyceps melolonthae (Tul. & C. Tul.) G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora
Parasitic on Coleoptera. Locality unknown (Mains 1958: 198, as *C. melolonthae*
var. *rickii*).

Genus *Purpureocillium* Luangsa-ard, Hywel-Jones, Houbraken & Samson
(1 species)

Purpureocillium lilacinum (Thom) Luangsa-ard, Houbraken, Hywel-Jones & Samson
Hyphomycetes, saprobic isolated from soil. Locality unknown (Raper & Thom
1949: 285, as *Penicillium lilacinum*, Delgado 2011: 16, as *Paecilomyces lilacinus*).

Family SAROCLADIACEAE L. Lombard
(1 genus, 2 species)

Genus *Sarocladium* W. Gams & D. Hawksw. (2 species)

Sarocladium oryzae (Sawada) W. Gams & D. Hawksw.
Hyphomycetes, parasitic on *Oryza sativa*. Locality unknown (IPSA 2019: 11).

Sarocladium strictum (W. Gams) Summerb.
Hyphomycetes, parasitic on *Zea mays*. Locality unknown (McGuire & Crandall
1967: 118, as *Cephalosporium acremonium*, Wellman 1977: 461, as
C. acremonium, Delgado 2011: 5, as *Acremonium strictum*).

Family STACHYBOTRYACEAE L. Lombard & Crous
(1 genus, 1 species)

Genus *Paramyrothecium* L. Lombard & Crous (1 species)

Paramyrothecium roridum (Tode) L. Lombard & Crous

Hyphomycetes, parasitic on *Glycine max*. Locality unknown (IPSA 2021: 9, as *Myrothecium roridum*).

Order MICROASCALES Luttr. ex Benny & Kimbr.
(2 families, 5 genera, 5 species)

Family CERATOCYSTIDACEAE Locq. ex Réblová, W. Gams & Seifert
(2 genera, 2 species)

Genus *Ceratocystis* Ellis & Halst. (1 species)

Ceratocystis fimbriata Ellis & Halst.

Parasitic on *Coffea arabica*, *Teobroma cacao*. Atlántico Sur (McGuire & Crandall 1967: 145, Gómez *et al.* 1990: 3, IPSA 2021: 5).

Genus *Thielaviopsis* Went. (1 species)

Thielaviopsis paradoxa (De Seynes) Höhn.

Hyphomycetes, parasitic on *Saccharum officinarum*. Locality unknown (McGuire & Crandall 1967: 127, as *Ceratocystis paradoxa*, Girard & Rott 2000: 131, Delgado 2011: 19).

Family MICROASCACEAE Luttr. ex Malloch
(3 genera, 3 species)

Genus *Microascus* Zukal (1 species)

Microascus paisii (Pollacci) Sandoval-Denis, Gené & Guarro

Hyphomycetes, parasitic on *Pinus pseudostrobus*. Locality unknown (Delgado 2011: 19, as *Scopulariopsis brumptii*).

Genus *Parascedosporium* Gilgado, Gené, Cano & Guarro (1 species)

Parascedosporium putredinis (Corda) Lackner & de Hoog

Hyphomycetes, parasitic on *Pinus pseudostrobus*. Locality unknown (Delgado 2011: 14, as *Graphium putredinis*).

Genus *Pithoascus* Arx (1 species)

Pithoascus nidicola (Masse & E.S. Salmon) Arx

Parasitic on *Pinus pseudostrobus*. Locality unknown (HerbIMI 2024).

Subclass PISORISPORIOMYCETIDAE Bundhun, Maharachch. & K.D. Hyde

Order PISORISPORIALES Réblová & J. Fourn.

(1 family, 1 genus, 1 species)

PISORISPORIALES genus *incertae sedis*

Genus *Brochiosphaera* K. Yamag., Chuaseehar. & Nakagiri (1 species)

Brochiosphaera microspora (R.F. Castañeda & W.B. Kendr.) K. Yamag., Chuaseehar. & Nakagiri

Hyphomycetes, saprobic on bark. Río San Juan (Delgado & Koukol 2016: 19, fig. 3i-j, as *Candelabrum microsporum*).

Subclass SAVORYELLOMYCETIDAE Hongsanan, K.D. Hyde & Maharachch.

Order SAVORYELLALES Boonyuen, Suetrong, Sivichai, K.L. Pang & E.B.G. Jones

(1 family, 1 genus, 1 species)

Family SAVORYELLACEAE Jaklitsch & Réblová

(1 genus, 1 species)

Genus *Rhexoacrodictys* W.A. Baker & Morgan-Jones (1 species)

Rhexoacrodictys erecta (Ellis & Everh.) W.A. Baker & Morgan-Jones

Hyphomycetes, saprobic on decaying wood. Río San Juan (Delgado & Koukol 2016: 27, fig. 3k).

Subclass SORDARIOMYCETIDAE O.E. Erikss & Winka

Order BOLINIALES P.F. Cannon
(1 family, 1 genus, 2 species)

Family BOLINIACEAE Rick
(1 genus, 2 species)

Genus *Camarops* P. Karst. (2 species)

Camarops biporosa J.D. Rogers & Samuels
Saprobic on dead wood. Río San Juan (Ellis & Everhart 1896: 71, as *Hypoxylon fibuliforme*).

Camarops polysperma (Mont.) J.H. Mill.
Saprobic on dead wood. Rivas (Smith 1893: 407, as *Hypoxylon cylindrophorum* and *H. polyspermum*).

Order CEPHALOTHECALES Maharachch. & K.D. Hyde
(1 family, 1 genus, 1 species)

Family CEPHALOTHECACEAE Höhn.
(1 genus, 1 species)

Genus *Phialemonium* W. Gams & McGinnis (1 species)

Phialemonium inflatum (Burnside) D. García, Perdomo, Gené, Cano & Guarro
Hyphomycetes, parasitic on *Pinus oocarpa*. Locality unknown (Delgado 2011: 15, as *Paecilomyces inflatus*).

Order CHAETOSPHAERIALES Huhndorf, A.N. Mill. & F.A. Fernández
(1 family, 5 genera, 5 species)

Family CHAETOSPHAERIACEAE Réblová, M.E. Barr & Samuels
(5 genera, 5 species)

Genus *Chloridium* Link (1 species)

Chloridium codinaeoides Piroz.
Hyphomycetes, saprobic on dead wood. León (Delgado 2011: 10).

Genus *Cryptophiale* Piroz. (1 species)

Cryptophiale kakombensis Piroz.
Hyphomycetes, saprobic on bark and decaying wood. Río San Juan (Delgado & Koukol 2016: 24, fig. 3b-c).

Genus *Dinemasporium* Lév. (1 species)

Dinemasporium strigosum (Pers.) Sacc.

Coelomycetes, parasitic on *Zoysia matrella*, Managua (GBIF 2025, *Dinemasporium graminum*).

Genus *Sporoschisma* Berk. & Broome (1 species)

Sporoschisma juvenile Boud.

Hyphomycetes, saprobic on decaying Wood. Río San Juan (Delgado & Koukol 2016: 29, fig. 2b-e).

Genus *Xyladelphia* Réblová, A.N. Mill. & Hern.-Restr. (1 species)

Xyladelphia pulchriseta (S. Hughes, WB. Kendr. & Shoemaker) W.P. Wu & Y.Z. Diao

Hyphomycetes, saprobic on bark and decaying wood. Río San Juan (Delgado & Koukol 2016: 22, as *Chaetosphaeria pulchriseta*).

Order CONIOCHAETALES Huhndorf, A.N. Mill. & F.A. Fernández
(1 family, 1 genus, 1 species)

Family CORDANACEAE Nann.
(1 genus, 1 species)

Genus *Cordana* Preuss (1 species)

Cordana abramovii Seman & Davydkina

Hyphomycetes, saprobic on bark. Río San Juan (Delgado & Koukol 2016: 20, fig 3e).

Order MELIOLALES Gäum. ex D. Hawksw. & O.E. Erikss.
(1 family, 2 genera, 5 species)

Family MELIOLACEAE G.W. Martin ex Hansf.
(2 genera, 5 species)

Genus *Irenopsis* F. Stevens (1 species)

Irenopsis selaginellarum (Cif.) Hansf.

Parasitic on *Selaginella kunzeana*, *S. sertata*. Locality unknown (HerbIMI 2024).

Genus *Meliola* Fr. (4 species)

***Meliola furcata* Lév.**

Parasitic on *Cissus* sp. Río San Juan (Berkeley 1868: 391, Berkeley 1875: 158, Ellis & Everhart 1892: 46, Earle 1896: 227, Spegazzini 1921: 374, Hansford 1961: 372).

***Meliola musae* (Kunze ex Fr.) Mont.**

Parasitic on *Musa paradisiaca*. Río San Juan (Pfister & Sayre 1978: 63).

***Meliola nicaraguensis* Speg.**

Parasitic on *Spondias* sp. Río San Juan (endemic) (Spegazzini 1921: 378, Hansford 1961: 468).

***Meliola trichostroma* (Kunze) Toro**

Parasitic on *Psidium guajava*. Río San Juan (Berkeley 1875: 158, as *Meliola amphitricha*, Smith 1893: 396, as *Meliola horrida*, McGuire & Crandall 1967: 135, as *M. horrida*, Spegazzini 1921: 380, as *Meliola psidii*, Litzenberger & Stevenson 1957: 15, as *M. psidii*, Hansford 1961: 146).

Order PHYLLACHORALES M.E. Barr
(2 families, 2 genera, 8 species)

Family PHYLLACHORACEAE Theiss. & H. Syd.
(1 genus, 6 species)

Genus *Phyllachora* Nitschke ex Fuckel (6 species)

***Phyllachora bonariensis* Speg.**

Parasitic on *Chloris* sp. Estelí (Lenné 1990: 32).

***Phyllachora cynodontis* Niessl**

Parasitic on *Chloris virgata*. Matagalpa (Litzenberger & Stevenson 1957: 6, as *Phyllachora boutelouae*).

***Phyllachora inclusa* (Berk. & M.A. Curtis) Sacc.**

Parasitic on *Jacquinia aurantiaca*. Chontales, Río San Juan (Berkeley & Curtis 1860: 129, as *Dothidea inclusa*, Ellis & Everhart 1892: 598, Seaver & Chardon 1926: 52, Stevenson 1926: 96, Spaulding 1961: 191, Litzenberger & Stevenson 1957: 11).

***Phyllachora maydis* Maubl.**

Parasitic on *Zea mays*. Estelí, Managua, Matagalpa (Litzenberger & Stevenson 1957: 18, McGuire & Crandall 1967: 119).

Phyllachora minutissima (Welw. & Curr.) A.L. Sm.

Parasitic on *Paspalum vaginatum*. Managua (Litzenberger & Stevenson 1957: 13, as *Phyllachora cornispora*).

Phyllachora permeans (Berk. & M.A. Curtis) Sacc.

Parasitic on living leaves. Locality unknown (endemic) (Berkeley & Curtis 1860: 129, as *Dothidea permeans*, Ellis & Everhart 1892: 602).

**Family TELIMENACEAE Mardones, T. Trampe & M. Piepenbr
(1 genus, 2 species)**

Genus *Telimena* Racib. (2 species)

Telimena balansae (Speg.) Mardones, Trampe & M. Piepenbr.

Parasitic on *Cedrela mexicana*, Managua (GBIF 2025, as *Phyllachora balansae*).

Telimena tenuis (Berk. & M.A. Curtis) Mardones & M. Piepenbr.

Parasitic on *Bauhinia* sp. Río San Juan (Berkeley & Curtis 1860: 129, as *Dothidea tenuis*, Ellis & Everhart 1892: 598, as *Phyllachora tenuis*, Stevenson 1926: 25, as *P. tenuis*, Mardones *et al.* 2022: 456).

**Order SORDARIALES Chad. ex D. Hawksw. & O.E. Erikss.
(2 families, 12 genera, 18 species)**

**Family CHAETOMIACEAE G. Winter
(11 genera, 17 species)**

Genus *Amesia* X. Wei Wang, Samson & Crous (1 species)

Amesia nigricolor (L.M. Ames) X. Wei Wang & Samson

Saprobic found in the soil. Locality unknown (Rodríguez 2003: 180, as *Chaetomium nigricolor*).

Genus *Arcopilus* X. Wei Wang, Samson & Crous (1 species)

Arcopilus cupreus (L.M. Ames) X. Wei Wang & Samson

Saprobic on soil. Locality unknown (Stchigel 2000: 213, as *Chaetomium cupreum*).

Genus *Chaetomium* Kunze (2 species)

Chaetomium convolutum Chivers

Saprobic on soil. Locality unknown (Rodríguez 2003: 161).

Chaetomium globosum Kunze

Saprobic on soil. Locality unknown (Stchigel 2000: 213, Rodríguez 2003: 169).

Genus *Chrysocorona* X. Wei Wang & Houbraken (1 species)

Chrysocorona lucknowensis (J.N. Rai & J.P. Tewari) X. Wei Wang & Houbraken
Saprobic found in the soil. Locality unknown (Rodríguez 2003: 175, as *Chaetomium lucknowense*).

Genus *Collariella* X. Wei Wang, Samson & Crous (1 species)

Collariella bostrychodes (Zopf) X. Wei Wang & Samson
Saprobic found in the soil. Locality unknown (Rodríguez 2003: 159, as *Chaetomium bostrychodes*).

Collariella gracilis (Udagawa) X. Wei Wang & Samson
Saprobic on soil. Locality unknown (Rodríguez 2003: 171, as *Chaetomium gracile*).

Genus *Corynascus* Arx (1 species)

Corynascus sepedonium (C.W. Emmons) Arx
Saprobic on soil. Locality unknown (Stchigel 2000: 213).

Genus *Dichotomopilus* X. Wei Wang, Samson & Crous (4 species)

Dichotomopilus dolichotrichus (L.M. Ames) X. Wei Wang & Samson
Saprobic on seed of *Pinus oocarpa*. Locality unknown (GBIF 2025, as *Chaetomium dolichotrichum*).

Dichotomopilus funicola (Cooke) X. Wei Wang & Samson
Saprobic on seed of *Pinus oocarpa*. Estelí (HerbIMI 2024).

Dichotomopilus indicus (Corda) X. Wei Wang & Samson
Saprobic on soil. Locality unknown (Stchigel 2000: 213, as *Chaetomium indicum*).

Dichotomopilus reflexus (Skolko & J.W. Groves) X. Wei Wang & Samson
Saprobic on seed of *Pinus oocarpa*. Estelí (HerbIMI 2024).

Genus *Humicola* Traaen (1 species)

Humicola fuscoatra Traaen
Hyphomycetes, parasitic on *Pinus caribaea*. Locality unknown (Delgado 2011: 14).

Genus *Ovatospora* X. Wei Wang, Samson & Crous (2 species)

Ovatospora brasiliensis (Bat. & Pontual) X. Wei Wang & Samson
Saprobic found in the soil. Locality unknown (Rodríguez 2003: 160, as *Chaetomium brasiliense*).

Ovatospora medusarum (J.A. Mey. & Lanneau) X. Wei Wang & Samson
Saprobic on soil. Locality unknown (Stchigel 2000: 213 as *Chaetomium medusarum*, Rodríguez 2003: 177, as *C. medusarum*).

Genus *Subramaniula* Arx (1 species)

Subramaniula fusispora (G. Sm.) X. Wei Wang & Samson
Saprobic found in the soil. Locality unknown (Stchigel 2000: 213, as *Chaetomium fusisporum*, Rodríguez 2003: 168, as *C. fusisporum*).

Genus *Thermothielavioides* X. Wei Wang & Houbraken (1 species)

Thermothielavioides terrestris (Apinis) X. Wei Wang & Houbraken
Saprobic on soil. Locality unknown (Stchigel 2000: 214, as *Thielavia terrestris*).

**Family SORDARIACEAE G. Winter
(1 genus, 1 species)**

Genus *Sordaria* Ces. & De Not. (1 species)

Sordaria fimicola (Roberge ex Desm.) Ces. & De Not
Saprobic on soil. Locality unknown (Stchigel 2000: 216).

Subclass XYLARIOMYCETIDAE O.E. Erikss & Winka

**Order AMPHISPHAERIALES D. Hawksw. & O.E. Erikss.
(4 families, 4 genera, 7 species)**

**Family APIOSPORACEAE K.D. Hyde, J. Fröhl., Joanne E. Taylor & M.E. Barr
(1 genus, 3 species)**

Genus *Nigrospora* Zimm. (3 species)

Nigrospora oryzae (Berk. & Broome) Petch
Hyphomycetes, parasitic on *Oryza sativa*. Locality unknown (McGuire & Crandall 1967: 124, Delgado 2011: 15).

Nigrospora sacchari (Speg.) E.W. Mason
Hyphomycetes, parasitic on *Saccharum officinarum*. Locality unknown (IPSA 2021: 9).

Nigrospora sphaerica (Sacc.) E.W. Mason

Hyphomycetes, parasitic on *Musa* sp., saprobic on *Roystonea* sp. León (Delgado 2011: 15).

Family BELTRANIACEAE Nann.
(1 genus, 1 species)

Genus *Beltrania* Penz. (1 species)

Beltrania rhombica Penz.

Hyphomycetes, saprobic on dead leaf. León (Delgado 2011: 8).

Family HYPONECTRIACEAE Petr.
(1 genus, 1 species)

Genus *Physalospora* Niessl (1 species)

Physalospora wildemaniana Sacc.

Parasitic on *Epidendrum* sp. Locality unknown (Girard 1967: 76).

Family SPOROCADACEAE Corda
(1 genus, 2 species)

Genus *Pestalotiopsis* Steyaert (2 species)

Pestalotiopsis mangiferae (Henn.) Steyaert

Coelomycetes, parasitic on *Mangifera indica*. Locality unknown (IPSA 2021: 53).

Pestalotiopsis palmarum (Cooke) Steyaert

Coelomycetes, parasitic on *Cocos nucifera*, *Elaeis guineensis*, *Musa paradisiaca*.
Locality unknown (IPSA 2021: 9).

Order XYLARIALES Nannf.
(8 families, 28 genera, 89 species)

Family CAINIACEAE J.C. Krug
(1 genus, 1 species)

Genus *Vesiculozygosporium* Crous (1 species)

Vesiculozygosporium echinosporum (Bunting & E.W. Mason) Crous

Hyphomycetes, saprobic on *Roystonea* sp. León (Delgado 2011: 20, fig. 11, as *Zygosporium echinosporum*).

Family DIATRYPACEAE Nitschke
(3 genera, 3 species)

Genus *Diatrypella* (Ces. & De Not.) De Not. (1 species)

Diatrypella pauper Ellis & Everh.

Saprobic on dead limbs. Río San Juan (endemic) (Smith 1893: 404).

Genus *Eutypa* Tul. & C. Tul. (1 species)

Eutypa flavovirens (Pers.) Tul. & C. Tul.

Saprobic on twig. Río San Juan (Pfister & Sayre 1978: 57, as *Hypoxylon flavovirens*).

Genus *Eutypella* (Nitschke) Sacc. (1 species)

Eutypella stellulata (Fr.) Sacc.

Saprobic on bark of a dead branch. Rivas (Smith 1893: 404).

Family GRAPHOSTROMATACEAE M.E. Barr, J.D. Rogers & Y.M. Ju
(2 genera, 10 species)

Genus *Biscogniauxia* Kuntze (2 species)

Biscogniauxia capnodes (Berk.) Y.M. Ju & J.D. Rogers

Saprobic on dead wood. Río San Juan (Smith 1893: 405, as *Nummularia rumpens*).

Biscogniauxia nummularia (Bull.) Kuntze

Saprobic on decaying wood. Granada (Ubau-Matamoros 2016a: 30).

Genus *Camillea* Fr. (8 species)

Camillea bilabiata Speg.

Saprobic on bark. Río San Juan (Smith 1893: 411, Læssøe *et al.* 1989: 127).

Camillea cyclops Mont.

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Camillea fossulata (Mont.) Læssøe, J.D. Rogers & Whalley

Saprobic on bark. Río San Juan (Smith 1893: 407, as *Hypoxylon fosullatum*).

Camillea heterostoma (Mont.) Læssøe, J.D. Rogers & Whalley

Saprobic on dead wood. Locality unknown (Læssøe *et al.* 1989: 134).



Figure 13. A: *Biscogniauxia capnodes*, Chinandega. B: *Daldinia clavata*, Managua. C-D: *Daldinia eschscholtzii*, Chinandega. E: *Hypoxylon haematostroma*, León. F: *Hypoxylon investiens*, Managua. G: *Hypoxylon lenormandii*, Chinandega. H: *Phylacia globosa*, Managua (photos by Ricardo Soza).

***Camillea labellum* Mont.**

Saprobic on bark. Río San Juan (Smith 1893: 405, as *Nummularia repanda* var. *zonata*, Læssøe *et al.* 1989: 136).

***Camillea leprieurii* Mont.**

Saprobic on decaying wood. Río San Juan (Smith 1893: 406, as *Nummularia vernicosa*, Læssøe *et al.* 1989: 136).

***Camillea mucronata* Mont.**

Saprobic on dead wood. Atlántico Sur (Soza 2025: *in press*).

***Camillea tinctor* (Berk.) Læssøe, J.D. Rogers & Whalley**

Saprobic on bark. Rivas, Río San Juan (Smith 1983: 405, as *Nummularia tinctor*, Læssøe *et al.* 1989: 145).

**Family HYPOXYLACEAE DC.
(9 genera, 28 species)**

Genus *Annulohypoxylon* Y.M. Ju, J.D. Rogers & H.M. Hsieh (5 species)

***Annulohypoxylon annulatum* (Schwein.) Y.M. Ju, J.D. Rogers & H.M. Hsieh**

Saprobic on bark. Rivas (Smith 1893: 406, as *Hypoxylon annulatum*).

***Annulohypoxylon pouceanum* (Berk. & Cooke) Y.M. Ju, J.D. Rogers & H.M. Hsieh**

Saprobic on bark. Río San Juan (GBIF 2025, as *Hypoxylon pouceanum*).

***Annulohypoxylon stygium* (Lév.) Y.M. Ju, J.D. Rogers & H.M. Hsieh**

Saprobic on bark. Rivas (Smith 1983: 406, as *Nummularia rufa*).

***Annulohypoxylon thouarsianum* (Lév.) Y.M. Ju, J.D. Rogers & H.M. Hsieh**

Saprobic on bark. Río San Juan (GBIF 2025, as *Hypoxylon malleolus*).

***Annulohypoxylon truncatum* (Starbäck) Y.M. Ju, J.D. Rogers & H.M. Hsieh**

Saprobic on dead wood. Río San Juan (Smith 1893: 406, as *Hypoxylon annulatum* var. *depressa*).

Genus *Daldinia* Ces. & De Not. (5 species)

***Daldinia caldariorum* Henn.**

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

***Daldinia childiae* J.D. Rogers & Y.M. Ju**

Saprobic on bark. Río San Juan (Stadler *et al.* 2014: 76).

***Daldinia clavata* Henn.**

Specimens examined: **Nicaragua:** Chinandega, Volcán San Cristobal (12° 41'51"N, 87° 01'57"W, 673 m), 28 Nov. 2021, R. Soza 00390 (RSE-F).

Saprobic on dead wood. Chinandega (**New country record**).

***Daldinia eschscholtzii* (Ehrenb.) Rehm**

Saprobic on dead wood. Carazo, Chinandega, Managua, Granada, Rivas, Río San Juan (Smith 1893: 411, as *Daldinia concentrica*, González & Orozco 2006: 1, Ubau-Matamoros 2016a: 30, both as *D. concentrica*, Stadler *et al.* 2014: 52, Soza *et al.* 2023: 11).

***Daldinia placentiformis* (Berk. M.A. Curtis) Theissen**

Saprobic on decorticated wood. Río San Juan (Smith 1983: 408, as *Hypoxyton papillatum*, Ju & Rogers 1996: 168, as *Hypoxyton placentiformis*, Stadler *et al.* 2014: 127).

Genus *Entonaema* Möller (1 species)***Entonaema liquescens* Möller**

Specimens examined: **Nicaragua:** Chinandega, Volcán San Cristobal (12° 41'51"N, 87° 01'57"W, 673 m), 28 Nov. 2021, R. Soza 00130 (RSE-F).

Saprobic on dead wood. Chinandega (**New country record**).

Genus *Hypoxyton* Bull. (8 species)***Hypoxyton fragiforme* (Pers.) J. Kickx fil.**

Saprobic on bark. Río San Juan (Smith 1893: 406, as *Hypoxyton coccineum*).

***Hypoxyton haematostroma* Mont.**

Saprobic on dead wood. Chinandega, Managua, Rivas, Río San Juan (Smith 1893: 115, Ellis & Everhart 1896: 72, as *Hypoxyton lucidum*, Ubau-Matamoros 2016a: 30, Soza *et al.* 2023: 11).

***Hypoxyton hypomiltum* Mont.**

Saprobic on bark. Rivas (MyCoPortal 2024).

***Hypoxyton investiens* (Schwein.) M.A. Curtis**

Saprobic on dead wood. Managua (Soza *et al.* 2024: 11).

***Hypoxyton lenormandii* Berk. & M.A. Curtis**

Saprobic on wood. Rivas (Smith 1893: 402, as *Rosellinia melaleuca*).

***Hypoxyton perforatum* (Schwein.) Fr.**

Saprobic on bark of decaying branch. Rivas (Smith 1893: 408).



Figure 14. A: *Phylacia sagraana*, Managua. B: *Kretzschmaria clavus*, Jinotega. C: *K. zonata*, Chinandega. D: *Xylaria cubensis*, Jinotega. E: *Xylaria hypoxylon*, Managua. F: *Xylaria multiplex*, Managua. G: *Xylaria polymorpha*, Managua. H: *Xylaria telfairii*, Managua (photos by Ricardo Soza).

***Hypoxylon rubiginosum* (Pers.) Fr.**

Saprobic on dead wood. Rivas, Río San Juan (Smith 1893: 408).

***Hypoxylon subgilvum* Berk. & Broome**

Saprobic on bark. Locality unknown (Miller 1961: 31).

Genus *Jackrogersella* L. Wendt, Kuhnert & M. Stadler (1 species)

***Jackrogersella multiformis* (Fr.) L. Wendt, Kuhnert & M. Stadler**

Saprobic on dead wood. Locality unknown (Spegazzini 1921: 401, as *Hypoxylon granulosum*).

Genus *Phylacia* Lév. (4 species)

***Phylacia globosa* Lév.**

Saprobic on bark. Managua (Soza *et al.* 2023: 11, as *Phylacia poculiformis*).

***Phylacia poculiformis* (Mont.) Mont.**

Saprobic on bark. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50).

***Phylacia sagrana* Mont.**

Saprobic on decaying branch. Jinotega, Managua, Río San Juan (Ellis & Everhart 1892: 663, Dennis 1957: 324, Saldívar 2015: 39, Soza *et al.* 2023: 11).

***Phylacia turbinata* (Berk.) Dennis**

Saprobic on wood. Rivas, Río San Juan (Smith 1893: 411, as *Camillea turbinata*).

Genus *Pyrenopolyporus* Lloyd (2 species)

***Pyrenopolyporus hunteri* Lloyd**

Saprobic on dead wood. Rivas (Smith 1893: 407, as *Hypoxylon nicaraguense* [in part], Ju & Rogers 1996: 171, as *Hypoxylon polyporum*, Wendt *et al.* 2018: 150).

***Pyrenopolyporus nicaraguensis* (Ellis & Everh.) M. Stadler, Kuhnert & L. Wendt**

Saprobic on dead wood. Río San Juan (Smith 1893: 407, as *Hypoxylon nicaraguense* [in part], Ju & Rogers 1996: 153, as *H. nicaraguense*, Wendt *et al.* 2018: 150).

Genus *Theissenia* Maubl. (1 species)

***Theissenia pyrenocrata* (Theiss.) Maubl.**

Saprobic on decaying wood. Río San Juan (MyCoPortal 2024).

Genus *Thuemenella* Penz. & Sacc. (1 species)

Thuemenella cubispora (Ellis & Holw.) Boedijn

Saprobic on dead wood. Río San Juan (Ellis & Everhart 1896: 69, as *Hypocrea cubispora*).

Family LOPADOSTOMATACEAE Daranag. & K.D. Hyde
(2 genera, 2 species)

Genus *Creosphaeria* Theiss. (1 species)

Creosphaeria sassafras (Schwein.) Y.M. Ju, F. San Martín & J.D. Rogers

Saprobic on bark. Río San Juan (Smith 1893: 407, as *Hypoxylon callostroma*).

Genus *Jumillera* J.D. Rogers, Y.M. Ju & F. San Martín (1 species)

Jumillera hypophlaea (Berk. & Ravenel) J.D. Rogers, Y.M. Ju & F. San Martín

Saprobic on bark. Río San Juan (Smith 1893: 405, as *Nummularia hypophloea*).

Family MICRODOCHIACEAE Hern.-Restr., Crous & J.Z. Groenew.
(1 genus, 3 species)

Genus *Microdochium* Syd. (3 species)

Microdochium albescens (Thüm.) Hern.-Restr. & Crous

Hyphomycetes, parasitic on *Oryza sativa*. Locality unknown (McGuire & Crandall 1967: 124, as *Rhynchosporium oryzae*, Holliday 1980: 434, as *R. oryzae*, Delgado 2011: 14, as *Microdochium oryzae*, IPSA 2021: 8, as *Monographella albescens*).

Microdochium nivale (Fr.) Samuels & I.C. Hallett

Hyphomycetes, parasitic on *Secchium edule*. Locality unknown (IPSA 2021: 8).

Microdochium sorghi (D.C. Bain & Edgerton ex Deighton) U. Braun

Hyphomycetes, parasitic on *Sorghum bicolor*. Locality unknown (Litzenberger & Stevenson 1957: 17, as *Gloeocercospora sorghi*, McGuire & Crandall 1967: 122, as *G. sorghi*, Braun 1995: 271, Delgado 2011: 14, IPSA 2021: 7).

Family XYLARIACEAE Tul. & C. Tul.
(7 genera, 38 species)

Genus *Dematophora* R. Hartig (4 species)

Dematophora arcuata (Petch) C. Lamb., Wittstein & M. Stadler

Parasitic on *Manihot esculenta*. Locality unknown (IPSA 2021: 11, as *Rosellinia arcuata*).

Dematophora bunodes (Berk. & Broome) C. Lamb., Wittstein & M. Stadler
Parasitic on *Coffea arabica*. Locality unknown (Litzenberger & Stevenson 1957: 7, as *Rosellinia bunodes*, IPSA 2021: 11, as *R. bunodes*).

Dematophora gigantea (Ellis & Everh.) C. Lamb., Wittstein & M. Stadler
Saprobic on bark. Río San Juan (Smith 1893: 401, as *Rosellinia gigantea*).

Dematophora pepo (Pat.) C. Lamb., Wittstein & M. Stadler
Parasitic on *Persea americana*. Locality unknown (IPSA 2021: 11, *Rosellinia pepo*).

Genus *Kretzschmaria* Fr. (4 species)

Kretzschmaria clavus (Fr.) Sacc.
Saprobic on bark of decaying trunk. Rivas, Río San Juan (Smith 1893: 409, as *Kretzschmaria coenopus* and *Kretzschmaria pusilla*, Dennis 1957: 309).

Kretzschmaria deusta (Hoffm.) P.M.D. Martin
Saprobic on dead wood. Río San Juan (Smith 1893: 411, as *Ustilina vulgaris*).

Kretzschmaria pavimentosa (Ces.) P.M.D. Martin
Saprobic on dead wood. Río San Juan (MyCoPortal 2024, as *Ustulina brasiliensis*).

Kretzschmaria zonata (Lév.) P.M.D. Martin
Specimens examined: **Nicaragua**: Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza 01039 (RSE-F).
Saprobic on bark. Chinandega (**New country record**).

Genus *Kretzschmariella* Viégas (1 species)

Kretzschmariella culmorum (Cooke) Y.M. Ju & J.D. Rogers
Saprobic on dead wood. Río San Juan (GBIF 2025, as *Hypoxylon culmorum*).

Genus *Nemania* Gray (3 species)

Nemania bipapillata (Berk. & M.A. Curtis) Pouzar
Saprobic on bark. Locality unknown (van de Gucht 1995: 320).

Nemania confluens (Tode) Læssøe & Spooner
Saprobic on decorticated wood. Río San Juan (Pfister & Sayre 1978: 58, as *Sphaeria confluens*).

Nemania diffusa (Sowerby) Gray
Saprobic on dead wood. Managua (Soza *et al.* 2023: 11).

Genus *Penzigia* Sacc. (1 species)

Penzigia turbinata (Ellis & Everh.) J.H. Mill.

Saprobic on dead limbs. Río San Juan (Smith 1893: 410, as *Poronia turbinata*).

Genus *Rosellinia* De Not. (1 species)

Rosellinia gigaspora Ellis & Everh.

Saprobic on dead bamboo cane. Río San Juan (endemic) (Smith 1893: 401).

Genus *Xylaria* Hill ex Schrank (24 species)

Xylaria anisopleura (Mont.) Fr.

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Xylaria arbuscula Sacc.

Saprobic on bark. Rivas (Smith 1893: 414, as *Xylaria cylindrica* [in part]).

Xylaria brevipes Sacc.

Saprobic on rotten wood. Granada (Ubau-Matamoros 2016a:30).

Xylaria corniformis (Fr.) Fr.

Saprobic on dead wood. Rivas, Río San Juan (Smith 1893: 414).

Xylaria cornu-damae (Schwein.) Berk.

Parasitic on *Citrus* sp. Managua (Litzenberger & Stevenson 1957: 6).

Xylaria cubensis (Mont.) Fr.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 11).

Xylaria curta Fr.

Saprobic on dead wood. Río San Juan (GBIF 2025).

Xylaria dichotoma (Mont.) Mont.

Saprobic on dead wood. León (GBIF 2025).

Xylaria frustulosa (Berk. & M.A. Curtis) Cooke

Saprobic on decaying wood. Rivas (Smith 1893: 397, as *Hypocrea bicolor*).

Xylaria gracillima (Fr.) Fr.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 11).

Xylaria guianensis (Mont.) Fr.

Saprobic on dead wood. Rivas, Río San Juan (Smith 1893: 413).

Xylaria heliscus (Mont.) J.D. Rogers & Y.M. Ju

Saprobic on bark. Rivas, Río San Juan (Smith 1893: 410, as *Poronia heliscus*).

Xylaria hypoxylon (L.) Grev.

Saprobic on dead wood. Carazo, Jinotega, Granada, Rivas, Río San Juan (Smith 1893: 414, González & Orozco 2006: 2, González & Orozco 2007: 38, Saldívar 2015: 40, Ubau-Matamoros 2016a:30, Saldívar 2018: 51).

Xylaria longipes Nitschke

Saprobic on rotten wood. Granada (Ubau-Matamoros 2016a:30).

Xylaria multiplex (Kunze) Fr.

Saprobic on bark. Managua, Rivas, Río San Juan (Smith 1893: 414, as *Xylaria cylindrica* [in part], Soza *et al.* 2023: 11).

Xylaria obovata (Berk.) Berk.

Saprobic on bark of decaying branch. Río San Juan (Smith 1893: 412).

Xylaria olobapha Berk.

Saprobic on dead wood. Río San Juan (Smith 1893: 412).

Xylaria polymorpha (Pers.) Grev.

Saprobic on bark. Carazo, Chinandega, Jinotega, Managua, Granada, Río San Juan (González & Orozco 2006: 2, González & Orozco 2007: 38, Saldívar 2015: 40, Ubau-Matamoros 2016a:30, Saldívar 2018: 51, Soza *et al.* 2023: 11).

Xylaria pumila (Fr.) Sacc.

Saprobic on decaying wood. Río San Juan (Smith 1893: 413).

Xylaria rhytidophloea Mont.

Saprobic on dead wood. Río San Juan (Smith 1893: 414).

Xylaria schweinitzii Berk. & M.A. Curtis

Saprobic on decaying wood. Río San Juan (Smith 1893: 412).

Xylaria scruposa (Fr.) Fr.

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Xylaria telfairii (Berk.) Sacc.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 11).

Xylaria titan Berk. & M.A. Curtis

Saprobic on bark. Rivas (Smith 1893: 412).

Family ZYGOSPORIACEAE J.F. Li, Phook. & K.D. Hyde
(1 genus, 2 species)

Genus *Zygosporium* Mont. (2 species)

Zygosporium masonii S. Hughes

Hyphomycetes, saprobic on *Roystonea* sp. León (Delgado 2011: 20).

Zygosporium oscheoides Mont.

Hyphomycetes, saprobic on *Roystonea* sp. León (Delgado 2011: 20).

XYLARIALES genus *incertae sedis*

Genus *Melanographium* Sacc. (1 species)

Melanographium citri (Gonz. Frag. & Cif.) M.B. Ellis

Hyphomycetes, saprobic on dead bamboo stem. Río San Juan (Delgado & Koukol 2016: 26).

Genus *Stromatoneurospora* S.C. Jong & E.E. Davis (1 species)

Stromatoneurospora phoenix (Kunze) S.C. Jong & E.E. Davis

Saprobic on decaying wood. Granada (Ubau-Matamoros 2016a: 30).

SORDARIOMYCETES genus *incertae sedis*

Genus *Stanjehughesia* Subram. (1 species)

Stanjehughesia curviapicis (Goh & K.D. Hyde) D.A.C. Almeida & Gusmão

Hyphomycetes, saprobic on decaying wood. Río San Juan (Delgado & Koukol 2016: 30, fig. 3a)

Subclass XYLOBOTRYOMYCETES Voglmayr & Jaklitsch

Order XYLOBOTRYALES Voglmayr & Jaklitsch
(1 family, 1 genus, 1 species)

Family XYLOBOTRYACEAE Voglmayr & Jaklitsch
(1 genus, 1 species)

Genus *Xylobotryum* Pat. (1 species)

Xylobotryum portentosum (Mont.) Pat.

Saprobic on dead bark. Río San Juan (Voglmayr *et al.* 2019, MyCoPortal 2024).

Subphylum SACCHAROMYCOTINA O.E. Erikss. & Winka

Class SACCHAROMYCETES O.E. Erikss. & Winka

Order SACCHAROMYCETALES Kudryavtsev
(1 family, 1 genus, 1 species)

Family DIPODASCACEAE Engl. & E. Gilg
(1 genus, 1 species)

Genus *Geotrichum* Link (1 species)

***Geotrichum candidum* Link**
Hyphomycetes, coprophilous. León (Martínez-García 2019: 16, fig. 12a-c).

ASCOMYCOTA genera *incertae sedis*

Genus *Aristastoma* Tehon (1 species)

***Aristastoma oeconomicum* (Ellis & Tracy) Tehon**
Coelomycetes, parasitic on *Vigna unguiculata*. Locality unknown (Wellman 1977: 446).

Genus *Chaetoseptoria* Tehon. (1 species)

***Chaetoseptoria wellmanii* J.A. Stev.**
Coelomycetes, parasitic on *Phaseolus vulgaris*. Estelí (CATIE 1981: 13).

Genus *Corynesporopsis* P.M. Kirk (1 species)

***Corynesporopsis isabelicae* Hol.-Jech.**
Hyphomycetes, saprobic on dead bamboo stems. Río San Juan (Delgado & Koukol 2016: 20, fig. 4b).

Genus *Helicofilia* Matsush. (1 species)

***Helicofilia madrasensis* Matsush.**
Hyphomycetes, fungicolous on *Tretopileus sphaerophorus*, saprobic on *Cocos nucifera*. Managua (Delgado 2011: 14, fig. 8-10).

Genus *Orphanocoela* Nag Raj (1 species)

***Orphanocoela maydis* (Latterell & A.E. Rossi) Nag Raj**
Parasitic on *Zea mays*. Estelí, Matagalpa (Latterell & Rossi 1984: 506, as *Hyalothyridium maydis*).

Genus *Pseudopetrakia* M.B. Ellis (1 species)

Pseudopetrakia kambakkamensis (Subram.) M.B. Ellis
Hyphomycetes, saprobic on *Eucalyptus* sp. León (Delgado 2011: 18, fig. 5-6).

Genus *Septosporiopsis* W.A. Baker & Morgan-Jones (1 species)

Septosporiopsis elaeidis (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones
Hyphomycetes, saprobic on dead bamboo stems. Río San Juan (Delgado & Koukol 2016: 28, fig. 4f-g).

Phylum BASIDIOMYCOTA R.T. Moore

Subphylum AGARICOMYCOTINA Doweld

Class AGARICOMYCETES Doweld

Order AGARICALES Underw.
(31 families, 84 genera, 213 species)

Family AGARICACEAE Chevall.
(10 genera, 26 species)

Genus *Agaricus* L. (2 species)

Agaricus endoxanthus Berk. & Broome
Specimens examined: Nicaragua: Río San Juan, near El Castillo, Refugio Bartola (10° 58'57"N, 84° 19'57"W, 85 m), 26 Jul. 2019, R. Soza (no coll.).
Saprobic on soil. Río San Juan (New country record).

Agaricus sylvaticus Schaeff.
Saprobic on soil. Managua (Soza *et al.* 2023: 12).

Genus *Chlorophyllum* Masee (1 species)

Chlorophyllum molybdites (G. Mey.) Masee
Saprobic on soil. Managua, Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

Genus *Cystolepiota* Singer (3 species)

Cystolepiota petasiformis (Murrill) Vellinga
Saprobic in humus. Managua (Soza *et al.* 2023: 12).



Figure 15. A: *Agaricus* sp., Managua. B: *Chlorophyllum molybdites*, Managua. C: *Cystolepiota petasiformis*, Managua. D: *Echinoderma asperum*, Managua. E: *Lepiota erythrosticta*, Managua. F: *L. phaeosticta*, Managua. G: *Leucoagaricus lilaceus*, Managua. H: *L. guatopoensis*, Managua (photos by Ricardo Soza).



Figure 16. A: *Cystolepiota seminuda*, Chinandega. B: *Leucoagaricus rubrotinctus*, Managua. C: *Leucocoprinus birnbaumii*, Chinandega. D: *L. brebissonii*, Chinandega. E: *L. cepistipes*, Managua. F: *L. cretaceus*, Managua. G: *L. fragilissimus*, Río San Juan. H: *Rugosopora pseudorubiginosa*, Managua. I: *Amanita aureofloccosa*, León (photos by Ricardo Soza, G by Yeimi Morales).

Cystolepiota seminuda (Lasch) Bon

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).
Saprobic on soil. Chinandega (**New country record**).

Cystolepiota sistrata (Fr.) Singer ex Bon & Bellù

Saprobic in humus. Jinotega (Saldívar 2015: 39).

Genus *Echinoderma* (Locq. ex Bon) Bon (1 species)

Echinoderma asperum (Pers.) Bon

Saprobic in soil. Managua (Soza *et al.* 2023: 12, as *Lepiota aspera*).

Genus *Lepiota* (Pers.) Gray (7 species)

Lepiota clypeolaria (Bull.) P. Kumm.

Saprobic in soil. Managua (González *et al.* 2004: 31).

Lepiota epicharis (Berk. & Broome) Sacc.

Saprobic in soil. Managua (González *et al.* 2004: 31).

Lepiota erythrosticta (Berk. & Broome) Sacc.

Saprobic on soil. Managua (Soza *et al.* 2023: 12).

Lepiota ianthinosquamosa Pegler

Saprobic on soil. Carazo, Managua, Río San Juan (González & Orozco 2006: 1, González *et al.* 2004: 31, González & Orozco 2007: 36, Saldívar 2018: 49).

Lepiota phaeosticta Morgan

Saprobic on soil. Managua (Soza *et al.* 2023: 12).

Lepiota subcristata Murrill

Saprobic on soil. Jinotega, Managua, Río San Juan (González *et al.* 2004: 31, González & Orozco 2007: 36, Saldívar 2015: 41, Saldívar 2018: 49).

Lepiota subflavescens Murrill

Saprobic in soil. Managua (González *et al.* 2004: 31).

Genus *Leucoagaricus* Locq. ex Singer (4 species)

Leucoagaricus guatopoensis (Dennis) Justo, Bizzi & Angelini

Saprobic in soil. Managua (González *et al.* 2004: 31, as *Lepiota guatopoensis*).

Leucoagaricus lilaceus Singer

Saprobic on soil. Managua (Soza *et al.* 2023: 12).

***Leucoagaricus rubrotinctus* (Peck) Singer**

Saprobic on soil and humus. Granada, Managua (Ubau-Matamoros 2016a: 30, Soza *et al.* 2023: 12).

***Leucoagaricus sulphurellus* (Pegler) B.P. Akers**

Saprobic on soil. Río San Juan (González & Orozco 2007: 36, Saldívar 2018: 50, both as *Leucocoprinus sulphurellus*).

Genus *Leucocoprinus* Pat. (5 species)

***Leucocoprinus birnbaumii* (Corda) Singer**

Saprobic in soil. Carazo, Managua (González *et al.* 2004: 31, González & Orozco 2006: 1).

***Leucocoprinus brebissonii* (Godey) Locq.**

Saprobic on soil. Managua, Matagalpa (Stanger & Smith 2015, Soza *et al.* 2023: 12).

***Leucocoprinus cepistipes* (Sowerby) Pat.**

Saprobic on soil. Carazo, Granada, Jinotega, Managua, Río San Juan (González & Orozco 2006: 1, Saldívar 2015: 41, Saldívar 2018: 52, Ubau-Matamoros 2016a: 30, Soza *et al.* 2023: 12).

***Leucocoprinus cretaceus* (Bull.) Locq.**

Saprobic on soil. Managua (Soza *et al.* 2023: 12).

***Leucocoprinus fragilissimus* (Ravenel ex Berk. & M.A. Curtis) Pat.**

Saprobic on soil. Carazo, Jinotega, Managua, Matagalpa, Río San Juan (González *et al.* 2004: 31, González & Orozco 2006: 1, González & Orozco 2007: 36, Stanger & Smith 2015, Saldívar 2015: 39, Saldívar 2018: 50).

Genus *Podaxis* Desv. (1 species)

***Podaxis pistillaris* (L.) Fr.**

Saprobic on sandy soil. Managua (Soza 2025: 6, fig. 2a).

Genus *Rugosospora* Heinem. (1 species)

***Rugosospora pseudorubiginosa* (Cifuentes & Guzmán) Guzmán & Bandala**

Saprobic on soil. Managua (Soza *et al.* 2023: 12).

Genus *Tulostoma* Pers. (1 species)

***Tulostoma exasperatum* Mont.**

Saprobic on Sandy soil. Managua (Soza 2025: 6, fig. 2b-c).



Figure 17. A: *Podaxis pistillaris*, Managua. B: *Tulostoma exasperatum*, Managua. C: *Amanita muscaria*, León. D: *Macrocybe titans*, Chinandega. E: *Clavaria fragilis*, Matagalpa. F: *C. zollingeri*, Atlántico Norte. G: *Clavulinopsis amoena*, Nueva Segovia. H: *Crepidotus flavus*, Managua. I: *C. roseus*, Managua (photos by Ricardo Soza, A by Edgar Castañeda, B by Juan de la Cruz, F by Roger Mendieta, and G by Ariel Salinas).

Family AMANITACEAE E.-J. Gilbert
(1 genus, 9 species)

Genus *Amanita* Pers. (7 species)

Amanita aureofloccosa Bas

Saprobic on the ground. Managua (Soza *et al.* 2023: 12).

Amanita brunnescens G.F. Atk.

Saprobic on the ground. Jinotega (Saldívar 2015: 39).

Amanita flavoconia G.F. Atk.

Saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Amanita fuscostriata Pegler

Saprobic on the ground. Managua (González *et al.* 2004: 31).

Amanita jacksonii Pomerl.

Saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Amanita lilloi Singer

Saprobic on the ground. Managua (González *et al.* 2004: 31).

Amanita muscaria (L.) Lam.

Specimens examined: **Nicaragua:** León, Achuapa (13°04'29"N, 86°35'37"W, 500 m), 15 Nov. 2020, Luis Rojas (no coll.).

Saprobic on the ground. León (**New country record**).

Amanita polypyramis (Berk. & M.A. Curtis) Sacc.

Saprobic on the ground. Atlántico Norte (HerbKew 2024).

Amanita velatipes G.F. Atk.

Saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Famlily CALLISTOSPORIACEAE Vizzini, Consiglio, M. Marchetti & P. Alvarado
(2 genera, 2 species)

Genus *Macrocybe* Pegler & Lodge (1 species)

Macrocybe titans (H.E. Bigelow & Kimbr.) Pegler, Lodge & Nakasone

Saprobic in abandoned ant nests. Managua (Soza *et al.* 2023: 13).

Genus *Pseudolaccaria* Vizzini, Contu & Z.W. Ge (1 species)

Pseudolaccaria pachyphylla (Fr.) Vizzini & Contu

Saprobic on soil. Jinotega (Saldívar 2015: 39, as *Mycena pallida*, Saldívar 2018: 52, as *M. pallida*).

Family CLAVARIACEAE Chevall.

(2 genera, 4 species)

Genus *Clavaria* Vaill. ex L. (2 species)

Clavaria fragilis Holmsk.

Saprobic on soil with moss. Carazo, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2018: 48, all as *Clavaria vermicularis*).

Clavaria zollingeri Lév.

Specimens examined: Nicaragua: Atlántico Norte, Siuna (13° 44'27"N, 84° 46'53"W, 204 m), 31 Jul. 2024, Roger Mendieta (no coll.).

Saprobic on soil. Atlántico Norte (New country record).

Genus *Clavulinopsis* Overeem (2 species)

Clavulinopsis amoena (Zoll. & Moritzi) Corner

Specimens examined: Nicaragua: Nueva Segovia, Cerro Mogoton (13° 45'37"N, 86° 23'53"W, 1961 m), 19 Jul. 2024, Ariel Salinas (no coll.).

Saprobic on soil. Nueva Segovia (New country record).

Clavulinopsis laeticolor (Berk. & M.A. Curtis) R.H. Petersen

Saprobic on the ground. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48, as *Clavaria laeticolor*).

Family CLITOCYBACEAE Vizzini, Consiglio & M. Marchetti

(2 genera, 2 species)

Genus *Clitocybe* (Fr.) Staude (1 species)

Clitocybe dealbata (Sowerby) P. Kumm.

Saprobic on soil. Granada (Ubau-Matamoros 2016a: 31).

Genus *Collybia* (Fr.) Staude (1 species)

Collybia sacchari (Wakker) Singer

Parasitic on *Saccharum officinarum*. Locality unknown (IPSA 2021: 8, as *Marasmius sacchari*).



Figure 18. A: *Crepidotus crocophyllus*, Matagalpa. B: *Nolanea avilana*, Managua. C: *Hygroaster nodulisporus*, Managua. D: *Hygrocybe cantharellus*, Matagalpa. E: *H. flavescens*, Atlántico Sur. F: *H. miniata*, Jinotega. G: *Gymnopilus chrysopellus*, Managua. H: *Gymnopilus luteofolius*, Chinandega (photos by Ricardo Soza).

Family CREPIDOTACEAE (S. Imai) Singer
(1 genus, 5 species)

Genus *Crepidotus* (Fr.) Staude (5 species)

Crepidotus crocophyllus (Berk.) Sacc.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on dead wood. Matagalpa (New country record).

Crepidotus flavus Capelari

Specimens examined: **Nicaragua:** Managua, Reserva Ecológica El Bajo (11°59'34"N, 86°19'30"W, 768 m), 30 Oct. 2021, R. Soza (no coll.).
Saprobic on dead wood. Managua (New country record).

Crepidotus mollis (Schaeff.) Staude

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 30).

Crepidotus roseus Singer

Saprobic on dead wood. Managua (Soza *et al.* 2023: 12, fig. 7h).

Crepidotus variabilis (Pers.) P. Kumm.

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 30).

Family ENTOLOMATACEAE Kotl. & Pouzar
(2 genera, 3 species)

Genus *Entoloma* P. Kumm. (2 species)

Entoloma murrayi (Berk. & M.A. Curtis) Sacc. & P. Syd.

Saprobic on the ground. Matagalpa (Stanger & Smith 2015, as *Nolanea murrayi*).

Entoloma virescens (Sacc.) E. Horak ex Courtec.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on the ground. Matagalpa (New country record).

Genus *Nolanea* (Fr.) P. Kumm. (1 species)

Nolanea avilana Dennis

Saprobic on soil. Managua (Soza *et al.* 2023: 12, fig. 8a).

Family FISTULINACEAE Lotsy
(1 genus, 1 species)

Genus *Porodisculus* Murrill (1 species)

Porodisculus pendulus (Fr.) Murrill

Saprobic on dead wood. Locality unknown (Berkeley & Curtis 1860: 122, as *Polyporus pocula*, Murrill 1907-1915: 47, Murrill 1915: 32).

Family HYDNANGIACEAE Gäum. & C.W. Dodge
(1 genus, 1 species)

Genus *Laccaria* Berk. & Broome (1 species)

Laccaria ohiensis (Mont.) Singer

Saprobic on soil. Río San Juan (González & Orozco 2007: 36, Saldívar 2018: 49).

Family HYGROCYBACEAE (Padamsee & Lodge) Vizzini, Consiglio & P. Alvarado
(2 genera, 6 species)

Genus *Hygroaster* Singer (1 species)

Hygroaster nodulisporus (Dennis) Ralaiv., Niskanen & Liimat.

Saprobic on soil. Managua (Soza *et al.* 2023: 12, fig. 10d).

Genus *Hygrocybe* (Fr.) P. Kumm. (5 species)

Hygrocybe cantharellus (Schwein.) Murrill

Specimens examined: Nicaragua: Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on the ground. Jinotega (New country record).

Hygrocybe conica (Schaeff.) P. Kumm.

Specimens examined: Nicaragua: Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on the ground. Managua (New country record).

Hygrocybe flavescens (Kauffman) Singer

Saprobic on the ground. Atlántico Sur (Soza 2025: *in press*).

Hygrocybe miniata (Fr.) P. Kumm.

Saprobic on soil. Managua, Río San Juan (González *et al.* 2004: 31, González & Orozco 2007: 36, Saldívar 2018: 49, Soza *et al.* 2023: 12).

Hygrocybe nigrescens (Quél.) Kühner

Saprobic in soil. Managua (González *et al.* 2004: 31).

Family HYMENOGASTRACEAE Vittad.
(2 genera, 8 species)

Genus *Gymnopilus* P. Karst. (6 species)

Gymnopilus chrysopellus (Berk. & M.A. Curtis) Murrill
Saprobic on dead wood. Managua (Soza *et al.* 2023: 15, fig. 10c).

Gymnopilus lateritius (Pat.) Murrill
Saprobic on dead wood. Managua (González *et al.* 2004: 31).

Gymnopilus luteofolius (Peck) Singer
Specimens examined: **Nicaragua**: Chinandega (12° 37' 20"N, 87° 07' 04"W, 78 m), 08 Nov. 2024, R. Soza (no coll.).
Saprobic on dead wood. Chinandega (**New country record**).

Gymnopilus palmicola Murrill
Saprobic on dead wood. Managua (Soza *et al.* 2023: 15).

Gymnopilus russipes Pegler
Saprobic on dead wood. Managua (González *et al.* 2004: 31).

Gymnopilus subtropicus Hesler
Saprobic on dead wood. Managua (Soza *et al.* 2023: 16).

Genus *Psilocybe* (Fr.) P. Kumm. (2 species)

Psilocybe cubensis (Earle) Singer
Saprobic on dung. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 51).

Psilocybe mexicana R. Heim
Saprobic on dung. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 51).

Family INOCYBACEAE Jülich
(2 genera, 4 species)

Genus *Inocybe* (Fr.) Fr. (3 species)

Inocybe lasserii Dennis
Saprobic on soil. Managua (González *et al.* 2004: 31).

Inocybe martinica Pegler
Saprobic on soil. Managua (González *et al.* 2004: 31).

***Inocybe viridiumbonata* Pegler**

Saprobic on soil. Managua (González *et al.* 2004: 31).

Genus *Inosperma* (Kühner) Matheny & Esteve-Rav. (1 species)

***Inosperma calamistratum* (Fr.) Matheny & Esteve-Rav.**

Saprobic on the ground. Carazo, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 36, Saldívar 2018: 49, all as *Inocybe calamistrata*).

Family LICHENOMPHALIACEAE (Lücking & Redhead) Vizzini, Consiglio & P. Alvarado

(2 genera, 2 species)

Genus *Cora* Fr. (1 species)

***Cora pavonia* (Sw.) Fr.**

Lichenized, corticolous on mosses. Locality unknown (Pfister & Sayre 1978: 41).

Genus *Dictyonema* C. Agardh ex Kunth (1 species)

***Dictyonema sericeum* (Sw.) Berk.**

Lichenized, corticolous. Granada (Breuss 2002: 1057, Breuss 2023: 136).

Family LYCOPERDACEAE Chevall.

(3 genera, 8 species)

Genus *Apioperdon* (Kreisel & D. Krüger) Vizzini (1 species)

***Apioperdon pyriforme* (Schaeff.) Vizzini**

Saprobic on soil. Carazo, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 36, Saldívar 2018: 50, all as *Lycoperdon pyriforme*, Soza 2025: 7).

Genus *Calvatia* Fr. (4 species)

***Calvatia bicolor* (Lév.) Kreisel**

Saprobic on soil. Río San Juan (Soza 2025: 8).

***Calvatia cyathiformis* (Bosc) Morgan**

Saprobic on soil. Granada, Nueva Segovia (Ubau-Matamoros 2016a: 31, Soza 2025: 8, fig. 3a-b).

***Calvatia gigantea* (Batsch) Lloyd**

Saprobic on soil. Estelí (Soza 2025: 8 fig. 3c).

***Calvatia rugosa* (Berk. & M.A. Curtis) D.A. Reid**

Saprobic on soil. Jinotega (Saldívar 2015: 40, Soza 2025: 10).



Figure 19. A-B: *Calvatia cyathiformis*, Nueva Segovia. C: *Calvatia gigantea*, Estelí D-E: *Lycoperdon fuligineum*, Jinotega. F-G. *Lycoperdon perlatum*, Chinandega. H: *Lycoperdon pratense*, Nueva Segovia (photos by Ricardo Soza, A-B by Maribel Nuñez, C by Francisco J. Muñoz, H by Alfredo 2017).

Genus *Lycoperdon* Pers. (3 species)

Lycoperdon fuligineum Berk. & M.A. Curtis

Saprobic on wood. Atlántico Sur, Jinotega, Matagalpa (Soza 2025: 10, fig. 3d-e).

Lycoperdon perlatum Pers.

Saprobic on soil. Chinandega, Río San Juan (González & Orozco 2007: 36, Saldívar 2018: 50, Soza 2025: 11, fig. 3f-g).

Lycoperdon pratense Pers.

Saprobic on the ground, around *Pinus caribaea*. Nueva Segovia (Reid 1977: 665, Alfredo 2014: 181, fig. 23d, Soza 2025: 11, fig. 3h).

**Family LYOPHYLLACEAE Jülich
(1 genus, 1 species)**

Genus *Tricholosporum* Guzmán (1 species)

Tricholosporum violaceum Halling & Franco-Mol.

Saprobic on the ground. Matagalpa (Stanger & Smith 2015).

**Family MARASMIACEAE Roze ex Kühner
(6 genera, 38 species)**

Genus *Brunneocorticium* Sheng H. Wu (1 species)

Brunneocorticium corynecarpon (Kunze) R.A. Koch, Lodge, Nakasone & Aime

Saprobic on tree and shrub branches. Atlántico Norte (MyCoPortal 2024, as *Rhizomorpha corynecarpus*).

Genus *Crinipellis* Pat. (5 species)

Crinipellis carecomoeis (Berk. & M.A. Curtis) Singer

Saprobic on dead wood. Managua (Soza *et al.* 2023: 13, fig. 8b).

Crinipellis pseudostipitaria Singer

Saprobic on dead wood. Managua (González *et al.* 2004: 31).

Crinipellis purpurea Singer

Specimens examined: **Nicaragua**: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).

Saprobic on dead branches. Chinandega (**New country record**).

Crinipellis scabella (Alb. & Schwein.) Murrill

Saprobic on dead branches. Jinotega (Saldívar 2015: 39, as *Crinipellis stipitaria*).

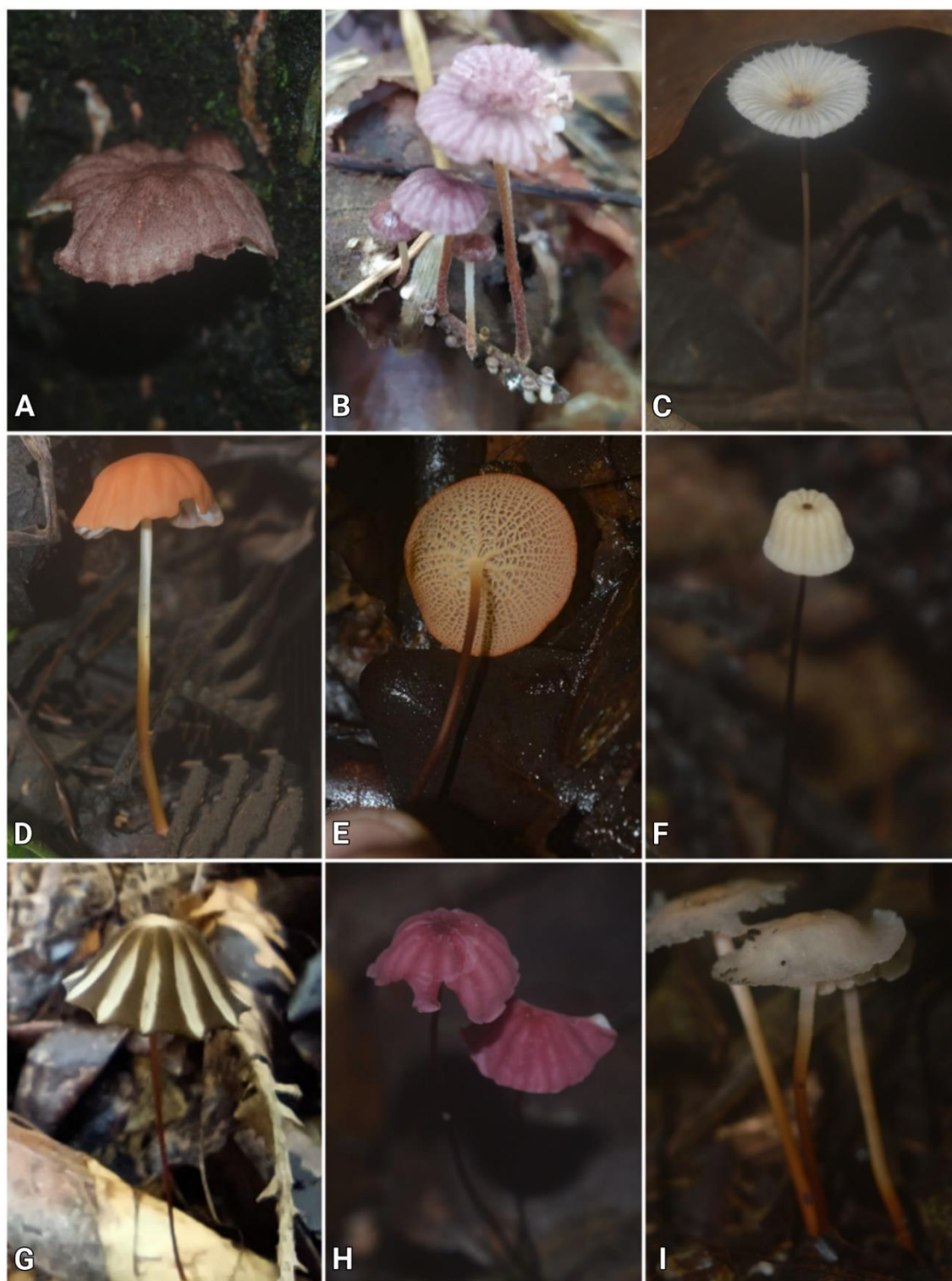


Figure 20. A: *Crinipellis carecomoeis*, Managua. B: *C. purpurea*, Chinandega. C: *C. tucumanensis*, Managua. D: *Marasmius berteroi*, Managua. E: *M. cladophyllus*, Matagalpa. F: *M. conicopapillatus*, Matagalpa. G: *M. griseoradiatus*, Chinandega. H: *M. haematocephalus*, Chinandega. I: *M. leoninus*, Managua (photos by Ricardo Soza).

***Crinipellis tucumanensis* Singer**

Saprobic on dead branches. Managua (Soza *et al.* 2023: 13, fig. 8c).

Genus *Hymenogloea* Pat. (1 species)

***Hymenogloea papyracea* (Berk. & M.A. Curtis) Singer**

Saprobic on dead leaves. Río San Juan (Saldívar 2018: 52).

Genus *Marasmius* Fr. (27 species)

***Marasmius aripoensis* (Dennis) Singer**

Saprobic on dead leaves. Carazo, Jinotega, Managua Río San Juan (González *et al.* 2004: 31, González & Orozco 2006: 1, González & Orozco 2007: 37, Saldívar 2015: 39, Saldívar 2018: 52).

***Marasmius berteroi* (Lév.) Murrill**

Saprobic on dead branches. Managua, Río San Juan (Saldívar 2018: 52, Soza *et al.* 2024: 13).

***Marasmius cladophyllus* Berk.**

Saprobic on dead wood. Jinotega, Managua, Matagalpa (González & Orozco 2007: 36, Stanger & Smith 2015, Saldívar 2015: 39, Saldívar 2018: 50).

***Marasmius conicopapillatus* Henn.**

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on dead leaves. Matagalpa (**New country record**).

***Marasmius corrugatus* (Pat.) Sacc.**

Saprobic on decaying wood. Managua (González *et al.* 2004: 31).

***Marasmius crinis-equi* F. Muell. ex Kalchbr.**

Parasitic on *Coffea arabica*. Locality unknown (IPSA 2021: 8).

***Marasmius dennisii* Singer**

Saprobic on dead leaves. Managua (Soza *et al.* 2024: 13).

***Marasmius graminicola* Speg.**

Saprobic on dead fallen leaves of *Zea mays*. Locality unknown (Wellman 1977: 465).

***Marasmius griseoradiatus* Desjardin & Ovrebo**

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12°40'54"N, 87°03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).

Saprobic on dead leaves. Chinandega (**New country record**).

***Marasmius guyanensis* Mont.**

Saprobic on dead leaves. Atlántico Sur (Soza 2025: *in press*).

***Marasmius haematocephalus* (Mont.) Fr.**

Saprobic on dead leaves and stems of trees. Carazo, Jinotega, Managua, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 37, Saldívar 2015: 39, Saldívar 2018: 50, Soza *et al.* 2024: 13).

***Marasmius hakgalensis* Petch**

Saprobic on dead leaves. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50).

***Marasmius helvolus* Berk.**

Saprobic on dead branches. Jinotega (Saldívar 2015: 39).

***Marasmius leoninus* Berk.**

Saprobic on dead branches. Managua (Soza *et al.* 2024: 13, fig. 8e).

***Marasmius leucorotalis* Singer**

Saprobic on decaying wood. Managua (González *et al.* 2004: 31).

***Marasmius leveilleanus* (Berk.) Sacc. & Trotter**

Saprobic on dead branches. Managua (Soza *et al.* 2024: 13).

***Marasmius neosessilis* Singer**

Saprobic on dead wood. Managua (Soza *et al.* 2024: 13, fig. 8f).

***Marasmius niveus* Mont.**

Saprobic on dead twigs and leaves. Managua (González *et al.* 2004: 31).

***Marasmius pallipes* Speg.**

Saprobic on dead wood. Carazo, Managua (González *et al.* 2004: 31, González & Orozco 2006: 1).

***Marasmius perlongispermus* Singer**

Saprobic on dead wood. Jinotega, Río San Juan (González & Orozco 2007: 37, Saldívar 2015: 39, Saldívar 2018: 52).

***Marasmius rhabarbarinus* Berk.**

Saprobic on dead leaves. Managua (Soza *et al.* 2024: 13, fig. 8g).

***Marasmius rhyssophyllus* Mont. ex Berk. & M.A. Curtis**

Saprobic on dead branches. Managua (González *et al.* 2004: 31).



Figure 21. A: *Marasmius neosessilis*, Managua. B: *M. rhabarbarinus*, Managua. C: *M. trinitatis*, Managua. D: *M. vigintifolius*, Chinandega. E: *Tetrapyrgos alba*, Jinotega. F: *T. longicystidiata*, Managua. G: *Filoboletus gracilis*, Managua. H: *Mycena alphetophora*, Managua. I: *Collybiopsis subpruinosa*, Managua (photos by Ricardo Soza).

Marasmius rotula (Scop.) Fr.

Saprobic on dead wood. Managua (Soza *et al.* 2024: 13).

Marasmius ruforotula Singer

Saprobic on dead wood. Managua (González *et al.* 2004: 32).

Marasmius tageticolor Berk.

Saprobic on dead twigs. Jinotega (Saldívar 2015: 41).

Marasmius trinitatis Dennis

Saprobic on rotten wood. Managua (Soza *et al.* 2024: 13, fig. 8h).

Marasmius vigintifolius Singer

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12°40'54"N, 87°03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).

Saprobic on dead leaves. Matagalpa (**New country record**).

Genus *Moniliophthora* H.C. Evans, Stalpers, Samson & Benny (2 species)

Moniliophthora perniciosa (Stahel) Aime & Phillips-Mora

Parasitic on *Theobroma cacao*. Atlántico Sur (Gómez *et al.* 1990: 3, as *Crinipellis perniciosa*).

Moniliophthora roreri (Cif.) H.C. Evans, Stalpers, Samson & Benny

Hyphomycetes, parasitic on *Theobroma cacao*. Atlántico Sur (López & Enríquez 1980: 21, as *Monilia roreri*, Gómez *et al.* 1990: 3, Phillips-Mora *et al.* 2007: 913, Ploetz 2007: 1636, Delgado 2011: 14).

Genus *Tetrapyrgos* E. Horak (2 species)

Tetrapyrgos alba (Berk. & M.A. Curtis) E. Horak

Saprobic on dead wood. Jinotega (Saldívar 2015: 39, as *Campanella alba*).

Tetrapyrgos longicystidiata Honan, Desjardin & T.J. Baroni

Saprobic on decaying leaves and sticks. Jinotega, Managua, Río San Juan (González & Orozco 2007: 38, Saldívar 2015: 40, Saldívar 2018: 51, all as *Tetrapyrgos nigripes*, Soza *et al.* 2024: 14).

Family MYCENACEAE Overeem
(3 genera, 10 species)

Genus *Filoboletus* Henn. (1 species)

Filoboletus gracilis (Klotzsch ex Berk.) Singer

Saprobic on dead wood. Jinotega, Managua, Río San Juan (González & Orozco 2007: 36, González *et al.* 2004: 31, Saldívar 2015: 39, Saldívar 2018: 49, Soza *et al.* 2024: 16).

Genus *Mycena* (Pers.) Roussel (8 species)

Mycena alcalina (Fr.) P. Kumm.

Saprobic on dead wood. Managua (Soza *et al.* 2024: 14, fig. 9b).

Mycena alphetophora (Berk.) Sacc.

Saprobic on dead wood. Managua (Soza *et al.* 2024: 14, fig. 9c).

Mycena citricolor (Berk. & M.A. Curtis) Sacc.

Parasitic on *Coffea arabica*. Locality unknown (Litzenberger & Stevenson 1957: 7, as *Omphalia flavida*).

Mycena haematopus (Pers.) P. Kumm.

Saprobic on wood. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50).

Mycena holoporphyræ (Berk. & M.A. Curtis) Singer

Specimens examined: Nicaragua: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).
Saprobic in humus. Chinandega (New country record).

Mycena margarita (Murrill) Murrill

Saprobic on dead wood. Granada, Jinotega, Río San Juan (González & Orozco 2007: 37, Saldívar 2015: 39, Ubau-Matamoros 2016a: 31, Saldívar 2018: 50).

Mycena pearsoniana Dennis ex Singer

Saprobic in humus. Managua (González *et al.* 2004: 32).

Mycena sanguinolenta (Alb. & Schwein.) P. Kumm.

Saprobic on dead wood. Jinotega, Río San Juan (González & Orozco 2007: 37, Saldívar 2015: 39, Saldívar 2018: 52).



Figure 22. A: *Cyathus intermedius*, Matagalpa. B-C: *Cyathus poeppigii*, Chinandega. D: *Cyathus setosus*, Chinandega. E: *Cyathus stercoreus*, Estelí. F: *Cyathus striatus*, Chinandega. G-H: *Cyathus striatus*, Managua (photos by Ricardo Soza, E by Andrea Perez).

Genus *Panellus* P. Karst. (1 species)

Panellus pusillus (Pers. ex Lév.) Burds. & O.K. Mill.

Saprobic on dead wood. Carazo, Jinotega, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 37, Saldívar 2015: 39, Saldívar 2018: 52, all as *Dictyopanus pusillus*).

**Family NIDULARIACEAE Dumort.
(1 genus, 6 species)**

Genus *Cyathus* Haller (6 species)

Cyathus intermedius (Mont.) Tul. & C. Tul.

Saprobic on dead wood. Matagalpa (Soza 2025: 12, fig. 4a).

Cyathus poeppigii Tul. & C. Tul.

Saprobic on dead wood. Chinandega, Managua (Soza 2025: 12, fig. 4b).

Cyathus setosus H.J. Brodie

Saprobic on dead wood. Chinandega (Soza 2025: 14, fig. 4c).

Cyathus stercoreus (Schwein.) De Toni

Saprobic on dung. Estelí (Soza 2025: 14, fig. 4d).

Cyathus striatus Willd.

Saprobic on dead wood. Carazo, Chinandega, Granada, Jinotega, León, Managua, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2015: 39, Ubau-Matamoros 2016a: 31, Saldívar 2018: 48, Soza *et al.* 2023: 12, Soza 2025: 14, fig. 5e).

Cyathus triplex Lloyd

Saprobic on dead wood. Río San Juan (Reid 1977: 685, Soza 2025: 15).

**Family OMPHALOTACEAE Bresinsky
(6 genera, 17 species)**

Genus *Connopus* R.H. Petersen (1 species)

Connopus acervatus (Fr.) K.W. Hughes, Mather & R.H. Petersen

Saprobic on soil. Matagalpa (Stanger & Smith 2015, as *Gymnopus acervatus*).

Genus *Collybiopsis* (J. Schröt.) Earle (3 species)

Collybiopsis luxurians (Peck) R.H. Petersen

Specimens examined: **Nicaragua:** Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza (no coll.).

Saprobic on soil. Chinandega (**New country record**).

Collybiopsis omphalodes (Berk.) J.S. Kim & Y.W. Lim

Saprobic on the ground. Matagalpa (Stanger & Smith 2015, *Gymnopus omphalodes*).

Collybiopsis subpruinosa (Murrill) R.H. Petersen

Saprobic on wood debris and twigs. Managua (Soza *et al.* 2024: 14, fig. 9d, as *Gymnopus subpruinosa*).

Genus *Gymnopus* (Pers.) Gray (5 species)

Gymnopus dryophilus (Bull.) Murrill

Saprobic on soil. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

Gymnopus iocephalus (Berk. & M.A. Curtis) Halling

Saprobic on soil. Jinotega, Managua (Saldívar 2015: 41, Soza *et al.* 2024: 14).

Gymnopus johnstonii (Murrill) A.W. Wilson, Desjardin & E. Horak

Saprobic on leaves. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

Gymnopus lodgeae (Singer) J.L. Mata

Saprobic on bark. Matagalpa (Stanger & Smith 2015).

Gymnopus montagnei (Berk.) Redhead

Saprobic on wood. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

Genus *Lentinula* Earle (1 species)

Lentinula aciculospora J.L. Mata & R.H. Petersen

Saprobic on wood. Río San Juan (González & Orozco 2007: 39, Saldívar 2018: 49).

Genus *Marasmiellus* Murrill (6 species)

Marasmiellus coilobasis (Berk.) Singer

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).

Saprobic on dead wood. Chinandega (**New country record**).



Figure 23. A: *Gymnopus montagnei*, Atlántico Sur. B: *Marasmiellus coilobasis*, Chinandega. C: *M. dealbatus*, Chinandega. D: *Neonothopanus hygrophanus*, Managua. E: *Tricholomopsis aurea*, Chinandega. F: *Cyptotrama asprata*, Matagalpa. G: *Oudemansiella cubensis*, Chinandega. H: *Dactylosporina steffenii*, Managua (photos by Ricardo Soza).

***Marasmiellus dealbatus* (Berk. & M.A. Curtis) Singer**

Specimens examined: **Nicaragua**: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).

Saprobic on dead wood. Chinandega (**New country record**).

***Marasmiellus guadelupensis* (Pat.) Singer**

Saprobic on dead wood. Jinotega, Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50, both as *Marasmius guadelupensis*, Saldívar 2015: 41).

***Marasmiellus nanus* (Masse) Dennis**

Saprobic on dead wood. Managua (González *et al.* 2004: 31, as *Collybia nana*).

***Marasmiellus neotropicus* (Singer) J.S. Oliveira**

Saprobic on soil. Carazo, Jinotega, Managua, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 36, González *et al.* 2004: 31, Saldívar 2015: 39, Saldívar 2018: 49, all as *Collybia neotropica*, Soza *et al.* 2024: 14, as *Gymnopus neotropicus*).

***Marasmiellus volvatus* Singer**

Saprobic on dead wood. Jinotega, Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50, both as *Marasmius volvatus*, Saldívar 2015: 39).

Genus *Neonothopanus* R.H. Petersen & Krisai (1 species)

***Neonothopanus hygrophanus* (Mont.) De Kesel & Degreef**

Saprobic on dead wood. Managua (Soza *et al.* 2024: 14, fig. 9e).

**Family PHYLLOTOSIDACEAE Locquin ex Olariaga, Huhtinen, Læssøe,
J.H. Petersen & K. Hansen
(2 genera, 3 species)**

Genus *Pleurocybella* Singer (1 species)

***Pleurocybella porrigens* (Pers.) Singer**

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50, both as *Phyllotus porrigens*).

Genus *Tricholomopsis* Singer (2 species)

***Tricholomopsis aurea* (Beeli) Desjardin & B.A. Perry**

Saprobic on rotten wood. Jinotega, Managua, Río San Juan (González & Orozco 2007: 35, Saldívar 2015: 39, Saldívar 2018: 48, Soza *et al.* 2023: 16, all as *Collybia aurea*).

***Tricholomopsis tropica* Dennis**

Saprobic on soil. Managua (González *et al.* 2004: 32).

**Family PHYSALACRIACEAE Corner
(6 genera, 6 species)**

Genus *Armillaria* (Fr.) Staude (1 species)

***Armillaria mellea* (Vahl) P. Kumm.**

Parasitic on *Simarouba amara*. Locality unknown (IPSA 2021: 4).

Genus *Cyptotrama* Singer (1 species)

***Cyptotrama asprata* (Berk.) Redhead & Ginns**

Saprobic on decaying wood. Río San Juan (Saldívar 2018: 52).

Genus *Dactylosporina* (Cléménçon) Dörfelt (1 species)

***Dactylosporina steffenii* (Rick) Dörfelt**

Saprobic on soil. Managua (Soza *et al.* 2024: 15, fig. 9f).

Genus *Oudemansiella* Speg. (1 species)

***Oudemansiella cubensis* (Berk. & M.A. Curtis) R.H. Petersen**

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50, both as *Oudemansiella canarii*, Stanger & Smith 2015, as *Oudemansiella platensis*, Soza *et al.* 2024: 15).

Genus *Strobilurus* Singer (1 species)

***Strobilurus conigenoides* (Ellis) Singer**

Saprobic on decaying fruits of *Magnolia* sp. Río San Juan (González & Orozco 2007: 38, Saldívar 2018: 51):

Genus *Xerula* Maire (1 species)

***Xerula hispida* Halling & G.M. Muell.**

Saprobic on the ground. Matagalpa (Stanger & Smith 2015, as *Xerula* sp).

**Family PLEUROTACEAE Kühner
(3 genera, 8 species)**

Genus *Nothopanus* Singer (1 species)

***Nothopanus eugrammus* (Mont.) Singer**

Saprobic on dead wood. Managua (González *et al.* 2004: 32).



Figure 24. A: *Hohenbuehelia nigra*, Managua. B: *Pleurotus ostreatus*, Managua. C: *Pluteus albostipitatus*, Managua. D: *P. chrysophlebius*, Managua. E: *Gerronema bryogeton*, Chinandega. F: *Gerronema cyathiforme*, Managua. G: *Hydropus brunneoumbonatus*, Chinandega. H: *H. nigrita*, Chinandega. I: *Lactocollybia epia*, Managua (photos by Ricardo Soza).

Genus *Hohenbuehelia* Schulzer (4 species)

Hohenbuehelia angustata (Berk.) Singer

Saprobic on dead wood. Managua (Saldívar 2018: 52).

Hohenbuehelia fluxilis (Fr.) P.D. Orton

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 31).

Hohenbuehelia nigra (Schwein.) Singer

Saprobic on dead wood. Managua (Soza *et al.* 2024: 15, fig. 9g).

Hohenbuehelia petaloides (Bull.) Schulzer

Saprobic on dead wood. Carazo, Jinotega (González & Orozco 2006: 1, Saldívar 2015: 39, as *Hohenbuehelia geogenia*).

Genus *Pleurotus* (Fr.) P. Kumm. (3 species)

Pleurotus djamor (Rumph. ex Fr.) Boedijn

Saprobic on dead wood. Managua (Soza *et al.* 2024: 15).

Pleurotus ostreatus (Jacq.) P. Kumm.

Saprobic on dead wood. Managua (Soza *et al.* 2024: 15).

Pleurotus pulmonarius (Fr.) Quél.

Saprobic on decaying wood. Granada, Managua (Ubau-Matamoros 2016a: 31, Soza *et al.* 2024: 15).

**Family PLUTEACEAE Kotl. & Pouzar
(1 genus, 6 species)**

Genus *Pluteus* Fr. (6 species)

Pluteus albstipitatus (Dennis) Singer

Saprobic on rotten wood. Managua (Soza *et al.* 2024: 15, fig. 9h).

Pluteus cervinus (Schaeff.) P. Kumm.

Saprobic on dead wood. Matagalpa (Stanger & Smith 2015).

Pluteus chrysophlebius (Berk. & M.A. Curtis) Sacc.

Saprobic on dead wood. Managua (Soza *et al.* 2024: 15, fig. 10a).

Pluteus nanus (Pers.) P. Kumm.

Saprobic on dead wood. Jinotega (Saldívar 2015: 41).

Pluteus salicinus (Pers.) P. Kumm.

Saprobic on dead wood. Jinotega (Saldívar 2015: 39).

Pluteus umbrosus (Pers.) P. Kumm.

Saprobic on dead wood. Matagalpa (Stanger & Smith 2015).

Family POROTHELEACEAE Murrill
(5 genera, 8 species)

Genus *Gerronema* Singer (3 species)

Gerronema bryogeton Singer

Specimens examined: Nicaragua: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).

Saprobic on dead wood. Chinandega (New country record).

Gerronema cyathiforme (Berk. & M.A. Curtis) Singer

Saprobic on decaying wood. Managua (Soza *et al.* 2023: 13, fig. 8d).

Gerronema strombodes (Berk. & Mont.) Singer

Saprobic on dead wood. Carazo, Managua (González & Orozco 2006: 1, Soza *et al.* 2023: 13).

Genus *Hydropus* Kühner ex Singer (2 species)

Hydropus brunneoumbonatus (Dennis) Singer

Specimens examined: Nicaragua: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).

Saprobic on dead twigs. Chinandega (New country record).

Hydropus nigrita (Berk. & M.A. Curtis) Singer

Saprobic on dead wood. Managua (González *et al.* 2004: 31, Soza *et al.* 2024: 13).

Genus *Lactocollybia* Singer (1 species)

Lactocollybia epia (Berk. & Broome) Pegler

Saprobic on dead wood. Managua (Soza *et al.* 2023: 13).

Genus *Megacollybia* Kotl. & Pouzar (1 species)

Megacollybia platyphylla (Pers.) Kotl. & Pouzar

Saprobic on the ground. Río San Juan (Saldivar 2018: 52).



Figure 25. A: *Megacollybia platyphylla*, Chinandega. B: *Trogia cantharelloides*, Managua. C: *Candolleomyces candolleanus*, Jinotega. D: *C. tuberculatus*, Chinandega. E: *Coprinellus disseminatus*, Managua. F: *C. micaceus*, Managua. G: *C. lagopus*, Managua. H: *C. stercorea*, Chinandega (photos by Ricardo Soza).

Genus *Trogia* Fr. (1 species)

Trogia cantharelloides (Mont.) Pat.

Saprobic on the ground. Managua (Soza *et al.* 2023: 14, fig. 9a).

Family PSATHYRELLACEAE Vilgalys, Moncalvo & Redhead
(5 genera, 12 species)

Genus *Candolleomyces* D. Wächt. & A. Melzer (3 species)

Candolleomyces candolleanus (Fr.) D. Wächt. & A. Melzer

Saprobic on soil. Managua (Soza *et al.* 2024: 15, as *Psathyrella candolleana*).

Candolleomyces trinitatensis (R.E.D. Baker & W.T. Dale) D. Wächt. & A. Melzer

Saprobic on very rotten wood. Managua (González *et al.* 2004: 31, as *Psathyrella trinitatensis*).

Candolleomyces tuberculatus (Pat.) D. Wächt. & A. Melzer

Specimens examined: **Nicaragua**: Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza (no coll.).

Saprobic on decaying wood. Chinandega (**New country record**).

Genus *Coprinellus* P. Karst. (2 species)

Coprinellus disseminatus (Pers.) J.E. Lange

Saprobic on dead wood. Carazo, Jinotega, Managua, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 35, González *et al.* 2004: 31, Saldívar 2015: 39, Saldívar 2018: 48, all as *Coprinus disseminatus*, Soza *et al.* 2024: 15).

Coprinellus micaceus (Bull.) Vilgalys, Hopple & Jacq. Johnson

Saprobic on wood. Granada, Managua (González *et al.* 2004: 31, Stanger & Smith 2015, Ubau-Matamoros 2016a: 30, as *Coprinus micaceus*, Soza *et al.* 2024: 15).

Genus *Coprinopsis* P. Karst. (3 species)

Coprinopsis brunneofibrillosa (Dennis) Redhead, Vilgalys & Moncalvo

Saprobic on soil. Managua (González *et al.* 2004: 31).

Coprinopsis lagopus (Fr.) Redhead, Vilgalys & Moncalvo

Saprobic on soil. Managua (Soza *et al.* 2024: 15).

Coprinopsis stercorea (Fr.) Redhead, Vilgalys & Moncalvo

Specimens examined: **Nicaragua**: Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza (no coll.).

Saprobic on dung. Chinandega (**New country record**).



Figure 26. A: *Parasola plicatilis*, Chinandega. B: *Myrmecopterula moniliformis*, Chinandega. C: *Schizophyllum commune*, Atlántico Sur. D: *S. umbrinum*, Managua. E: *Agrocybe retigera*, Chinandega. F: *Deconica coprophila*, Chinandega. G: *Volvariella volvacea*, Chinandega. H: *Xeromphalina tenuipes*, León. I: *Panaeolus antillarum*, Atlántico Sur (photos by Ricardo Soza).

Genus *Parasola* Redhead, Vilgalys & Hopple (2 species)

***Parasola conopilea* (Fr.) Örstadius & E. Larss.**

Saprobic on soil. Jinotega (Saldívar 2015: 41, Saldívar 2018: 52, both as *Psathyrella conopilea*).

***Parasola plicatilis* (Curtis) Redhead, Vilgalys & Hopple**

Saprobic on soil. Carazo, Managua, Río San Juan (González & Orozco 2006: 1, Saldívar 2018: 52, both as *Coprinus plicatilis*, Soza *et al.* 2024: 15).

Genus *Psathyrella* (Fr.) Quél. (2 species)

***Psathyrella coprinoceps* (Berk. & M.A. Curtis) Dennis**

Saprobic on dried trunks. Managua (González *et al.* 2004: 31).

***Psathyrella erinensis* Dennis**

Saprobic on soil. Managua (González *et al.* 2004: 31).

**Family PTERULACEAE Corner
(1 genus, 1 species)**

Genus *Myrmecopterula* Leal-Dutra, Dentinger & G.W. Griff. (1 species)

***Myrmecopterula moniliformis* (Henn.) Leal-Dutra, Dentinger & G.W. Griff.**

Specimens examined: **Nicaragua:** Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza 01026 (RSE-F).

Saprobic on soil. Chinandega (**New country record**).

**Family SCHIZOPHYLLACEAE Quél.
(1 genus, 3 species)**

Genus *Schizophyllum* Fr. (3 species)

***Schizophyllum commune* Fr.**

Saprobic on dead wood. Carazo, Granada, Managua, Río San Juan (Murrill 1912: 213, as *Hyponevris alneus*, Lloyd 1913-1916: 1, Cooke 1961: 580, Wellman 1977: 130, González & Orozco 2006: 1, González & Orozco 2007: 38, Ubau-Matamoros 2016a: 32, Ubau-Matamoros 2016b: 14, Saldívar 2018: 51, Soza *et al.* 2024: 15).

***Schizophyllum fasciatum* Pat.**

Saprobic on dead wood. Locality unknown (Cooke 1961: 589).

***Schizophyllum umbrinum* Berk.**

Saprobic on dead wood. Managua, Rivas (Ellis & MacBride 1896: 194, as *Schizophyllum multifidum* var. *digitatum*, Cooke 1961: 591, Soza *et al.* 2024: 15, as *Schizophyllum lepieurii*).

Family STROPHARIACEAE Singer & A.H. Sm.
(3 genera, 3 species)

Genus *Agrocybe* Fayod (1 species)

Agrocybe retigera (Speg.) Singer
Saprobic on soil. Managua (Soza *et al.* 2024: 15).

Genus *Deconica* (W.G. Sm.) P. Karst. (1 species)

Deconica coprophila (Bull.) P. Karst.
Saprobic on dung. Granada, Río San Juan. (González & Orozco 2007: 37, Ubau-Matamoros 2016a: 31, Saldívar 2018: 51, all as *Psilocybe coprophila*).

Genus *Hypholoma* (Fr.) P. Kumm. (1 species)

Hypholoma subviride (Berk. & M.A. Curtis) Dennis
Saprobic on rotten wood. Jinotega (Saldívar 2015: 39).

Family TRICHOLOMATACEAE R. Heim ex Pouzar
(1 genus, 1 species)

Genus *Ripartitella* Singer (1 species)

Ripartitella alba Halling & Franco-Mol.
Saprobic on wood. Río San Juan (González & Orozco 2007: 38, Saldívar 2018: 51).

Family VOLVARIELLACEAE Vizzini, Consiglio & P. Alvarado
(1 genus, 2 species)

Genus *Volvariella* Speg. (2 species)

Volvariella cubensis (Murrill) Shaffer
Saprobic on rotten wood. Managua (Soza *et al.* 2024: 15, fig. 10b).

Volvariella volvacea (Bull.) Singer.
Specimens examined: **Nicaragua**: Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza (no coll).
Saprobic on dead wood. Chinandega (**New country record**).

Family XEROMPHALINACEAE Vizzini, Consiglio & P. Alvarado
(1 genus, 2 species)

Genus *Xeromphalina* Kühner & Maire (2 species)

Xeromphalina campanella (Batsch) Kühner & Maire

Saprobic on wood. Carazo, Río San Juan (González & Orozco 2006: 2, González & Orozco 2007: 37, Saldívar 2018: 50).

Xeromphalina tenuipes (Schwein.) A.H. Sm.

Saprobic on dead wood. Jinotega, Managua, Río San Juan (González & Orozco 2007: 38, González *et al.* 2004: 32, Stanger & Smith 2015, Saldívar 2018: 51, Soza *et al.* 2024: 14).

AGARICALES genera *incertae sedis*

Genus *Dendrothele* Höhn. & Litsch. (1 species)

Dendrothele strumosa (Fr.) P.A. Lemke

Saprobic on wood. Locality unknown (Burt 1918: 190, as *Aleurodiscus strumosus*).

Genus *Lycogalopsis* E. Fisch. (1 species)

Lycogalopsis solmsii E. Fisch.

Saprobic on dead wood. Río San Juan (Soza 2025: 15).

Genus *Panaeolina* Maire (1 species)

Panaeolina foenisecii (Pers.) Maire

Saprobic on soil. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50).

Genus *Panaeolus* (Fr.) Quél. (2 species)

Panaeolus antillarum (Fr.) Dennis

Saprobic on dung. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50).

Panaeolus semiovatus (Sowerby) S. Lundell & Nannf.

Saprobic on dung. Granada (Ubau-Matamoros 2016a: 30).

Order AMYLOCORTICIALES K.H. Larss., Manfr. Binder & Hibbett
(1 family, 1 genus, 1 species)

Family AMYLOCORTICIACEAE Jülich
(1 genus, 1 species)

Genus *Agroathelia* Redhead & Mullineux (1 species)

Agroathelia rolfsii (Sacc.) Redhead & Mullineux

Parasitic on *Arachis hypogaea*, *Cajanus cajan*, *Medicago sativa*, *Mucuna deeringiana*, *Phaseolus vulgaris*, *Sesamum indicum*, *Vigna unguiculata*. Managua (Litzenberger & Stevenson 1957: 4, McGuire & Crandall 1967: 121, González *et al.* 1985: 129, all as *Sclerotium rolfsii*, Lenné 1990: 18, as *Corticium rolfsii*, IPSA 2021:4, as *Athelia rolfsii*).

Order AURICULARIALES J. Schröt.
(1 family, 2 genera, 7 species)

Family AURICULARIACEAE Fr.
(1 genus, 6 species)

Genus *Auricularia* Bull. (6 species)

Auricularia angiospermarum Y.C. Dai, F. Wu & D.W. Li

Saprobic on dead wood. Granada, Managua, Río San Juan (González & Orozco 2007: 35, as *Auricularia auricula*, Ubau-Matamoros 2016b: 7, as *A. auricula*, Saldívar 2018: 48, as *A. auricula-judae*, Soza *et al.* 2023: 16, as *A. auricula-judae*).



Figure 27. A-B: *Auricularia angiospermarum*, Chinandega. C: *Auricularia brasiliana*, Managua. D: *Auricularia cornea*, Matagalpa. E: *Auricularia fuscusuccinea*, Managua. F: *Auricularia nigricans*, Managua. G-H: *Auricularia tremellosa*, Chinandega (photos by Ricardo Soza).

***Auricularia brasiliiana* Y.C. Dai & F. Wu**

Saprobic on dead wood. Carazo, Granada, León, Managua, Río San Juan, Rivas (Ellis & MacBride 1896: 190, as *Auricularia lobata*, Lowy 1971: 24, González & Orozco 2006: 1, González & Orozco 2007: 35, Ubau-Matamoros 2016b: 7, Saldívar 2018: 48, Soza *et al.* 2023: 16, all as *Auricularia mesenterica*).

***Auricularia cornea* Ehrenb.**

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).
Saprobic on dead wood. Matagalpa (**New country record**).

***Auricularia fuscusuccinea* (Mont.) Henn.**

Saprobic on dead wood. Jinotega, Managua, Río San Juan (Bonar 1939: 202, as *Auricularia rosea*, Lowy 1971: 22, González & Orozco 2007: 35, Saldívar 2015: 39, Saldívar 2018: 48, Soza *et al.* 2023: 16).

***Auricularia nigricans* (Sw.) Birkebak, Looney & Sánchez-García**

Saprobic on dead wood. Granada, Río San Juan, Rivas (Pfister & Sayre 1978: 43, as *Exidia hispidula*, Lowy 1971: 25, Soza *et al.* 2023: 16, as *Auricularia polytricha*).

***Auricularia tremellosa* (Fr.) Pat.**

Saprobic on dead wood. Managua (Soza *et al.* 2023: 16, as *Auricularia delicata*).

AURICULARIALES genus incertae sedis

Genus *Pseudohydnum* P. Karst. (1 species)

***Pseudohydnum gelatinosum* (Scop.) P. Karst.**

Saprobic on dead wood. Matagalpa (Soza in press).

**Order BOLETALES E.-J. Gilbert
(8 families, 18 genera, 22 species)**

**Family BOLETACEAE Chevall.
(10 genera, 11 species)**

Genus *Boletellus* Murrill (1 species)

***Boletellus coccineus* (Sacc.) Singer**

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte, Matagalpa (Singer *et al.* 1983: 152, as *Boletellus ananas* var. *crassotunicatus*, Singer *et al.* 1983: 153, as *B. ananas* var. *minor*, Singer *et al.* 1992: 6, as *B. ananas* var. *crassotunicatus*, Singer *et al.* 1992: 7, as *B. ananas* var. *minor*, Gómez 1996: 69, as *Boletellus minor*, Stanger & Smith 2015, as *Boletellus ananas*).



Figure 28. A: *Boletellus coccineus*, Atlántico Sur. B: *Calostoma cinnabarinum*, Nueva Segovia. C: *Pisolithus arhizus*, Madriz. D-E: *Scleroderma verrucosum*, Jinotega. F: *Cantharellus cibarius*, Estelí. G: *Craterellus cornucopioides*, Estelí. H: *Hydnum repandum*, Estelí (photos by Ricardo Soza, B by Milton Salazar, C by Ariel Salinas, G by Christian Schwarz, H by Fulvio Castillo).

Genus *Heimioporus* E. Horak (1 species)

Heimioporus ivoryi (Singer) E. Horak

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (Gómez 1996: 71, as *Boletellus ivoryi*).

Genus *Hemileccinum* Šutara (1 species)

Hemileccinum subglabripes (Peck) Halling

Ectomycorrhizal, saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Genus *Lanmaoa* G. Wu & Zhu L. Yang (1 species)

Lanmaoa flavorubra (Halling & M. Mata) G. Wu, Halling & Zhu L. Yang

Ectomycorrhizal, saprobic on soil. Estelí (Vargas-Fuentes & Gribal 2015: 8, as *Boletus* cf. *flavoruber*).

Genus *Neoboletus* Gelardi, Simonini & Vizzini (1 species)

Neoboletus subvelutipes (Peck) Yang Wang, B. Zhang & Yu Li

Ectomycorrhizal, saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Genus *Phylloporus* Quél. (1 species)

Phylloporus centroamericanus Singer & L.D. Gómez

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Sur (Soza 2025: *in press*).

Genus *Pulveroboletus* Murrill (1 species)

Pulveroboletus ravenelii (Berk. & M.A. Curtis) Murrill

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (Singer *et al.* 1983: 91, Gómez 1996: 81).

Genus *Strobilomyces* Berk. (1 species)

Strobilomyces strobilaceus (Scop.) Berk.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Ectomycorrhizal, saprobic on the ground. Matagalpa (**New country record**).

Genus *Tylopilus* P. Karst. (1 species)

Tylopilus nicaraguensis Singer & M.H. Ivory

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (endemic) (Singer *et al.* 1983: 107, Singer *et al.* 1991: 24).

Genus *Xerocomus* Quél. (2 species)

Xerocomus morrisii (Peck) M. Zang

Ectomycorrhizal, saprobic on the ground. Matagalpa (Stanger & Smith 2015).

Xerocomus pseudoboletinus (Murrill) Singer

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (Singer *et al.* 1983: 79, Gómez 1996: 63, as *Xerocomus pseudoboletinus* var. *pinicaribaeae*).

Family BOLETINELLACEAE P.M. Kirk, P.F. Cannon & J.C. David
(1 genus, 1 species)

Genus *Phlebopus* (R. Heim) Singer (14)

Phlebopus beniensis (Singer & Digilio) Heinem. & Rammeloo

Saprobic on the ground. Atlántico Norte (HerbKew 2024).

Family CALOSTOMATACEAE E. Fisch.
(1 genus, 1 species)

Genus *Calostoma* Desv. (1 species)

Calostoma cinnabarinum Corda

Ectomycorrhizal, saprobic on soil. Nueva Segovia (Soza 2025: 16, fig. 5a-b).

Family GYROPORACEAE (Singer) Manfr. Binder & Bresinsky
(1 genus, 1 species)

Genus *Gyroporus* Quél. (24)

Gyroporus castaneus (Bull.) Quél.

Saprobic on the ground. Atlántico Norte (HerbKew 2024).

Family RHIZOPOGONACEAE Gäum. & C.W. Dodge
(1 genus, 1 species)

Genus *Rhizopogon* Fr. (1 species)

Rhizopogon nigrescens Coker & Couch

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (Hosford & Trappe 1980: 13, Soza 2025: 17).

Family SCLERODERMATACEAE Corda
(2 genera, 4 species)

Genus *Pisolithus* Alb. & Schwein. (1 species)

Pisolithus arhizus (Scop.) Rauschert

Ectomycorrhizal, saprobic on soil under *Pinus oocarpa*. León, Madriz, Managua (Horan & Chilvers 1990: 290, as *Pisolithus tinctorius*, Soza 2025: 17, fig. 4f).

Genus *Scleroderma* Pers. (3 species)

Scleroderma cepa Pers.

Ectomycorrhizal, saprobic on soil. Carazo (González & Orozco 2006: 2).

Scleroderma citrinum Pers.

Ectomycorrhizal, saprobic on soil. Carazo (González & Orozco 2006: 2).

Scleroderma verrucosum (Bull.) Pers.

Ectomycorrhizal, saprobic on soil. Jinoeta (Soza 2025: 17, fig. 4g-h).

Family SERPULACEAE Jarosch & Bresinsky
(1 genus, 1 species)

Genus *Serpula* (Pers.) Gray (1 species)

Serpula costaricensis M. Mata & Ryvarden

Ectomycorrhizal, saprobic on soil. Estelí (Vargas-Fuentes & Gribal 2015: 8).

Family SUILLACEAE Besl & Bresinsky
(1 genus, 2 species)

Genus *Suillus* Gray (2 species)

Suillus decipiens (Peck) Kuntze.

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Norte (Singer *et al.* 1983: 49).

Suillus granulatus (L.) Roussel

Saprobic on the ground. Atlántico Norte (HerbKew 2024).

Order CANTHARELLALES Gäum.
(3 families, 6 genera, 7 species)

Family BOTRYOBASIDIACEAE Jülich
(1 genus, 1 species)

Genus *Botryobasidium* Donk (1 species)

Botryobasidium vagum (Berk. & M.A. Curtis) D.P. Rogers
Saprobic on dead wood. Locality unknown (Welden & Lemke 1961: 6, as *Pellicularia vaga*, Hjortstam & Ryvarden 2007: 41).

Family CERATOBASIDIACEAE G.W. Martin
(2 genera, 2 species)

Genus *Rhizoctonia* DC. (1 species)

Rhizoctonia solani J.G. Kühn
Parasitic on *Brassica oleracea* var. *capitata*, *Carthamus tinctorius*, *Citrus aurantium*, *Coffea arabica*, *Crotalaria pallida*, *Cucumis sativus*, *Gossypium hirsutum*, *Hibiscus sabdariffa*, *Lupinus angustifolius*, *Medicago lupulina*, *Nicotiana tabacum*, *Phaseolus vulgaris*, *Solanum tuberosum*. Atlántico Sur, Carazo, Chinandega, Estelí, Jinotega, Managua, Masaya (Litzenberger & Stevenson 1957: 5, McGuire & Crandall 1967: 121, as *Pellicularia filamentosa*, CATIE 1981: 13, as *Thanatephorus cucumeris*, Gómez et al. 1990: 3, Lenné 1990: 39, Carcache 1999: 41, Augusto et al. 2010: 3).

Genus *Thanatephorus* Donk (1 species)

Thanatephorus microsclerotium (Matz) Boidin, Mugnier & Canales
Parasitic on *Gossypium hirsutum*. Locality unknown (McGuire & Crandall 1967: 147, as *Rhizoctonia microsclerotia*).

Family HYDNACEAE Chevall.
(3 genera, 4 species)

Genus *Cantharellus* Adans.ex Fr. (2 species)

Cantharellus cibarius Fr.
Specimens examined: **Nicaragua**: Estelí, Reserva Natural Tisey-La Estanzuela (12° 59'30"N, 86° 22'50"W, 1473 m), 21 Nov. 2019, R. Soza (no coll.).
Ectomycorrhizal, saprobic on soil. Estelí (New country record).

Cantharellus cinnabarinus (Schwein.) Schwein.
Ectomycorrhizal, saprobic on soil. Locality unknown (HerbKew 2024).

Genus *Craterellus* Pers. (1 species)

***Craterellus cornucopioides* (L.) Pers.**

Specimens examined: **Nicaragua:** Estelí, Reserva Natural Tisey-La Estanzuela (12° 59'30"N, 86° 22'50"W, 1473 m), 21 Nov. 2019, R. Soza (no coll.).
Ectomycorrhizal, saprobic on soil. Estelí (**New country record**).

Genus *Hydnum* L. (1 species)

***Hydnum repandum* L.**

Saprobic on soil. Río San Juan (González & Orozco 2007: 36, Saldívar 2018: 49).

**Order CORTICIALES K.H. Larss.
(1 family, 4 genera, 4 species)**

**Family CORTICIACEAE Herter
(4 genera, 4 species)**

Genus *Corticium* Pers. (1 species)

***Corticium koleroga* (Cooke) Höhn.**

Parasitic on *Coffea arabica*. Carazo, Masaya (Litzenberger & Stevenson 1957: 7, McGuire & Crandall 1967: 149, both as *Pellicularia koleroga*, IPSA 2021: 6).

Genus *Necator* Massee (1 species)

***Necator salmonicolor* (Berk. & Broome) K.H. Larss., Redhead & T.W. May**

Parasitic on *Coffea arabica*. Atlántico Sur, Jinotega, Matagalpa (Litzenberger & Stevenson 1957: 7, McGuire & Crandall 1967: 149, Gómez *et al.* 1990: 3, all as *Corticium salmonicolor*, IPSA 2021: 6, as *Erythrimum salmonicolor*).

Genus *Tretopileus* B.O. Dodge (1 species)

***Tretopileus sphaerophorus* (Berk. & M.A. Curtis) S. Hughes & Deighton**

Hyphomycetes, saprobic on spathe of dead inflorescence of *Cocos nucifera*. Managua (Delgado 2011: 19, fig. 1-3).

Genus *Waitea* Warcup & P.H.B. Talbot (1 species)

***Waitea circinata* Warcup & P.H.B. Talbot**

Parasitic on *Oryza sativa*. Locality unknown (IPSA 2021: 11, as *Rhizoctonia oryzae*).

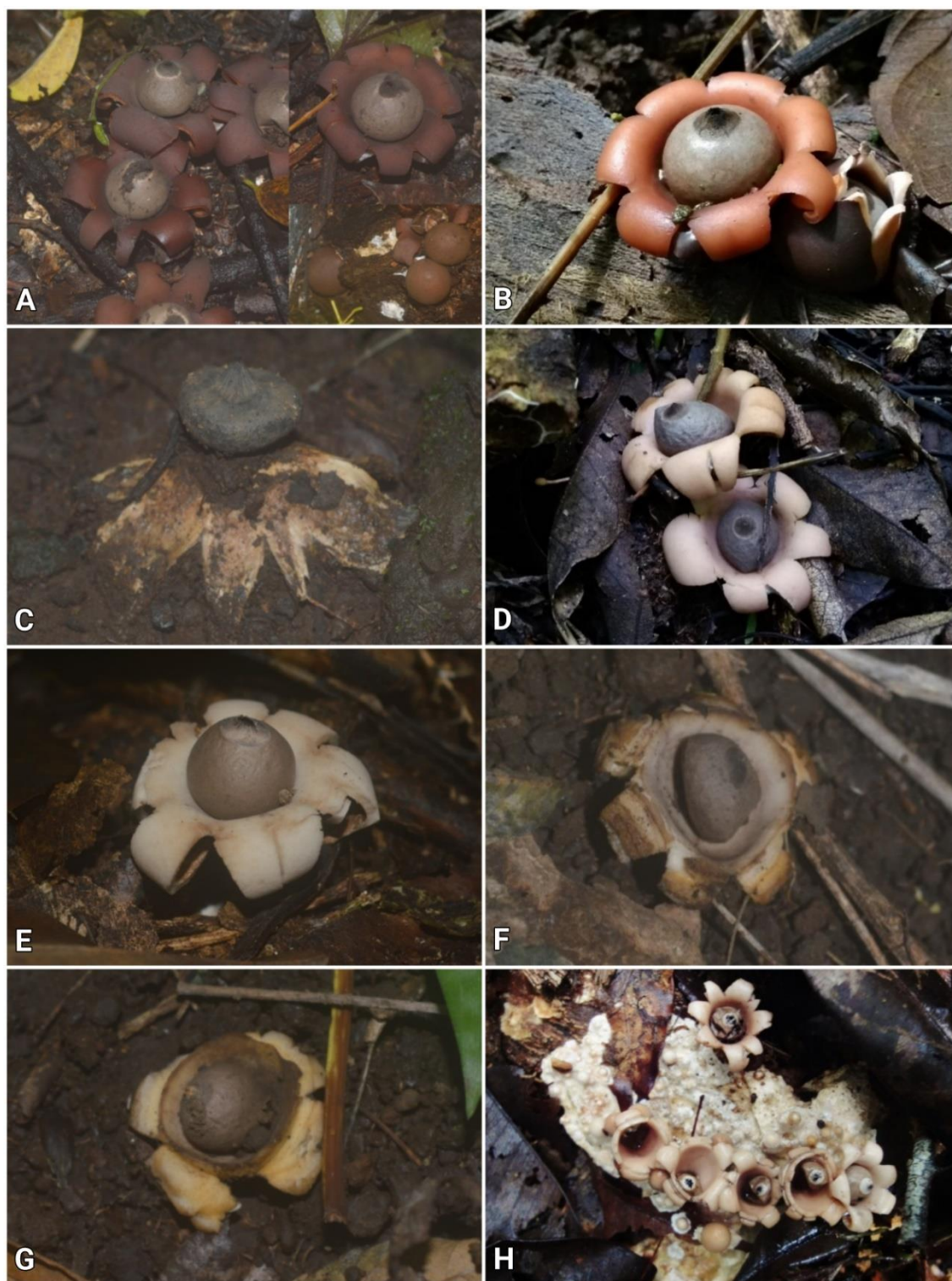


Figure 29. A-B: *Geastrum javanicum*, Managua. C: *Geastrum lloydianum*, Managua. D-E: *Geastrum saccatum*, Managua. F-G: *Geastrum triplex*, Managua. H: *Geastrum schweinitzii*, Río San Juan (photos by Ricardo Soza, H by Eric van den Berghe).

Order GEASTRALES K. Hosaka & Castellano
(1 family, 1 genus, 5 species)

Family GEASTRACEAE Corda
(1 genus, 5 species)

Genus *Geastrum* Pers. (5 species)

Geastrum javanicum Lév.

Saprobic in humus. Managua (Soza *et al.* 2023: 16, fig. 10f, Soza 2025: 18, fig. 6).

Geastrum lloydianum Rick

Saprobic in humus. Managua (Soza *et al.* 2023: 16, Soza 2025: 18, fig. 6c).

Geastrum saccatum Fr.

Saprobic in humus. Carazo, Jinotega, Managua, Masaya, Matagalpa (González & Orozco 2006: 1, Saldívar 2015: 39, Ubau-Matamoros 2016b: 11, as *Geastrum triplex*, Soza *et al.* 2023: 16, Soza 2025: 20, fig. 6d-e).

Geastrum schweinitzii (Berk. & M.A. Curtis) Zeller

Saprobic on dead wood. Río San Juan (Soza 2025: 20, fig. 6h).

Geastrum triplex Jungh.

Saprobic in humus. Managua (Soza *et al.* 2023: 16, Soza 2025: 20, fig. 6f-g).

Order GLOEOPHYLLALES Thorn
(1 family, 4 genera, 5 species)

Family GLOEOPHYLLACEAE Jülich
(4 genera, 5 species)

Genus *Gloeophyllum* P. Karst. (2 species)

Gloeophyllum sepium (Wulfen) P. Karst.

Saprobic on wood. Locality unknown (MyCoPortal 2024, as *Lenzites saepiaria*).

Gloeophyllum striatum (Fr.) Murrill

Saprobic on rotten wood of *Caesalpinia* sp. Carazo (Murrill 1904c: 604, as *Sesia striata*, Ellis & MacBride 1896: 194, Litzenberger & Stevenson 1957: 5, Dennis 1965: 234, all as *Lenzites striata*, González & Orozco 2006: 1).

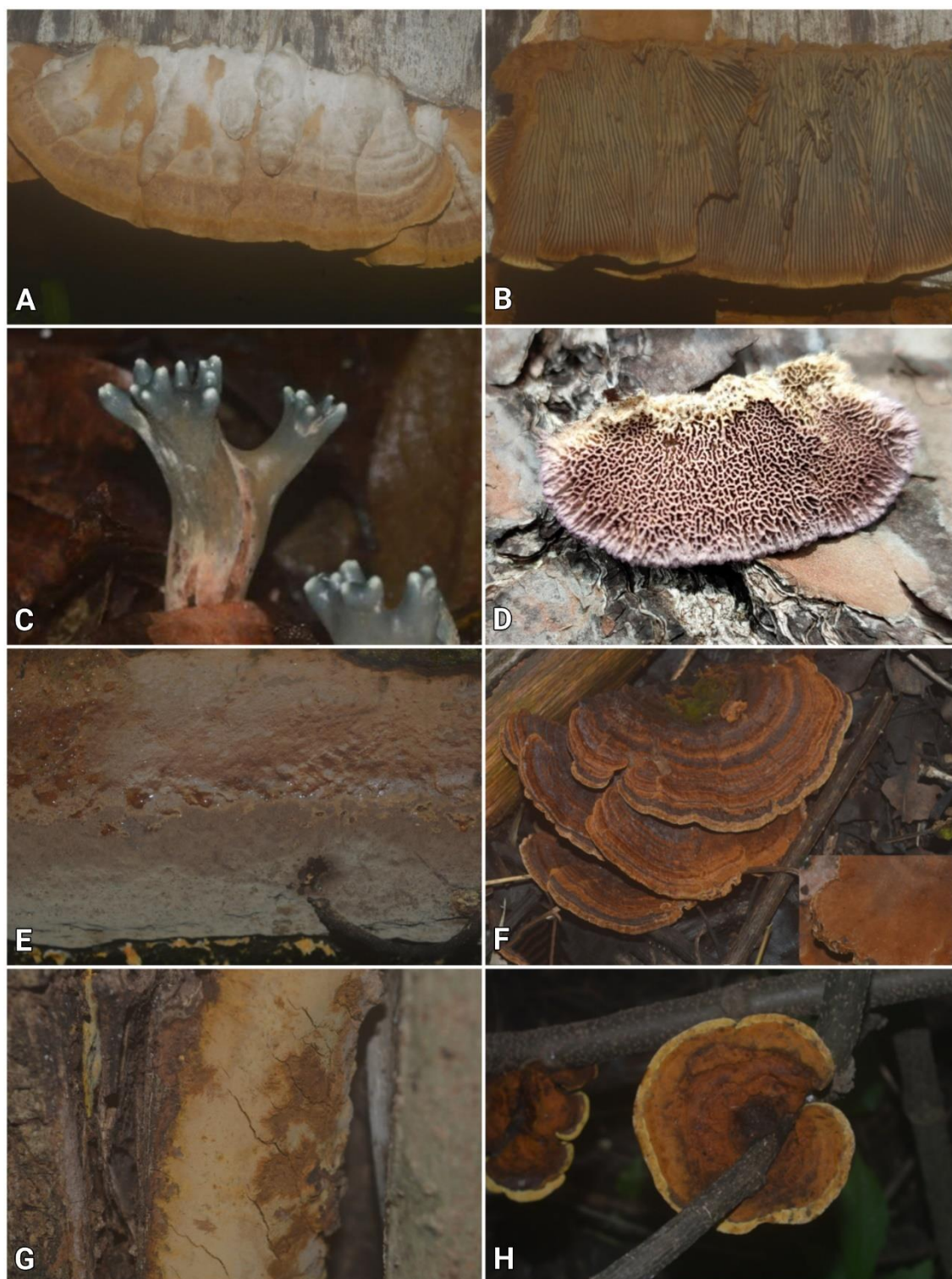


Figure 30. A-B: *Gloeophyllum striatum*, Atlántico Sur. C: *Phaeoclavulina cyanocephala*, Matagalpa. D: *Trichaptum byssogenum*, Atlántico Sur. E: *Fuscoporia ferrea*, Chinandega. F: *Fuscoporia gilva*, Managua. G: *Fuscoporia ferruginosa*, Managua. H: *Phylloporia chrysites*, Chinandega (photos by Ricardo Soza).

Genus *Heliocybe* Redhead & Ginns (1 species)

Heliocybe sulcata (Berk.) Redhead & Ginns

Saprobic on dead wood. Nueva Segovia (Pegler 1983: 115, as *Lentinus sulcatus*).

Genus *Neolentinus* Redhead & Ginns (1 species)

Neolentinus lepideus (Fr.) Redhead & Ginns

Saprobic on dead wood. Managua (Pegler 1983: 182, as *Lentinus lepideus*).

Genus *Osmoporus* Singer (1 species)

Osmoporus mexicanus (Mont.) Y.C. Dai & S.H. He

Saprobic on dead wood. Locality unknown (Murrill 1904c: 604, as *Sesia berkeleyi*).

**Order GOMPHALES Jülich
(2 families, 3 genera, 4 species)**

**Family CLAVARIADELPHACEAE Corner
(1 genus, 1 species)**

Genus *Clavariadelphus* Donk (1 species)

Clavariadelphus truncatus Donk

Saprobic on soil. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

**Family GOMPHACEAE Donk
(2 genera, 3 species)**

Genus *Phaeoclavulina* Brinkmann (2 species)

Phaeoclavulina cyanocephala (Berk. & M.A. Curtis) Giachini

Specimens examined: Nicaragua: Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on the ground. Matagalpa (New country record).

Phaeoclavulina zippelii (Lév.) Overeem

Saprobic on soil. Jinotega (Saldívar 2015: 40, as *Ramaria zippelii*).

Genus *Ramaria* Fr. ex Bonord. (1 species)

Ramaria stricta (Pers.) Quél.

Saprobic on soil. Jinotega, Río San Juan (Saldívar 2015: 40, Saldívar 2018: 52).

Order HYMENOGASTRALES Oberw.
(9 families, 23 genera, 48 species)

Family COLTRICIACEAE Jülich
(1 genus, 3 species)

Genus *Coltricia* Gray (3 species)

Coltricia cinnamomea (Jacq.) Murrill

Saprobic on soil. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48, both as *Coltricia hamata*).

Coltricia focicola (Berk. & M.A. Curtis) Murrill

Specimens examined: **Nicaragua**: Río San Juan, near El Castillo, Refugio Bartola (10°58'57"N, 84°19'57"W, 85 m), 26 Jul. 2019, R. Soza (no coll.).
Saprobic on soil. Río San Juan (**New country record**).

Coltricia fonsecoensis W.B. Cooke & Bonar

Saprobic on the ground. Chinandega (Cooke & Bonar 1961: 3).

Family HIRSCHIOPORACEAE Y.C. Dai, Yuan Yuan & Meng Zhou
(3 genera, 3 species)

Genus *Nigrohirschioporus* Y.C. Dai, Yuan Yuan & Meng Zhou (1 species)

Nigrohirschioporus sector (Ehrenb.) Y.C. Dai, Yuan Yuan & Meng Zhou

Saprobic on dead wood. Carazo (González & Orozco 2006: 2, as *Trichaptum sector*).

Genus *Pallidohirschioporus* Y.C. Dai, Yuan Yuan & Meng Zhou (1 species)

Pallidohirschioporus biformis (Fr.) Y.C. Dai, Yuan Yuan & Meng Zhou

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus sartwellii*).

Genus *Perennihirschioporus* Y.C. Dai, Yuan Yuan & Meng Zhou (1 species)

Perennihirschioporus fumosoavellaneus (Romell) Y.C. Dai, Yuan & Meng Zhou

Saprobic on dead wood. Locality unknown (Murrill 1907-1915: 101, as *Fomitella fumoso-avellanea*, Rajchenberg & Bianchinotti 1991: 228, as *Trichaptum fumoso-avellanea*).

Family HYMENOGASTRACEAE Donk
(13 genera, 32 species)

Genus *Fomitiporella* Murrill (1 species)

Fomitiporella umbrinella (Bres.) Murrill

Saprobic on dead wood. Locality unknown (Lowe 1963: 475, as *Poria umbrinella*, Lowe 1966: 144, as *P. umbrinella*, Larsen & Cobb-Poulsen 1990: 144, *Phellinus umbrinellus*).

Genus *Fomitiporia* Murrill (1 species)

Fomitiporia robusta (P. Karst.) Fiasson & Niemelä

Parasitic on living wood. Locality unknown (Lowe 1954: 494, Spaulding 1961: 112, Welden & Lemke 1961: 14, all as *Fomes robusta*)

Genus *Fulvifomes* Murrill (6 species)

Fulvifomes crocatus (Fr.) Y.C. Dai & F. Wu

Saprobic on decayed wood. Locality unknown (Murrill 1905b: 358, as *Corioloopsis crocata*).

Fulvifomes luteoumbrinus (Romell) Y.C. Dai & Vlasák

Saprobic on wood. Carazo, Río San Juan (González & Orozco 2006: 2, González & Orozco 2007: 35, Saldivar 2018: 48, all as *Aurificaria luteoumbrina*).

Fulvifomes merrillii (Murrill) Baltazar & Gibertoni

Saprobic on dead wood. León (Larios-Juárez *et al.* 2013: 13, as *Phellinus merrillii*).

Fulvifomes nilgheriensis (Mont.) Bondartseva & S. Herrera

Saprobic on decayed wood. Locality unknown (Murrill 1907-1915: 107, as *Pyropolyporus pseudosenex*, Murrill 1915: 83, as *Fulvifomes pseudosenex*, Lowe 1952: 236, as *Fomes pseudosenex*, Lowe 1957: 27, as *F. pseudosenex*, Larsen & Cobb-Poulsen 1990: 96, as *Phellinus nilgheriensis*).

Fulvifomes rimosus (Berk.) Fiasson & Niemelä

Saprobic on decayed wood. Granada (Ellis & MacBride 1896: 193, as *Fomes rimosus*, Ubau-Matamoros 2016: 31, as *Phellinus rimosus*).

Fulvifomes robiniae (Murrill) Murrill

Saprobic on wood. Managua (Kotlaba & Pauzar 1978: 176, as *Phellinus robiniae*).

Genus *Fuscoporia* Murrill (8 species)***Fuscoporia ferrea*** (Pers.) G. Cunn.

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).

Saprobic on decayed wood. Chinandega (**New country record**).

Fuscoporia ferruginosa (Schrad.) Murrill

Saprobic on decayed wood. Managua (Lowe 1963: 471, as *Poria ferruginosa*, Lowe 1966: 161, as *P. ferruginosa*, Pfister & Sayre 1978: 36, as *Polyporus salicinus*, Soza et al. 2023: 16).

Fuscoporia gilva (Schwein.) T. Wagner & M. Fisch.

Saprobic on decayed wood. Jinotega, Managua (Ellis & MacBride 1896: 193, as *Mucronoporus gilvus*, Ellis & MacBride 1896: 192, as *Polystictus subglaber*, Saldívar 2015: 39, as *Phellinus gilvus*, Soza et al. 2023: 16, as *P. gilvus*).

Fuscoporia licnoides (Mont.) Oliveira-Filho & Gibertoni

Parasitic on living wood of *Caesalpinia* sp. Locality unknown (Ellis & MacBride 1896: 193, as *Mucronoporus licnoides*, Bonar 1939: 204, as *Polyporus licnoides*, Litzenberger & Stevenson 1957: 5, as *P. licnoides*).

Fuscoporia longisetulosa (Bondartseva & S. Herrera) Bondartseva & S. Herrera

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, as *Phellinus longisetulosus*, Saldívar 2018: 50, as *P. longisetulosus*).

Fuscoporia nicaraguensis Murrill

Saprobic on dead wood. Río San Juan (Murrill 1907-1915: 6, Lowe 1966: 160, as *Poria nicaraguensis*).

Fuscoporia rufitincta (Berk. & M.A. Curtis) Murrill

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 193, as *Mucronoporus rufitinctus*, Murrill 1903a: 232, Murrill 1907-1915: 99, Murrill 1915: 77, Lowe 1955: 220, Lowe 1957: 67, all as *Fomes rubritinctus*, Larsen & Cobb-Poulle 1990: 126, as *Phellinus rufitinctus*).

Fuscoporia senex (Nees & Mont.) Ghob.-Nehj.

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 193, as *Fomes senex*, Murrill 1903b: 119, as *Pyropolyporus senex*).

Genus *Hymenochaete* Lév. (3 species)***Hymenochaete damicornis*** (Link) Lév.

Parasitic from roots in the ground. Carazo, Río San Juan (González & Orozco 2006: 2, González & Orozco 2007: 38, both as *Stipitochaete damicornis*).

Hymenochaete luteobadia (Fr.) Höhn. & Litsch.

Saprobic on dead wood. Río San Juan (Saldívar 2018: 52).

Hymenochaete microcycla (Zipp. ex Lév.) Spirin & Miettinen

Saprobic on dead wood. Jinotega (Ellis & MacBride 1896: 193, as *Mucronoporus tabacinus*, Saldívar 2015: 39, as *Cyclomyces tabacinus*).

Genus *Inonotus* P. Karst. (2 species)

Inonotus obliquus (Fr.) Pilát

Parasitic on living angiosperm tree. Locality unknown (Ellis & MacBride 1896: 193, as *Fomes obliquus*).

Inonotus porrectus Murrill

Saprobic on wood. Locality unknown (Bonar 1939: 204, as *Polyporus porrectus*).

Genus *Mensularia* Lázaro Ibiza (1 species)

Mensularia radiata (Sowerby) Lázaro Ibiza

Parasitic on living angiosperm. Granada (Ubau-Matamoros 2016a: 31, as *Inonotus radiatus*).

Genus *Onnia* P. Karst. (1 species)

Onnia tomentosa (Fr.) P. Karst.

Saprobic on soil. Carazo, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 37, Saldívar 2018: 50).

Genus *Phellinus* Quél. (2 species)

Phellinus igniarius (L.) Quél.

Saprobic on decayed wood. León (Pfister & Sayre 1978: 35, as *Polyporus igniarius*, Larios-Juárez *et al.* 2013: 14).

Phellinus pomaceus (Pers.) Maire

Saprobic on decayed wood. Granada (Ubau-Matamoros 2016a: 31).

Genus *Phylloporia* Murrill (2 species)

Phylloporia chrysites (Berk.) Ryvarden

Saprobic on dead wood. Locality unknown (MyCoPortal 2024).

Phylloporia pectinata (Klotzsch) Ryvarden

Parasitic on living angiosperm. Managua (Ellis & MacBride 1896: 193, as *Fomes pectinatus*, Lowe 1957: 17, as *F. pectinatus*, Soza *et al.* 2023: 16).

Genus *Pseudoinonotus* T. Wagner & M. Fisch. (1 species)

Pseudoinonotus dryadeus (Pers.) T. Wagner & M. Fisch.

Parasitic on living angiosperm. Carazo, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 36, Saldívar 2018: 49, all as *Inonotus dryadeus*).

Genus *Pyrrhoderma* Imazeki (1 species)

Pyrrhoderma noxium (Corner) L.W. Zhou & Y.C. Dai

Parasitic on living wood. Locality unknown (Wellman 1977: 130, as *Fomes noxius*).

Genus *Tropicoporus* L.W. Zhou, Y.C. Dai & Sheng H. Wu (3 species)

Tropicoporus dependens (Murrill) L.W. Zhou, Y.C. Dai & Vlasák

Saprobic on decayed wood. Locality unknown (Lowe 1957: 36, as *Fomes dependens*).

Tropicoporus extensus (Lév.) Y.C. Dai & F. Wu

Saprobic on decayed wood. Locality unknown (Murrill 1907-1915: 110, as *Pyropolyporus extensus*, Lowe 1957: 33, as *Fomes extensus*, Larsen & Cobb-Poulle 1990: 61, as *Phellinus extensus*).

Tropicoporus linteus (Berk. & M.A. Curtis) L.W. Zhou & Y.C. Dai

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 193, Lowe 1952: 232, Lowe 1957: 35, all as *Fomes linteus*, Murrill 1903b: 119, as *Pyropolyporus linteus*, Murrill 1907-1915: 109, as *P. linteus*, Murrill 1903b: 119, as *Pyropolyporus yucatanensis*, Murrill 1907-1915: 106, as *P. yucatanensis*, Murrill 1915: 84, as *Fulvifomes linteus*).

Family NIGROFOMITACEAE Jülich
(1 genus, 1 species)

Genus *Nigrofomes* Murrill (1 species)

Nigrofomes melanoporus (Mont.) Murrill

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 193, Lowe 1954: 493, Lowe 1957: 40, all as *Fomes melanoporus*, Murrill 1907-1915: 112).

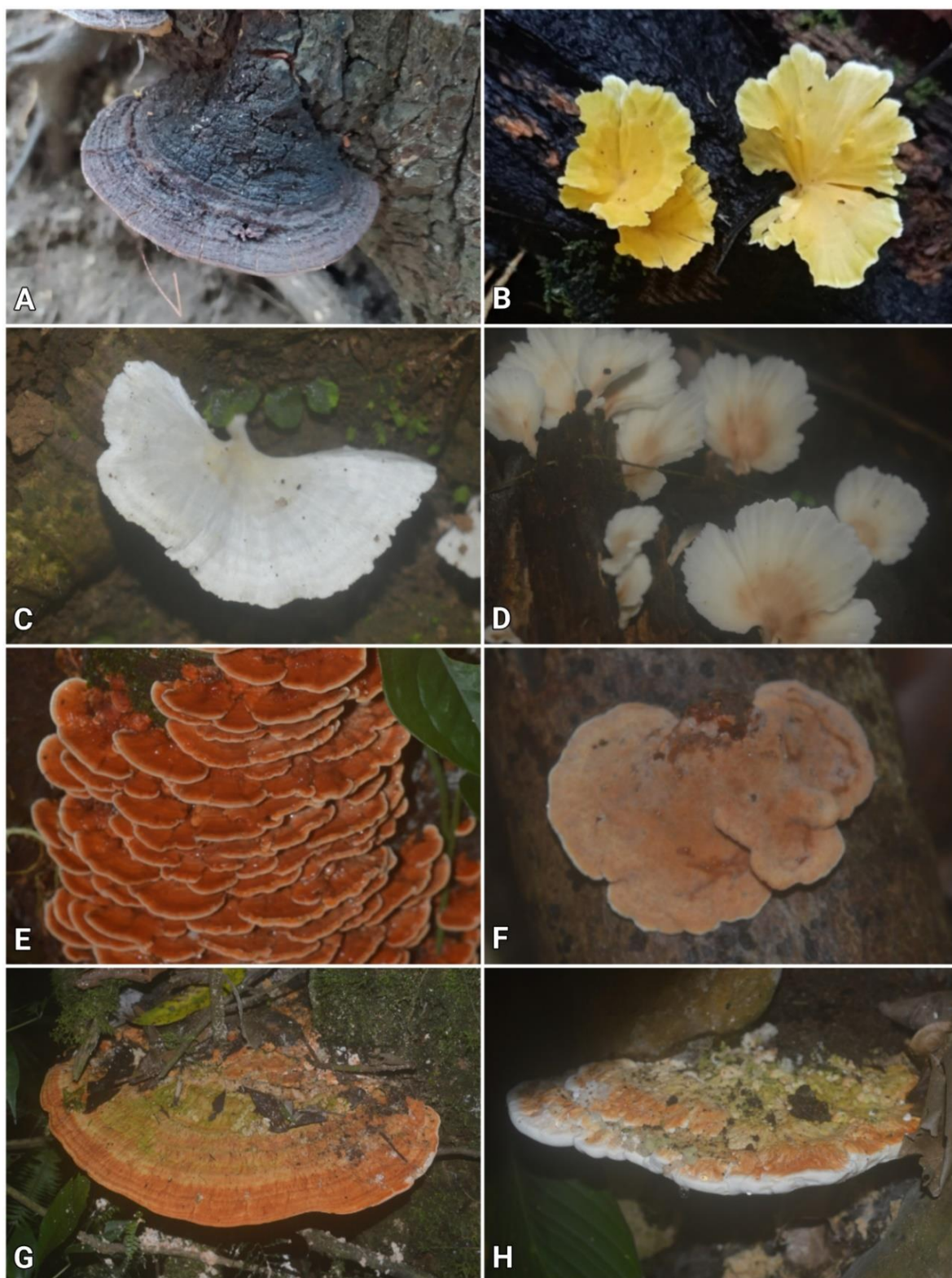


Figure 31. A: *Tropicoporus linteus*, Managua. B: *Cotylidia aurantiaca*, Río San Juan. C-D: *Cotylidia diaphana*, Managua. E-F: *Rigidoporus microporus*, Matagalpa. G-H: *Rigidoporus ulmarius*, Managua (photos by Ricardo Soza).

Family RICKENELLACEAE Vizzini
(1 genus, 2 species)

Genus *Cotylidia* P. Karst. (2 species)

Cotylidia aurantiaca (Pat.) A.L. Welden

Specimens examined: Nicaragua: Río San Juan, near El Castillo, Refugio Bartola (10° 58'57"N, 84° 19'57"W, 85 m), 27 Jul. 2019, R. Soza (no coll.).
Saprobic on dead wood. Río San Juan (New country record).

Cotylidia diaphana (Cooke) Lentz

Saprobic on dead wood. Granada, Managua (Ubau-Matamoros 2016a: 32, Soza *et al.* 2023: 18).

Family RIGIDOPORACEAE Jülich
(1 genus, 2 species)

Genus *Rigidoporus* Murrill (2 species)

Rigidoporus microporus (Sw.) Overeem

Saprobic on dead wood. Managua (Soza *et al.* 2023: 17).

Rigidoporus ulmarius (Sowerby) Imazeki

Saprobic on dead wood. Managua (Soza *et al.* 2023: 17).

Family SCHIZOPORACEAE Jülich
(1 genus, 2 species)

Genus *Xylodon* (Pers.) Gray (2 species)

Xylodon flaviporus (Berk. & M.A. Curtis ex Cooke) Riebesehl & Langer

Saprobic on dead wood. Atlántico Norte (HerbKew 2024).

Xylodon paradoxus (Schrad.) Chevall.

Saprobic on dead wood. Locality unknown (Lowe 1966: 46, as *Poria versipora*).

Family SIDERACEAE L.W. Zhou & Xue W. Wang
(1 genus, 1 species)

Genus *Sidera* Miettinen & K.H. Larss. (1 species)

Sidera vulgaris (Fr.) Miettinen

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 191, as *Poria vulgaris*).

Family TRICHAPTACEAE Y.C. Dai, Yuan Yuan & Meng Zhou
(1 genus, 2 species)

Genus *Trichaptum* Murrill (2 species)

Trichaptum byssogenum (Jungh.) Ryvarden

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 191, as *Trametes versatilis*).

Trichaptum perrottetii (Lév.) Ryvarden

Saprobic on dead wood. León (Ellis & MacBride 1896: 192, as *Polystictus trichomallus*, Larios-Juárez *et al.* 2013: 18, as *Trichaptum perrottetii*).

Order PHALLALES E. Fisch.
(4 families, 10 genera, 15 species)

Family CLATHRACEAE Chevall.
(5 genera, 8 species)

Genus *Aseroë* Labill. (1 species)

Aseroë rubra Labill. (con acento o sin acento ?)

Saprobic on the ground. Jinotega (Soza 2025: 22, fig. 8a).

Genus *Blumenavia* Möller (1 species)

Blumenavia rhacodes Möller

Saprobic on the ground. Madriz (Soza 2025: 22, fig. 8b).

Genus *Clathrus* P. Micheli ex L. (3 species)

Clathrus chrysomycelinus Möller

Saprobic on the ground. Río San Juan (Soza 2025: 24).

Clathrus columnatus Bosc

Saprobic on the ground. Estelí (Soza 2025: 24, fig. 8c).

Clathrus crispus Turpin

Saprobic on the ground. Estelí (Soza 2025: 24, fig. 8d).

Genus *Laternea* Turpin (2 species)

Laternea pusilla Berk. & M.A. Curtis

Saprobic on decayed wood. Jinotega (Dring 1980: 48, Soza 2025: 24, fig. 8e).



Figure 32. A: *Aseroe rubra*, Jinotega. B: *Blumenavia rhacodes*, Madriz. C: *Clathrus columnatus*, Estelí. D: *C. crispus*, Estelí. E: *Laternea pusilla*, Jinotega. F: *L. triscapa*, Chinandega. G: *Ligiella rodrigueziana*, Atlántico Sur. H: *Lysurus sphaerocephalus*, León. I: *Mutinus argentinus*, Managua (photos by Ricardo Soza, A by Karen Nadezka, B by Irene Weber, C by Fulvio Castillo, D by Rogelio Selva, E by Eric van den Berghe, G by Carlos Sequeira, H by por Raúl Valle).

***Laternea triscapa* Turpin**

Saprobic on the ground. Chinandega (Soza 2025: 25, fig. 8f).

Genus *Ligiella* J.A. Sáenz

***Ligiella rodrigueziana* J.A. Sáenz**

Saprobic on the ground. Atlántico Sur (Soza 2025: 25, fig. 8g).

**Family LYSURACEAE Corda
(1 genus, 1 species)**

Genus *Lysurus* Fr. (1 species)

***Lysurus sphaerocephalus* (Schltld.) Hern. Caff., Urcelay, Hosaka & L. Domínguez**

Saprobic on the ground. León (Soza 2025: 25, fig. 8h).

**Family PHALLACEAE Corda
(3 genera, 5 species)**

Genus *Mutinus* Fr. (1 species)

***Mutinus argentinus* Speg.**

Saprobic on soil. Managua (Soza *et al.* 2023: 16, fig. 10g, as *Mutinus bambusinus*, Soza 2025: 26, fig. 8i).

Genus *Phallus* Junius ex L. (3 species)

***Phallus impudicus* L.**

Saprobic on the ground. Managua (Soza *et al.* 2023: 17, Soza 2025: 26, fig. 9a).

***Phallus indusiatus* Vent.**

Saprobic on the ground. Chinandega, León, Managua, Río San Juan, Rivas (González & Orozco 2007: 37, Kibby & McNeil 2012: 88, fig. 4, Saldívar 2018: 50, Soza *et al.* 2023: 17, Soza 2025: 27, fig. 9b).

***Phallus merulinus* (Berk.) Cooke**

Saprobic on the ground. Jinotega (Soza 2025: 28, fig. 9c).

Genus *Staheliomyces* E. Fisch. (1 species)

***Staheliomyces cinctus* E. Fisch.**

Saprobic on the ground. Río San Juan (Soza 2025: 28).



Figure 33. A: *Phallus impudicus*, Managua. B: *Phallus indusiatus*, Chinandega. C: *Phallus merulinus*, Jinotega. D-E: *Protuberera maracuja*, Jinotega. F-G: *Fomitopsis feei*, Managua. H: *Fomitopsis stereoides*, Managua (photos by Ricardo Soza).

Family PROTOPHALLACEAE Zeller
(1 genus, 1 species)

Genus *Protubera* Möller (1 species)

Protubera maracuja Möller

Saprobic on the ground. Jinotega (Soza 2023b: 5, fig. 2a-d, Soza 2025: 21, fig. 7).

Order POLYPORALES Gäum.
(12 families, 44 genera, 107 species)

Family ADUSTOPORIACEAE Audet
(1 genus, 1 species)

Genus *Adustoporia* Audet (1 species)

Adustoporia sinuosa (Fr.) Audet

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 191, as *Poria vaporaria*).

Family FOMITOPSIDACEAE Jülich
(1 genus, 8 species)

Genus *Fomitopsis* P. Karst. (8 species)

Fomitopsis cupreorosea (Berk.) J. Carranza & Gilb.

Saprobic on wood. Atlántico Sur (MyCoPortal 2024, as *Polyporus cupreoroseus*).

Fomitopsis dochmia (Berk. & Broome) Ryvarden

Saprobic on dead wood. Locality unknown (Lowe 1955: 216, as *Fomes dochmius*).

Fomitopsis feei (Fr.) Kreisel

Saprobic on dead wood. Carazo, Managua (Carranza-Morse & Gilbertson 1986: 479, González & Orozco 2006: 1, Soza *et al.* 2024: 17).

Fomitopsis lignea (Berk.) Ryvarden

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 193, Murrill 1903a: 229, Murrill 1907-1915: 97, Lowe 1955: 218, Lowe 1957: 77, all as *Fomes ligneus*).

Fomitopsis marianii (Bres.) Spirin, Vlasák & Cartabia

Saprobic on wood. Locality unknown (Murrill 1907-1915: 44, as *Trametes lignea*).

***Fomitopsis quercina* (L.) Spirin & Miettinen**

Saprobic on decayed wood. Granada, Jinotega, Río San Juan (González & Orozco 2007: 35, Saldívar 2015: 40, Ubau-Matamoros 2016a: 31, Saldívar 2018: 48, all as *Daedalea quercina*).

***Fomitopsis pinicola* (Sw.) P. Karst.**

Saprobic on wood. Matagalpa (Stanger & Smith 2015).

***Fomitopsis stereoides* (Fr.) Spirin**

Saprobic on wood. Río San Juan (Ellis & MacBride 1896: 192, as *Hexagonia vittata*).

**Family GANODERMATACEAE (Donk) Donk
(4 genera, 13 species)**

Genus *Amauroderma* Murrill (3 species)

***Amauroderma calcigenum* (Berk.) Torrend**

Saprobic on soil. Río San Juan (González & Orozco 2007: 35, Saldívar 2018: 48).

***Amauroderma exile* (Berk.) Torrend**

Saprobic on soil. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus renatus*, Murrill 1907-1915: 117, as *Amauroderma renatum*, Murrill 1915: 92, as *A. renatum*).

***Amauroderma schomburgkii* (Mont. & Berk.) Torrend**

Saprobic on soil. Río San Juan (Furtado 1981: 82).

Genus *Cristataspore* Robledo & Costa-Rezende (1 species)

***Cristataspore coffeata* (Berk.) Robledo, Costa-Rezende & de Madignac Bonzi**

Saprobic on soil. Carazo, Río San Juan (Ellis & MacBride 1896: 193, as *Fomes opacus*, González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2018: 48, Soza *et al.* 2023: 17, all as *Humphreya coffeatum*).

Genus *Foraminispora* Robledo, Costa-Rez. & Drechsler-Santos (1 species)

***Foraminispora rugosa* (Berk.) Costa-Rez., Drechsler-Santos & Robledo**

Saprobic on soil. Locality unknown (Murrill 1907-1915: 116, *Amauroderma avellaneum*, Murrill 1915: 94, as *A. avellaneum*, Furtado 1981: 89, as *Amauroderma sprucei*).

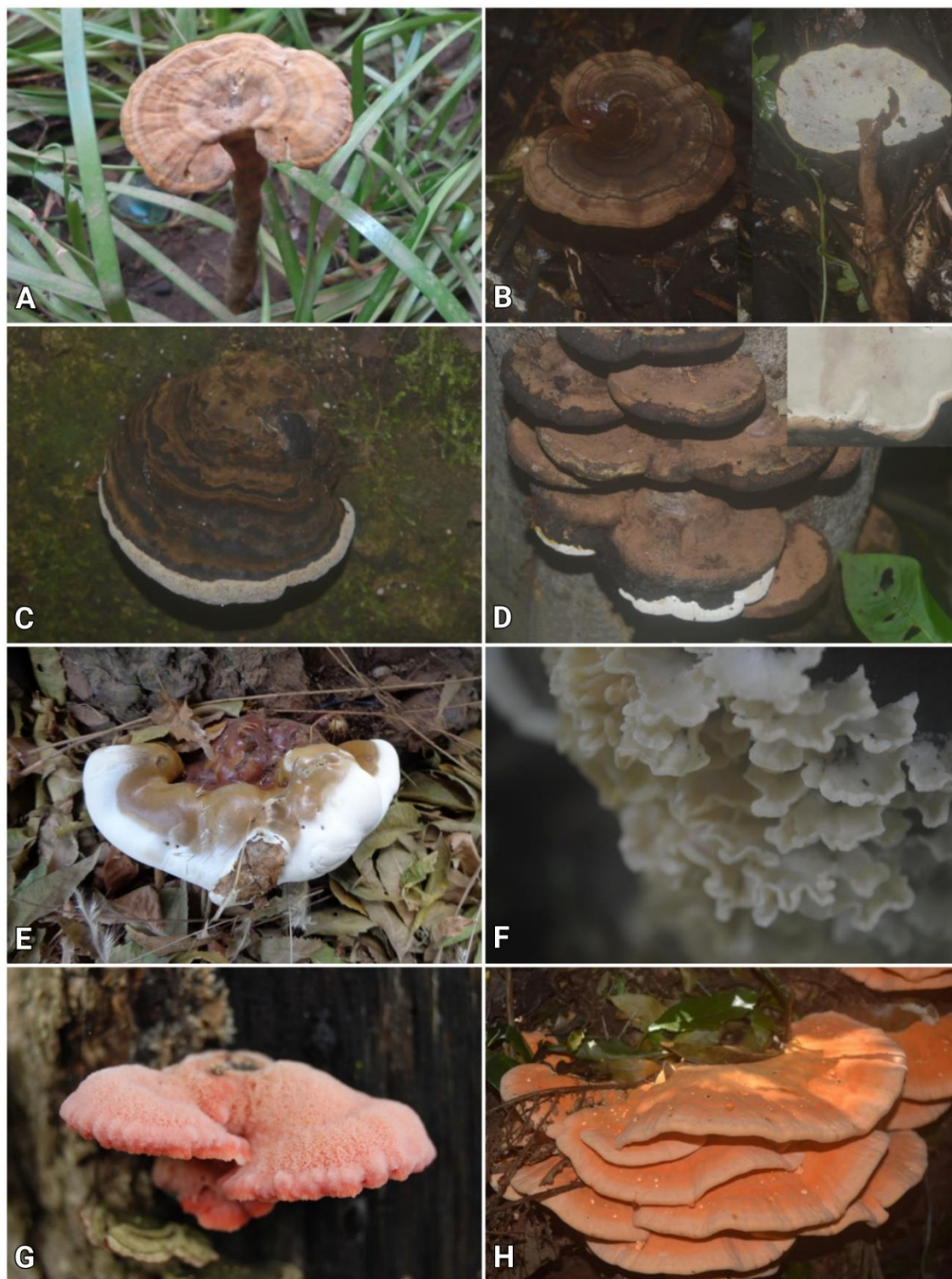


Figure 34. A-B: *Cristataspora coffeata*, Managua. C: *Ganoderma applanatum*, Managua. D: *Ganoderma australe*, Managua. E: *G. lucidum*, Chinandega. F: *Irpex rosettiformis*, Chinandega. G: *Byssomerulius incarnatus*, Estelí. H: *Laetiporus sulphureus*, Jinotega (photos by Ricardo Soza, G by Christian Schwarz).

Genus *Ganoderma* P. Karst. (8 species)***Ganoderma applanatum* (Pers.) Pat.**

Saprobic on decayed wood. Carazo, Managua, Río San Juan (Ellis & MacBride 1896: 193, as *Fomes applanatus*, Ellis & MacBride 1896: 193, as *Fomes vegetus*, González & Orozco 2006: 1, González & Orozco 2007: 36, both as *Ganoderma lipsiense*, Saldívar 2018: 49, Soza *et al.* 2023: 17).

***Ganoderma australe* (Fr.) Pat.**

Saprobic on decayed wood. Carazo, Managua, Río San Juan (Ellis & MacBride 1896: 193, as *Fomes australis*, González & Orozco 2006: 1, González & Orozco 2007: 36, Larios-Juárez *et al.* 2013: 12, Saldívar 2018: 49).

***Ganoderma dorsale* (Lloyd) Torrend**

Saprobic on decayed wood. Río San Juan (MyCoPortal 2024, as *Polyporus dorsalis*).

***Ganoderma lionnetii* Rolland**

Saprobic on decayed wood. Locality unknown (Murrill 1903c: 301, Murrill 1907-1915: 115, Murrill 1915: 91, all as *Elfvigia lionnetii*).

***Ganoderma lucidum* (Curtis) P. Karst.**

Saprobic on decayed wood. Carazo, Granada, Managua, Río San Juan (Ellis & MacBride 1896: 193, as *Fomes lucidus*, Murrill 1902: 602, as *Ganoderma pseudoboletus*, González & Orozco 2006: 1, Ubau-Matamoros 2016a: 31, Ubau-Matamoros 2016b: 8, Saldívar 2018: 49, Soza *et al.* 2023: 17).

***Ganoderma oerstedii* (Fr.) Murrill**

Saprobic on decayed wood. Locality unknown (Murrill 1902: 606).

***Ganoderma parvulum* Murrill**

Saprobic on decayed wood. Locality unknown (Murrill 1902: 605, Murrill 1907-1915: 123, Murrill 1915: 99, Steyeart 1980: 181).

***Ganoderma stipitatum* (Murrill) Murrill**

Saprobic on decayed wood. Locality unknown (Murrill 1903a: 229, as *Fomes stipitatus*, Murrill 1907-1915: 122, Ryvarden 2000: 189, Steyeart 1980: 181).

Family IRPICACEAE Spirin & Zmitr.
(5 genera, 6 species)

Genus *Byssomerulius* Parmasto (1 species)

Byssomerulius incarnatus (Schwein.) Gilb.

Specimens examined: **Nicaragua:** Estelí, Reserva Natural Tisey-La Estanzuela (12° 59'30"N, 86° 22'50"W, 1473 m), 17 Jul. 2010, Christian Schwarz (no coll.).
Saprobic on dead wood. Estelí (New country record).

Genus *Ceriporia* Donk (2 species)

Ceriporia purpurea (Fr.) Donk

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 32).

Ceriporia reticulata (Hoffm.) Domański

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 32).

Genus *Gloeoporus* Mont. (1 species)

Gloeoporus thelephoroides (Hook.) G. Cunn.

Saprobic on wood. Locality unknown (Lloyd 1913: 331, as *Polyporus conchoides*).

Genus *Irpex* Fr. (1 species)

Irpex rosettiformis C.C. Chen & Sheng H. Wu

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).
Saprobic on dead wood. Chinandega (New country record).

Genus *Vitreoporus* Zmitr. (1 species)

Vitreoporus dichrous (Fr.) Zmitr.

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 191, as *Gloeoporus candidus*).

Family LAETIPORACEAE Jülich
(2 genera, 2 species)

Genus *Laetiporus* Murrill (1 species)

Laetiporus sulphureus (Bull.) Murrill

Specimens examined: **Nicaragua:** Reserva Natural Macizo de Peñas Blancas (13° 16'45.7"N 85° 42'39.2"W), 1460 m, 20 Jul. 2021, R. Soza (no coll.).
Saprobic on decayed wood. Jinotega (New country record).

Genus *Phaeolus* (Pat.) Pat. (1 species)

***Phaeolus schweinitzii* (Fr.) Pat.**

Saprobic on hardwood. Río San Juan (Saldívar 2018: 51, as *Phaeolus spadiceus*).

**Family MERIPILACEAE Jülich
(1 genus, 3 species)**

Genus *Physisporinus* P. Karst. (3 species)

***Physisporinus lineatus* (Pers.) F. Wu, Jia J. Chen & Y.C. Dai**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 193, as *Polyporus zonalis*).

***Physisporinus vinctus* (Berk.) Murrill**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 191, as *Poria carneopallens*, Murrill 1921: 84, as *Poria vincta*).

***Physisporinus vitreus* (Pers.) P. Karst.**

Saprobic on dead wood. Río San Juan (Saldívar 2018: 51).

**Family PANACEAE Miettinen, Justo & Hibbett
(2 genera, 3 species)**

Genus *Cymatoderma* Jungh. (1 species)

***Cymatoderma caperatum* (Berk. & Mont.) D.A. Reid**

Saprobic on wood. Matagalpa (Stanger & Smith 2015, as *Cymataderma elegans*).

Genus *Panus* Fr. (2 species)

***Panus lecomtei* (Fr.) Corner**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 194, as *Lentinus lecomtei*).

***Panus strigellus* (Berk.) Overh.**

Saprobic on dead wood. Managua (Soza *et al.* 2023: 17, as *Panus neostrigosus*).

**Family PHANEROCHAETACEAE Jülich
(2 genera, 4 species)**

Genus *Bjerkandera* P. Karst. (2 species)

***Bjerkandera adusta* (Willd.) P. Karst.**

Saprobic on dead wood. Carazo, Jinotega, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 35, Saldívar 2015: 39, Saldívar 2018: 48).



Figure 35. A: *Panus strigellus*, León. B-C: *Phlebiopsis papyrina*, León. D: *Podoscypha nitidula*, Atlántico Sur. E: *Podoscypha petalodes*, Chinandega. F: *Podoscypha venustula*, Chinandega. G: *Coriolopsis brunneoleuca*, Managua. H: *Coriolopsis byrsina*, Managua (photos by Ricardo Soza).

***Bjerkandera fumosa* (Pers.) P. Karst.**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 193, as *Polyporus salignus*).

Genus *Phlebiopsis* Jülich (2 species)***Phlebiopsis crassa* (Lév.) Floudas & Hibbett**

Saprobic on decayed wood. Locality unknown (Berkeley & Curtis 1860: 123, as *Stereum nicaraguense*).

***Phlebiopsis papyrina* (Mont.) Miettinen & Spirin**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 190, as *Stereum papyrinum*, Ellis & MacBride 1896: 190, as *Stereum purpureum*, Welden & Lemke 1961: 8, as *S. papyrinum*, Welden 1975: 542, as *Lopharia papyrina*, Welden 2010: 72, as *L. papyrina*).

**Family PODOSCYPHACEAE D.A. Reid
(1 genus, 5 species)****Genus *Podoscypha* Pat. (5 species)*****Podoscypha nitidula* (Berk.) Pat.**

Specimens examined: **Nicaragua:** Atlántico Sur, Reserva Natural Llanos de Karawala (12° 56'11"N, 83° 40'47"W, 27 m), 23 Sep. 2022, R. Soza 00927 (RSE-F).
Saprobic on dead wood. Atlántico Sur (**New country record**).

***Podoscypha petalodes* (Berk.) Boidin**

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).
Saprobic on dead wood. Chinandega (**New country record**).

***Podoscypha ravenelii* (Berk. & M.A. Curtis) Pat.**

Saprobic on wood. Locality unknown (Welden 1954: 436, as *Stereum pergamenum*).

***Podoscypha surinamensis* (Lév.) Pat.**

Saprobic on dead wood. Atlántico Sur (Welden 2010: 53).

***Podoscypha venustula* (Speg.) D.A. Reid**

Specimens examined: **Nicaragua:** Managua, Reserva Ecológica El Bajo (11° 59'34"N, 86° 19'30"W, 768 m), 30 Oct. 2021, R. Soza (no coll.).
Saprobic on dead wood. Managua (**New country record**).

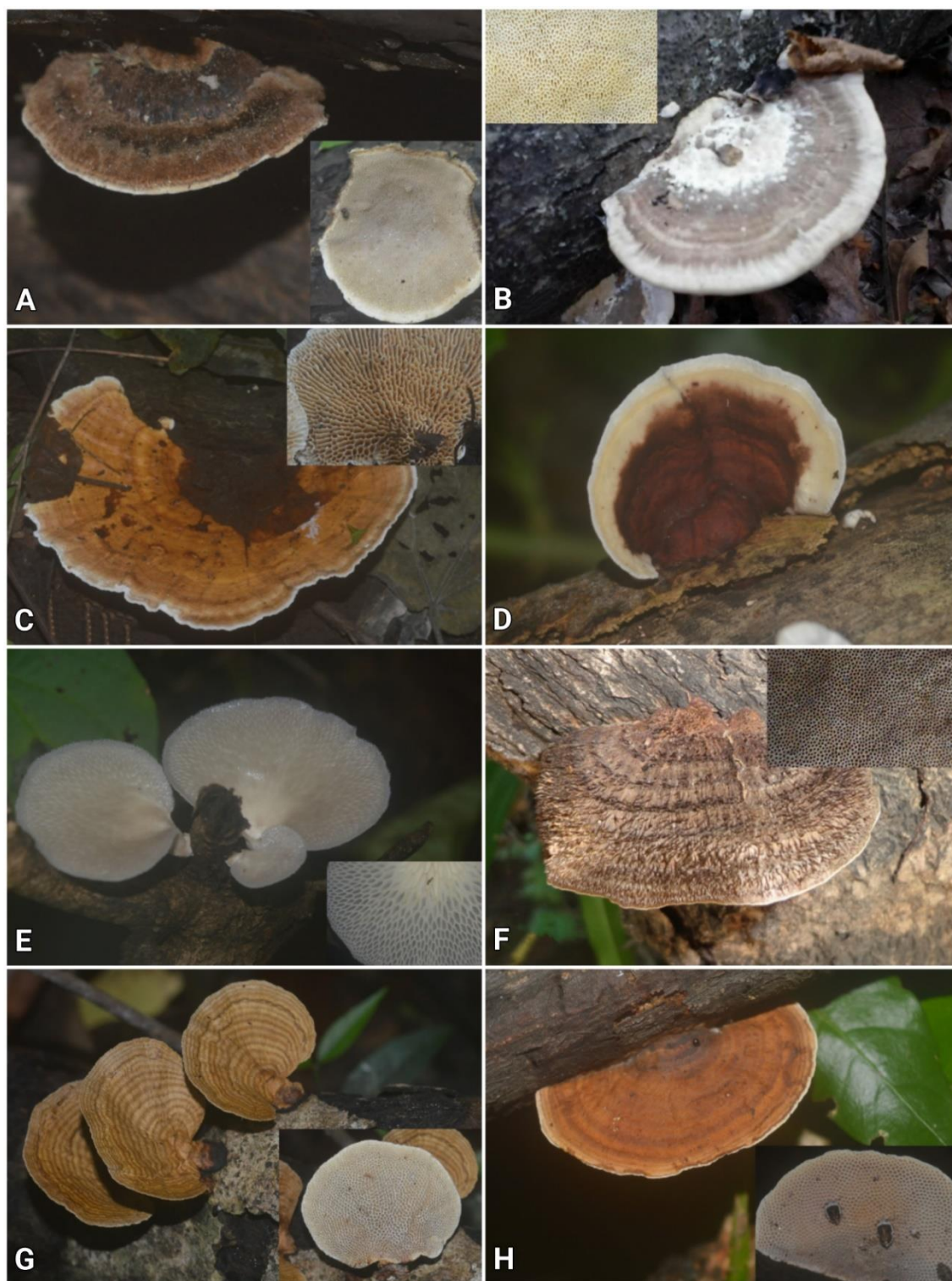


Figure 36. A: *Corioloopsis caperata*, Managua. B: *Cubamyces cubensis*, Managua. C: *Cubamyces flavidus*, Managua. D: *Earliella scabrosa*, Managua. E: *Favolus brasiliensis*, Managua. F: *Hexagonia hydroides*, Managua. G: *Hexagonia tenuis*, Atlántico Sur. H: *Hexagonia variegata*, Managua (photos by Ricardo Soza).

Family POLYPORACEAE Fr. ex Corda
(20 genera, 56 species)

Genus *Atroporus* Ryvarden (1 species)

Atroporus rufoatratus (Berk.) Palacio, Reck & Robledo
Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 193, as *Fomes rufoatratus*, Lowe 1955: 223, as *F. rufoatratus*).

Genus *Corioloopsis* Murrill (3 species)

Corioloopsis brunneoleuca (Berk.) Ryvarden
Saprobic on dead wood. Managua (Soza *et al.* 2023: 17).

Corioloopsis byrsina (Mont.) Ryvarden
Saprobic on dead wood. Managua (Ellis & MacBride 1896: 191, as *Polystictus byrsinus*, Soza *et al.* 2023: 17).

Corioloopsis caperata (Berk.) Murrill
Saprobic on dead wood. Managua (Murrill 1907-1915: 76, as *Corioloopsis cirrhifer*, Lowe 1963: 460, as *Poria albobrunnea*, Soza *et al.* 2023: 17).

Genus *Cubamyces* Murrill (2 species)

Cubamyces cubensis (Mont.) Murrill
Saprobic on dead wood. Managua (Lloyd 1913: 375, as *Trametes cubensis*, Soza *et al.* 2023: 17).

Cubamyces flavidus (Lév.) Lücking
Saprobic on dead wood. Managua (Soza *et al.* 2023: 17).

Genus *Cyanoporus* Y.C. Dai, W.L. Mao & Yuan Yuan (1 species)

Cyanoporus fuligo (Berk. & Broome) Y.C. Dai, W.L. Mao & Yuan Yuan
Saprobic on wood. Locality unknown (Lowe 1963: 478, as *Porogramme fuligo*).

Genus *Dentocorticium* (Parmasto) M.J. Larsen & Gilb. (1 species)

Dentocorticium portoricense (Fr.) Nakasone & S.H. He
Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 191, as *Irpex coriaceus*, Murrill 1907-1915: 74, as *Cerrenella subcoriacea*, Murrill 1915: 54, as *C. subcoriacea*).

Genus *Earliella* Murrill (1 species)***Earliella scabrosa* (Pers.) Gilb. & Ryvar**

Saprobic on dead wood. Carazo, Jinotega, Managua, Río San Juan (Murrill 1905c: 479, as *Earliella cubensis*, González & Orozco 2006: 1, González & Orozco 2007: 36, Saldívar 2015: 41, Saldívar 2018: 52, Soza *et al.* 2023: 17).

Genus *Favolus* Fr. (2 species)***Favolus brasiliensis* (Fr.) Fr.**

Saprobic on dead wood. Carazo, Granada, Managua, Río San Juan (Ellis & MacBride 1896: 193, as *Polyporus brasiliensis*, González & Orozco 2006: 2, González & Orozco 2007: 37, Ubau-Matamoros 2016a: 32, Saldívar 2018: 51, Soza *et al.* 2023: 17, all as *Polyporus tenuiculus*).

***Favolus philippinensis* (Berk.) Sacc.**

Saprobic on dead wood. Atlántico Sur (Soza 2025: *in press*).

Genus *Fomes* (Fr.) Fr. (1 species)***Fomes fasciatus* (Sw.) Cooke**

Saprobic on decayed wood. Locality unknown (Berkeley & Curtis 1860: 122, as *Polyporus marmoratus*, Murrill 1907-1915: 114, as *Elfvigia fasciata*).

Genus *Funalia* Pat. (2 species)***Funalia rigida* (Berk. & Mont.) Peck**

Saprobic on dead wood. Locality unknown (MyCoPortal 2024, as *Trametes rigida*).

***Funalia supina* (Sw.) Targino de Oliveira & Gibertoni**

Saprobic on dead wood. Locality unknown (Murrill 1905b: 365, as *Fomitella supina*).

Genus *Hexagonia* Fr. (3 species)***Hexagonia hydroides* (Sw.) M. Fidalgo**

Saprobic on decayed wood. Carazo, Granada, León, Managua, Río San Juan (Ellis & MacBride 1896: 191, as *Trametes hydroides*, Murrill 1904c: 609, as *Pogonomyces hydroides*, González & Orozco 2006: 1, González & Orozco 2007: 36, Larios-Juárez *et al.* 2013: 15, Ubau-Matamoros 2016: 31, Saldívar 2018: 49, Soza *et al.* 2023: 17).

***Hexagonia tenuis* (Fr.) Fr.**

Saprobic on decayed wood. Carazo, Granada (Ellis & MacBride 1896: 191, as *Hexagonia polygramma*, Murrill 1905a: 100, as *Favolus tenuis*, González & Orozco 2006: 1, Ubau-Matamoros 2016a: 31, as *Hexagonia glaber*).

***Hexagonia variegata* Berk.**

Saprobic on decayed wood. Río San Juan (Berkeley & Curtis 1860: 122, Ellis & MacBride 1896: 191, Fidalgo & Fidalgo 1966: 876, as *Hexagonia papyracea*, Murrill 1905a: 101, as *Favolus variegatus*).

Genus *Hjortstamia* Boidin & Gilles (1 species)***Hjortstamia rimosissima* (Berk. & M.A. Curtis) Boidin & Gilles**

Saprobic on dead cane. Río San Juan (endemic) (Berkeley & Curtis 1860: 124, as *Corticium rimosissimum*, Burt 1925: 341, as *Peniophora rimosissima*, Welden 1975: 544, as *Lopharia rimosissima*, Hjortstam 1989: 311, as *Corticium rimosissimum*, Hjortstam & Ryvar den 2007: 66, Welden 2010: 73, as *Lopharia rimosissima*).

Genus *Lentinus* Fr. (8 species)***Lentinus arcularius* (Batsch) Zmitr.**

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, Saldivar 2018: 50, both as *Polyporus arcularius*).

***Lentinus berteroi* (Fr.) Fr.**

Saprobic on dead wood. Locality unknown (Pegler 1983: 20, as *Lentinus bertieri*).

***Lentinus crinitus* (L.) Fr.**

Saprobic on dead wood. Carazo, Granada, Managua, Matagalpa, Río San Juan (González & Orozco 2006: 1, as *Panus crinitus*, González & Orozco 2007: 37, as *P. crinitus*, Stanger & Smith 2015, Saldivar 2018: 50, as *P. crinitus*, Ubau-Matamoros 2016a: 31, Soza *et al.* 2023: 17).

***Lentinus scleropus* (Pers.) Fr.**

Saprobic on dead wood. Managua, Río San Juan (Berkeley & Curtis 1860: 121, as *Panus infundibulum*, Pegler 1983: 97, Soza *et al.* 2023: 17).

***Lentinus swartzii* Berk.**

Saprobic on dead wood. Locality unknown (Berkeley & Curtis 1860: 121, as *Lentinus pyramidatus*, Murrill 1907-1915: 291, as *L. pyramidatus*, Berkeley & Curtis 1860: 121, as *Lentinus nicaraguensis*, Pegler 1983: 37).

***Lentinus tricholoma* (Mont.) Zmitr.**

Saprobic on dead wood. Carazo, Granada, Managua, Río San Juan (Ellis & Everhart 1896: 68, as *Polyporus obolus*, Murrill 1904a: 35, as *P. obolus*, Murrill 1907-1915: 58, as *P. obolus*, Murrill 1915: 44, as *P. obolus*, Ellis & MacBride 1896: 193, as *Polyporus similis*, Murrill 1904a: 38, González & Orozco 2006: 2, González & Orozco 2007: 37, Stanger & Smith 2015, Ubau-Matamoros 2016a: 32, Saldivar 2018: 51, Soza *et al.* 2023: 17, all as *Polyporus tricholoma*).



Figure 37. A: *Lentinus crinitus*, León. B: *Lentinus scleropus*, Managua. C: *Lentinus tricholoma*, Managua. D: *Polyporus leprieurii*, Atlántico Sur. E: *Trametes acuta*, Chinandega. F: *Trametes elegans*, Chinandega. G: *Trametes hirsuta*, Managua. H: *Trametes maxima*, Managua (photos by Ricardo Soza).

***Lentinus velutinus* Fr.**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 194, as *Lentinus blepharodes*, Ellis & MacBride 1896: 194, as *Lentinus castaneus*).

***Lentinus villosus* Klotzsch**

Saprobic on dead wood. Río San Juan (Pfister & Sayre 1978: 31).

Genus *Lopharia* Kalchbr. & MacOwan (1 species)

***Lopharia cinerascens* (Schwein.) G. Cunn.**

Saprobic on dead wood. Locality unknown (Berkeley & Curtis 1860: 123, as *Corticium aschistum*, Cooke 1879: 20, as *Peniophora berkeleyi*, Burt 1920: 203, as *Stereum cinerascens*, Hjortstam 1989: 302, as *Corticium aschistum*).

Genus *Neofavolus* Sotome & T. Hatt. (1 species)

***Neofavolus alveolaris* (DC.) Sotome & T. Hatt.**

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 51, both as *Polyporus mori*).

Genus *Perenniporia* Murrill (4 species)

***Perenniporia alboincarnata* (Pat. & Gaillard) Decock & Ryvariden**

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 191, as *Polystictus alboincarnatus*).

***Perenniporia martia* (Berk.) Ryvariden**

Saprobic on dead wood. Locality unknown (Lowe 1957: 76, as *Fomes sulcatus*).

***Perenniporia medulla-panis* (Jacq.) Donk**

Saprobic on dead wood. Locality unknown (Lowe 1963: 469, as *Poria unita*).

***Perenniporia subannosa* (Bres.) Decock, S. Herrera & Ryvariden**

Saprobic on dead wood. Locality unknown (Decock *et al.* 2001: 199).

Genus *Picipes* Zmitr. & Kovalenko (3 species)

***Picipes badius* (Pers.) Zmitr. & Kovalenko**

Saprobic on dead wood. Río San Juan (Ellis & MacBride 1896: 193, as *Polyporus picipes*, González & Orozco 2007: 37, Saldívar 2018: 50, both as *Polyporus badius*).

***Picipes dictyopus* (Mont.) B.K. Cui, Xing Ji & J.L. Zhou**

Saprobic on dead wood. Río San Juan (MyCoPortal 2024).

***Picipes melanopus* (Pers.) Zmitr. & Kovalenko**

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 193, as *Polyporus fissus*).

Genus *Polyporus* P. Micheli ex Adans. (2 species)

***Polyporus leprieurii* Mont.**

Saprobic on dead wood. Carazo, Río San Juan (Murrill 1907-1915: 62, as *Polyporus subelegans*, Murrill 1915: 48, as *P. subelegans*, Seaver & Chardon 1926: 166, as *P. subelegans*, Fidalgo & Fidalgo 1967: 859, as *Melanopus leprieurii*, González & Orozco 2006: 2, González & Orozco 2007: 37, Saldívar 2018: 51).

***Polyporus varius* (Pers.) Fr.**

Saprobic on dead wood. Río San Juan (González & Orozco 2007: 37, Saldívar 2018: 50, both as *Polyporus elegans*).

Genus *Poriella* C.L. Zhao (1 species)

***Poriella subacida* (Peck) C.L. Zhao**

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 31, as *Perenniporia subacida*).

Genus *Porogramme* (Pat.) Pat. (4 species)

***Porogramme albocincta* (Cooke & Masee) Gibertoni**

Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 32).

***Porogramme epimiltina* (Berk. & Broome) Y.C. Dai, W.L. Mao & Yuan Yuan**

Saprobic on dead wood. Locality unknown (Lowe 1963: 468, as *Poria borbonica*).

***Porogramme graphica* (Bres.) Pat.**

Saprobic on dead wood. Locality unknown (Lowe 1963: 477).

***Porogramme subargentea* (Speg.) Y.C. Dai, W.L. Mao & Yuan Yuan**

Saprobic on dead wood. Locality unknown (Lowe 1963: 457, Lowe 1966: 124, both as *Poria pavonina*).

Genus *Trametes* Fr. (14 species)

***Trametes acuta* (Berk.) Imazeki**

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).

Saprobic on dead wood. Chinandega (**New country record**).

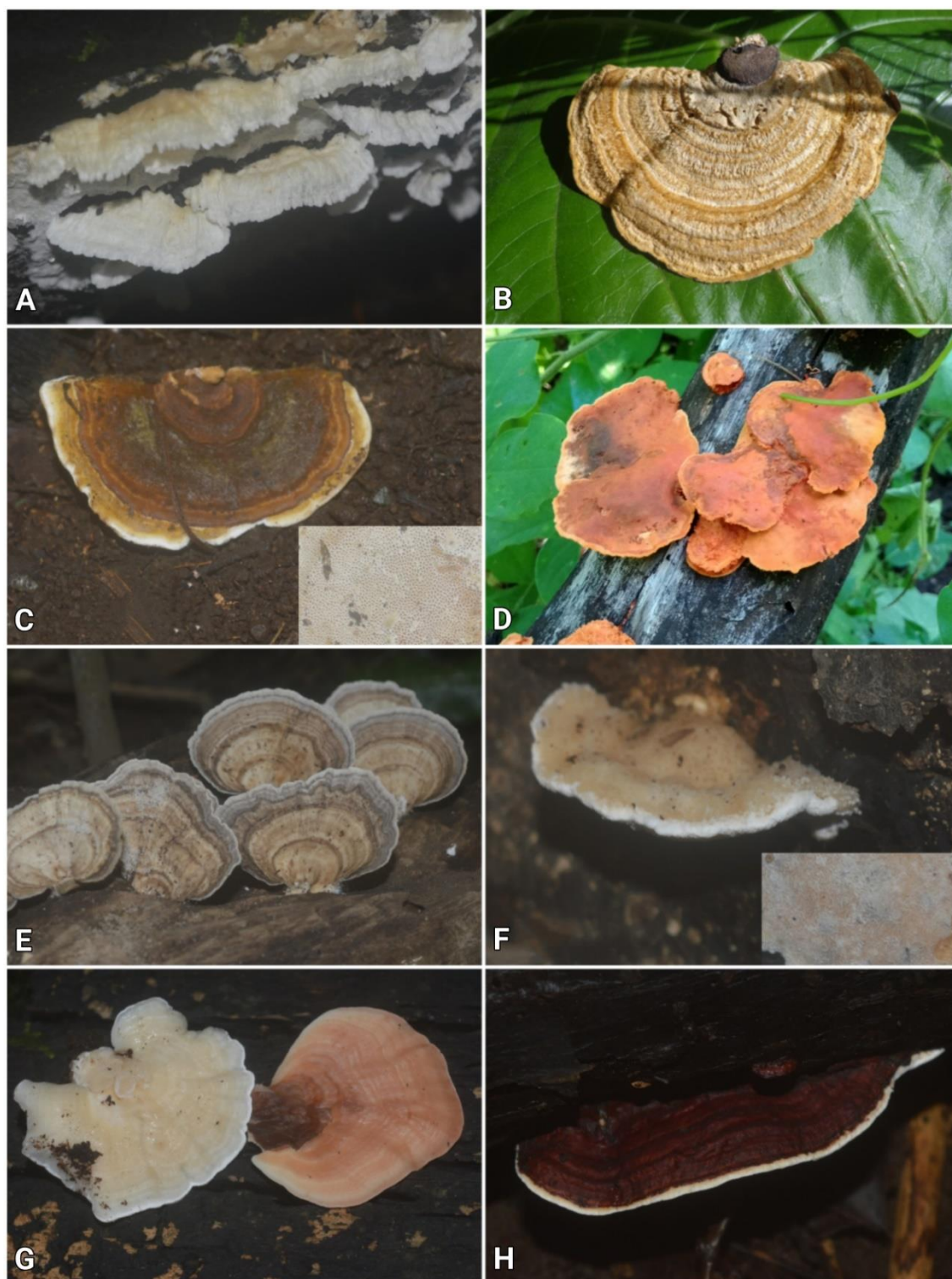


Figure 38. A: *Trametes membranacea*, Chinandega. B-C: *Trametes polyzona*, Managua. D: *Trametes sanguinea*, León. E: *Trametes versicolor*, Chinandega. F: *Cyanosporus caesius*, Managua. G: *Antrodiella versicutis*, Atlántico Sur. H: *Nigroporus vinosus*, Chinandega (photos by Ricardo Soza).

***Trametes betulina* (L.) Pilát**

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 194, as *Lenzites cinnamomea* var. *crocata*).

***Trametes elegans* (Spreng.) Fr.**

Saprobic on dead wood. Locality unknown (Murrill 1905a: 91, as *Agaricus deplanatus*, Dennis 1965: 234, as *Lenzites palisoti*).

***Trametes hirsuta* (Wulfen) Lloyd**

Saprobic on dead wood. Carazo (Ellis & MacBride 1896: 192, as *Polystictus hirsutus*, González & Orozco 2006: 2, as *Trichaptum hirsuta*).

***Trametes marianna* (Pers.) Ryvarden**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 191, as *Trametes muelleri*, Murrill 1905d: 646, as *Coriolus brachypus*).

***Trametes maxima* (Mont.) A. David & Rajchenb.**

Saprobic on dead wood. Managua (Soza *et al.* 2023: 17).

***Trametes membranacea* (Fr.) Kreisel**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus semiplicatus*, Murrill 1905d: 648, as *Coriolus membranaceus*).

***Trametes meyenii* (Klotzsch) Lloyd**

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus obstinatus*).

***Trametes modesta* (Kunze ex Fr.) Ryvarden**

Saprobic on wood. Locality unknown (Murrill 1915: 13, as *Coriolus leioderms*).

***Trametes polyzona* (Pers.) Justo**

Saprobic on dead wood. Managua, Río San Juan (Pfister & Sayre 1978: 37, as *Trametes occidentalis*, Soza *et al.* 2023: 17).

***Trametes repanda* (Pers.) Justo**

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 194, as *Lenzites repanda*).

***Trametes sanguinea* (L.) Lloyd**

Saprobic on wood. Carazo, Granada, Managua, Río San Juan (Ellis & MacBride 1896: 192, as *Polystictus sanguineus*, Litzenberger & Stevenson 1957: 5, as *Polyporus sanguineus*, Murrill 1904b: 421, González & Orozco 2006: 1, González & Orozco 2007: 37, Ubau-Matamoros 2016b: 12, Saldívar 2018: 51, Soza *et al.* 2023: 17, all as *Pycnoporus sanguineus*).

***Trametes versicolor* (L.) Lloyd**

Saprobic on dead wood. Carazo, Granada, Jinotega, Managua, Río San Juan (González & Orozco 2006: 2, González & Orozco 2007: 38, Saldívar 2015: 40, Ubau-Matamoros 2016a: 32, Saldívar 2018: 51, Soza *et al.* 2023: 17).

***Trametes villosa* (Sw.) Kreisel**

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus gibberulosus*, *Polystictus pinsitus*, Murrill 1905b: 359, as *Coriolopsis gibberulosa*, Murrill 1905b: 356, as *Funalia villosa*, Murrill 1905d: 651, as *Coriolus pinsitus*).

**Family POSTIACEAE B.K. Cui, Shun Liu & Y.C. Dai
(2 genus, 2 species)**

Genus *Amaropostia* B.K. Cui, L.L. Shen & Y.C. Dai (1 species)

***Amaropostia stiptica* (Pers.) B.K. Cui, L.L. Shen & Y.C. Dai**

Saprobic on decayed wood. Locality unknown (Ellis & MacBride 1896: 192, as *Polystictus albidus*).

Genus *Cyanosporus* McGinty (1 species)

***Cyanosporus caesius* (Schrad.) McGinty**

Saprobic on dead wood. Managua (Soza *et al.* 2023: 17, as *Oligoporus caesius*).

**Family STECCHERINACEAE Parmasto
(3 genera, 4 species)**

Genus *Antrodiella* Ryvarden & I. Johans. (2 species)

***Antrodiella liebmannii* (Fr.) Ryvarden**

Saprobic on dead wood. Atlántico Sur (MyCoPortal 2024).

***Antrodiella versicutis* (Berk. & M.A. Curtis) Gilb. & Ryvarden**

Saprobic on wood. Locality unknown (Lowe 1975: 54, as *Tyromyces versicutis*).

Genus *Junghuhnia* Corda (1 species)

***Junghuhnia nitida* (Pers.) Ryvarden**

Saprobic on wood. Locality unknown (Ellis & MacBride 1896: 191, as *Poria nitida*).

Genus *Nigroporus* Murrill (1)

***Nigroporus vinosus* (Berk.) Murrill**

Specimens examined: **Nicaragua:** Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 12 Jul. 2021, R. Soza (no coll.).

Saprobic on dead wood. Chinandega (**New country record**).



Figure 39. A: *Artomyces pyxidatus*, Chinandega. B: *Lachnocladium denudatum*, Managua. C: *Lactarius indigo*, Matagalpa. D: *Russula brevipes*, Atlántico Sur. E: *Russula emetica*, Matagalpa. F: *Russula virescens*, Matagalpa. G: *Stereum hirsutum*, Estelí. H: *Stereum ostrea*, Managua (photos by Ricardo Soza).

Order RUSSULALES Kreisel ex P. M. Kirk, P. F. Cannon & J. C. David
(6 families, 10 genera, 14 species)

Family AURISCALPIACEAE Maas Geest.
(1 genus, 1 species)

Genus *Artomyces* Jülich (1 species)

Artomyces pyxidatus (Pers.) Jülich
Saprobic on decayed wood. Matagalpa (Stanger & Smith 2015).

Family BONDARZEVIACEAE Kotl. & Pouzar
(1 genus, 1 species)

Genus *Heterobasidion* Bref. (1 species)

Heterobasidion annosum (Fr.) Bref.
Parasitic on living trunk of tree. Río San Juan (González & Orozco 2007: 36, Saldívar 2018: 49).

Family ECHINODONTIACEAE Donk
(1 genus, 1 species)

Genus *Larssoniporia* Y.C. Dai, Jia J. Chen & B.K. Cui (1 species)

Larssoniporia tropicalis (Cooke) Y.C. Dai, Jia J. Chen & B.K. Cui
Saprobic on decayed wood. Locality unknown (Murrill 1907-1915: 8, as *Fomitiporia tropicalis*, Lowe 1963: 456, as *Poria tropicalis*, Lowe 1966: 26, as *P. tropicalis*).

Family PENIOPHORACEAE Lotsy
(4 genera, 4 species)

Genus *Baltazaria* Leal-Dutra, Dentinger & G.W. Griff. (1 species)

Baltazaria galactina (Fr.) Leal-Dutra, Dentinger & G.W. Griff.
Saprobic on dead wood. Granada (Ubau-Matamoros 2016a: 31, as *Scytinostroma galactinum*).

Genus *Lachnocladium* Lév. (1 species)

Lachnocladium denudatum Corner
Saprobic on dead wood. Managua (Soza *et al.* 2023: 18).

Genus *Peniophora* Cooke (1 species)

Peniophora incarnata (Pers.) P. Karst.

Saprobic on dead wood. Río San Juan (Pfister & Sayre 1978: 42, as *Corticium incarnatum*).

Genus *Radulum* Fr. (1 species)

Radulum rhabarbarinum Berk. & M.A. Curtis

Saprobic on decayed wood. Locality unknown (endemic) (Berkeley & Curtis 1860: 123, Gilbertson 1965: 863).

**Family RUSSULACEAE Lotsy
(2 genera, 5 species)**

Genus *Lactarius* Pers. (1 species)

Lactarius indigo (Schwein.) Fr.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on the ground. Matagalpa (**New country record**).

Genus *Russula* Pers. (4 species)

Russula brevipes Peck

Ectomycorrhizal, saprobic on soil under *Pinus caribaea*. Atlántico Sur (Soza 2025: *in press*).

Russula cyanoxantha (Schaeff.) Fr.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on the ground. Matagalpa (**New country record**).

Russula emetica (Schaeff.) Pers.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on the ground. Matagalpa (**New country record**).

Russula virescens (Schaeff.) Fr.

Specimens examined: **Nicaragua:** Matagalpa, Selva Negra (13°00'14"N, 85°54'37"W, 1409 m), 28 May. 2022, R. Soza (no coll.).

Saprobic on the ground. Matagalpa (**New country record**).

Family STEREACEAE Pilát
(1 genus, 2 species)

Genus *Stereum* Hill ex Pers. (2 species)

Stereum hirsutum (Willd.) Pers.

Saprobic on dead wood. Locality unknown (Ellis & MacBride 1896: 190, as *Stereum versicolor*).

Stereum ostrea (Blume & T. Nees) Fr.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 18).

Order THELEPHORALES Corner ex Oberw.
(1 family, 1 genus, 1 species)

Family THELEPHORACEAE Chevall.
(1 genus, 1 species)

Genus *Thelephora* Ehrh. ex Willd. (1 species)

Thelephora palmata (Scop.) Fr.

Saprobic on soil. Atlántico Sur (Soza 2025: *in press*).

Class DACRYMYCETES Doweld

Order DACRYMYCETALES Henn.
(1 family, 2 genera, 3 species)

Family DACRYMYCETACEAE J. Schröt.
(2 genera, 3 species)

Genus *Calocera* (Fr.) Fr. (1 species)

Calocera cornea (Batsch) Fr.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 16).

Genus *Dacryopinax* G.W. Martin (2 species)

Dacryopinax elegans (Berk. & M.A. Curtis) G.W. Martin

Saprobic on dead wood. Managua (Soza *et al.* 2023: 16).

Dacryopinax spathularia (Schwein.) G.W. Martin

Saprobic on dead wood. Carazo, Jinotega, Managua, Río San Juan (González & Orozco 2006: 1, González & Orozco 2007: 36, Saldívar 2015: 39, Saldívar 2018: 48, Soza *et al.* 2023: 16).



Figure 40. A: *Thelephora palmata*, Atlántico Sur. B: *Calocera cornea*, Managua. C: *Dacryopinax elegans*, Managua. D: *D. spathularia*, Chinandega. E: *Phaeotremella foliacea*, Managua. F: *Tremella fuciformis*, Chinandega. G: *T. mesenterica*, Managua. H: *T. rubromaculata*, Atlántico Sur (photos by Ricardo Soza).

Class TREMELLOMYCETES Doweld

Order TREMELLALES Fr.
(2 families, 2 genera, 4 species)

Family PHAEOTREMELLACEAE A.M. Yurkov & Boekhout
(1 genus, 1 species)

Genus *Phaeotremella* Rea (1 species)

Phaeotremella foliacea (Pers.) Wedin, J.C. Zamora & Millanes
Saprobic on dead wood. Managua (Soza *et al.* 2023: 18, as *Tremella foliacea*).

Family TREMELLACEAE Fr.
(1 genus, 3 species)

Genus *Tremella* Pers. (3 species)

Tremella fuciformis Berk.

Specimens examined: Nicaragua: Chinandega, Volcán Chonco (12° 40'54"N, 87° 03'16"W, 389 m), 11 Jul. 2021, R. Soza (no coll.).
Saprobic on dead wood. Chinandega (New country record).

Tremella mesenterica (Schaeff.) Pers.

Saprobic on dead wood. Managua (Soza *et al.* 2023: 18).

Tremella rubromaculata Lowy

Saprobic on dead wood. Atlántico Sur (Soza 2025: *in press*).

Subphylum PUCCINIOMYCOTINA Bauer, Begerow, J. Samp.,
M. Weiss & Oberw.

Class ATRACTIELLOMYCETES Bauer, Begerow, J. P. Samp.,
M. Weiss & Oberw.

Order ATRACTIELLALES Oberw. & Bandoni
(1 family, 1 genus, 1 species)

Family PHLEOGENACEAE Gäum.
(1 genus, 1 species)

Genus *Phleogena* Link (1 species)

Phleogena faginea (Fr. & Palmquist) Link
Saprobic on dead wood. Río San Juan, Rivas (Lowy 1971: 46).

Class MICROBOTRYOMYCETES Bauer, Begerow, J. Samp., M. Weiss
& Oberw.

Order SPORIDIOBOLALES Doweld
(1 family, 1 genus, 1 species)

Family SPORIDIOBOLACEAE R.T. Moore
(1 family, 1 genus, 1 species)

Genus *Sporobolomyces* Kluyver & C.B. Niel (1 species)

Sporobolomyces carnicolor Yamasaki & H. Fujii ex F.Y. Bai & Boekhout
Parasitic on Rubiaceae fruit. Jinotega (Garay *et al.* 2019: 891).

Class PUCCINIOMYCETES Bauer, Begerow, J. Samp., M. Weiss & Oberw.

Order PUCCINIALES Clem. & Shear
(10 families, 18 genera, 87 species)

Family COLEOSPORIACEAE Dietel
(1 genus, 4 species)

Genus *Coleosporium* Lév. (4 species)

***Coleosporium eupatorii* Arthur**

Rust fungi, parasitic on *Eupatorium macrophyllum*. Granada (Arthur 1906: 31, Arthur 1907: 90, Stevenson 1926: 72).

***Coleosporium paraphysatum* Dietel & Holw.**

Rust fungi, parasitic on *Sinclairia discolor*. Matagalpa (Hennen & McCain 1993:972).

***Coleosporium steviae* Arthur**

Rust fungi, parasitic on *Hebeclinium macrophyllum*. Granada (MyCoPortal 2024).

***Coleosporium viguierae* Dietel & Holw.**

Rust fungi, parasitic on *Verbesina agricolarum*. Jinotega (MyCoPortal 2024).

Family CRONARTIACEAE Dietel
(1 genus, 1 species)

Genus *Cronartium* Fr. (1 species)

***Cronartium quercuum* (Berk.) Miyabe ex Shirai**

Rust fungi, parasitic on *Pinus oocarpa*. Jinotega (MyCoPortal 2024).

Family CROSSOPSORACEAE Aime & McTaggart
(2 genera, 2 species)

Genus *Crossopsora* Syd. & P. Syd. (1 species)

***Crossopsora byrsonimatis* (Henn.) R. S. Peterson**

Rust fungi, on *Byrsonima crassifolia*. Chontales, Granada (MyCoPortal 2024).

Genus *Kweilingia* Teng (1 species)

***Kweilingia divina* (Sydow) Buriticá**

Rust fungi, parasitic on *Rhipidocladum racemiflorum*. Chontales (MyCoPortal 2024, as *Uredo ignava*).

Family PHAKOPSORACEAE Cummins & Hirats.
(1 genus, 3 species)

Genus *Phakopsora* Dietel (3 species)

Phakopsora nishidana S. Ito

Rust fungi parasitic on *Ficus carica*. Managua (Litzenberger & Stevenson 1957: 9, as *Physopella fici*).

Phakopsora pallescens (Arthur) Buriticá & J.F. Hennen

Rust fungi parasitic on *Tripsacum latifolium*. Carazo (Mains 1934: 128, as *Angiopsora pallescens*, Wellman 1977: 434, as *A. pallescens*, Arthur 1920a: 278, as *Dicaeoma pallescens*, Cummins 1971: 53, as *Physopella pallescens*, Arthur 1919: 111, as *Puccinia pallescens*, Arthur 1925a: 156, as *P. pallescens*, Stevenson 1926: 187, as *P. pallescens*, Buriticá 1999: 275).

Phakopsora zae (Mains) Buriticá

Rust fungi, on *Zea mays*. Granada, Managua (Litzenberger & Stevenson 1957: 18, as *Angiopsora zae*, McGuire & Crandall 1967: 118, as *A. zae*, Buriticá 1999: 275).

Family PUCCINIACEAE Chevall.
(3 genera, 57 species)

Genus *Endophyllum* Lév. (2 species)

Endophyllum circumscriptum (Schwein.) Whetzel & Olive

Rust fungi parasitic on *Cissus sicyoides*. Jinotega (Buriticá & Hennen 1980: 13).

Endophyllum decoloratum (Schwein.) Whetzel & Olive

Rust fungi parasitic on *Clibadium polygynum*. Atlántico Sur (Buriticá & Hennen 1980: 11).

Genus *Puccinia* Pers. (44 species)

Puccinia arachidis Speg.

Rust fungi, on *Arachis hypogaea*. Managua (Litzenberger & Stevenson 1957: 4).

Puccinia canaliculata (Schwein.) Lagerh.

Rust fungi, on *Cyperus rotundus*. Chinandega, Estelí, Managua (Litzenberger & Stevenson 1957: 8).

Puccinia cenchri Dietel & Holway

Rust fungi, parasitic on *Cenchrus pilosus*. Chinandega (Litzenberger & Stevenson 1957: 6).

***Puccinia chaetochloae* (Arthur) Arthur**

Rust fungi, parasitic on *Ixophorus unisetus*. Managua (Litzenberger & Stevenson 1957: 11).

***Puccinia cnici-oleracei* Pers.**

Rust fungi, parasitic on *Erigeron* sp., *Emilia* sp. Managua, Matagalpa (Litzenberger & Stevenson 1957: 9, as *Puccinia emiliae*, Hennen & McCain 1993: 974).

***Puccinia conoclinii* Seym.**

Rust fungi, parasitic on *Ageratum* sp., *Eupatorium* sp. Matagalpa (Hennen & McCain 1993: 974).

***Puccinia cynanchi* Schwein.**

Rust fungi, parasitic on *Gonolobus* sp. Granada (Arthur 1922b: 555 as *Micropuccinia obliqua*, Litzenberger & Stevenson 1957: 9, as *Puccinia gonolobi*).

***Puccinia cynodontis* Lacroix ex Desm.**

Rust fungi, on *Cynodon dactylon*. Chinandega, Jinotega, Managua (Litzenberger & Stevenson 1957: 8, McGuire & Crandall 1967: 151, Lenné 1990: 43).

***Puccinia deformata* Berk. & M.A. Curtis**

Rust fungi parasitic on *Olyra latifolia*. Chontales (Arthur & Johnston 1918: 136, Arthur 1920a: 294, *Dicaeoma deformatum*, Seaver & Chardon 1926: 129, Cummins 1943: 104, Litzenberger & Stevenson 1957: 13).

***Puccinia dochmia* Berk. & M.A. Curtis**

Rust fungi, parasitic on *Muhlenbergia* sp. Río San Juan (Berkeley & Curtis 1860: 126, Cummins 1943: 104, Arthur 1920a: 309, as *Dicaeoma dochmium*, Cummins & Greene 1961: 278, Watson 1971: 52, Cummins 1971:356).

***Puccinia eleocharidis* Arthur**

Rust fungi, parasitic on *Eleocharis* sp. Granada (MyCoPortal 2024).

***Puccinia fumosa* Holw.**

Rust fungi, parasitic on *Loeselia ciliata*. Jinotega (Parmelee 1986: 463).

***Puccinia gnaphaliicola* Henn.**

Rust fungi, parasitic on *Gnaphalium* sp. Locality unknown (Girard 1967: 76, as *Puccinia graphiicola*).

***Puccinia gouaniae* Holw.**

Rust fungi, parasitic on *Gouania lupuloides*. Chinandega (MyCoPortal 2024).

***Puccinia graminis* Pers.**

Rust fungi, parasitic on *Triticum aestivum*. Matagalpa (Litzenberger & Stevenson 1957: 18, McGuire & Crandall 1967: 127).

***Puccinia heliconiae* (Dietel) Arthur**

Rust fungi, parasitic on *Heliconia* sp. Locality unknown (MyCoPortal 2024).

***Puccinia heterospora* Berk. & M.A. Curtis**

Rust fungi, parasitic on *Abutilon trisulcatum*, *Anoda cristata*, *Sida urens*. Managua, Matagalpa (Hennen & McCain 1993: 975).

***Puccinia hodgsoniana* F. Kern**

Rust fungi, parasitic on *Peteravenia* sp. Matagalpa (Hennen *et al.* 1972: 368, Cummins 1978: 116, Hennen & McCain 1993: 975).

***Puccinia hydrocotyles* (Mont.) Cooke**

Rust fungi, on *Hydrocotyle mexicana*. Jinotega (Hennen & McCain 1993: 975).

***Puccinia invaginata* Arthur & J.R. Johnston**

Rust fungi, parasitic on *Gouania lupuloides*. Jinotega (MyCoPortal 2024).

***Puccinia investita* Schwein.**

Rust fungi, parasitic on *Achyrocline* sp. Jinotega (Hennen & McCain 1993: 976).

***Puccinia irregularis* Dietel**

Rust fungi, parasitic on *Verbesina pallens*. Locality unknown (Arthur 1921: 432, as *Dicaeoma irregular*, Stevenson 1926: 191, Cummins 1943: 109, Parmelee 1967: 2286, Cummins 1978: 45).

***Puccinia kuehnii* (W. Krüger) E.J. Butler**

Rust fungi, on *Saccharum officinarum*. Chinandega (Chavarria *et al.* 2009: 425).

***Puccinia lateripes* Berk. & Ravenel**

Rust fungi, on *Ruellia haenkeana*. Chinandega (HerbIMI 2024, as *Puccinia ruelliae*).

***Puccinia lateritia* Berk. & M.A. Curtis**

Rust fungi, parasitic on *Borreria* sp. Atlántico Sur (MyCoPortal 2024).

***Puccinia liberta* F. Kern**

Rust fungi, parasitic on *Eleocharis* sp. Granada (Kern 1919: 142, Arthur 1920b: 348, as *Dicaeoma libertum*, Cummins 1935b: 609, Cummins 1943: 110).

***Puccinia macropoda* Speg.**

Rust fungi, parasitic on *Alternanthera* sp. Granada (MyCoPortal 2024).

***Puccinia medellinensis* Mayor**

Rust fungi, parasitic on *Hyptis pectinata*, *Hyptis suaveolens*. Chinandega (Arthur 1927: 842, as *Dicaeoma medellinensis*, Litzenberger & Stevenson 1957: 11, Baxter 1961: 21).

***Puccinia melampodii* Dietel & Holw.**

Rust fungi, parasitic on *Melampodium* sp. Locality unknown (Parmelee 1967: 2314).

***Puccinia melanocephala* Syd. & P. Syd.**

Rust fungi, parasitic on *Saccharum officinarum*. Chinandega (Raid & Comstock 2000: 85, IPSA 2021: 10).

***Puccinia mogiphanis* (Juel) Arthur**

Rust fungi, parasitic on *Achyranthes laguroides*. Locality unknown (Cummins & Stevenson 1956: 157).

***Puccinia nakanishikii* Dietel**

Rust fungi, parasitic on *Cymbopogon* sp. Estelí (HerbIMI 2024).

***Puccinia oahuensis* Ellis & Everh.**

Rust fungi, parasitic on *Hyparrhenia rufa*. Locality unknown (IPSA 2021: 10).

***Puccinia obtecta* Peck**

Rust fungi, parasitic on *Scirpus* sp. Granada (Litzenberger & Stevenson 1957: 16).

***Puccinia polysora* Underw.**

Rust fungi, parasitic on *Tripsacum laxum*, *Zea mays*. Chinandega, Estelí, Jinotega, Managua, Matagalpa (Litzenberger & Stevenson 1957: 19, McGuire & Crandall 1967: 119, Roure 1962: 120, CATIE 1981: 13, Lenné 1990: 144).

***Puccinia purpurea* Cooke**

Rust fungi, parasitic on *Sorghum bicolor*. Estelí, Managua, Matagalpa (Litzenberger & Stevenson 1957: 19, McGuire & Crandall 1967: 119, CATIE 1981: 13).

***Puccinia recondita* Roberge ex Desm.**

Rust fungi, parasitic on *Triticum aestivum*. Matagalpa (Litzenberger & Stevenson 1957: 18, McGuire & Crandall 1967: 127).

***Puccinia ruelliae-bourgaei* Dietel & Holw.**

Rust fungi, parasitic on *Ruellia* sp. Chinandega (MyCoPortal 2024).

***Puccinia scleriae* (Pazschke) Arthur**

Rust fungi, parasitic on *Passiflora holoserica*. Atlántico Sur (MyCoPortal 2024).

***Puccinia sepulta* Berk. & M.A. Curtis**

Rust fungi, parasitic on leaves of *Ficus* sp. Río San Juan (endemic) (Berkeley & Curtis 1860: 126, Anderson 1891: 127).

***Puccinia sorghi* Schwein.**

Rust fungi, parasitic on *Sorghum bicolor*, *Zea mays*. Estelí, Jinotega (Litzenberger & Stevenson 1957: 19, CATIE 1981: 13).

***Puccinia spegazzinii* De Toni**

Rust fungi, parasitic on *Mikania micrantha*. Matagalpa (Evans & Ellison 2005: 943).

***Puccinia thaliae* Dietel**

Rust fungi, parasitic on *Canna indica*. Atlántico Sur (MyCoPortal 2024).

***Puccinia tillandsiae* Cummins & Pollack**

Rust fungi, parasitic on *Tillandsia* sp. Locality unknown (Girard 1968: 81, as *Uredo tillandsiae*, Cummins & Pollack 1974: 533).

Genus *Uromyces* (Link) Unger (11 species)

***Uromyces appendiculatus* (Persoon) Unger**

Rust fungi, parasitic on *Phaseolus vulgaris*. Jinotega, Matagalpa, Estelí (Litzenberger & Stevenson 1957: 15, McGuire & Crandall 1967: 121, CATIE 1981: 13, all as *Uromyces phaseoli*).

***Uromyces bidenticola* (Henn.) Arthur**

Rust fungi, parasitic on *Bidens pilosa*. Locality unknown (Arthur 1922a: 481, as *Klebahnia bidentis*, Roure 1962: 140).

***Uromyces bonaerensis* Speg.**

Rust fungi, parasitic on *Gomphrena* sp. Locality unknown (Cummins & Stevenson 1956: 184, Cummins 1943: 124).

***Uromyces celosiae* Dietel & Holway**

Rust fungi, parasitic on *Iresine calea*. Managua (MyCoPortal 2024).

***Uromyces dolicholi* Arthur**

Rust fungi, parasitic on *Cajanus cajan*. Managua (Litzenberger & Stevenson 1957: 5, Roure 1962: 145, Cummins 1978: 212, Lenné 1990: 19).

***Uromyces eragrostidis* Tracy**

Rust fungi, parasitic on *Eragrostis* sp. Estelí (Litzenberger & Stevenson 1957: 9, Wellman 1977: 131, Lenné 1990: 62).

***Uromyces euphorbiae* Cooke & Peck**

Rust fungi, parasitic on *Euphorbia adenoptera*. Locality unknown (Arthur 1912: 259, as *Nigredo proeminens*).

***Uromyces hedysari-paniculati* (Schwein.) Farl.**

Rust fungi, parasitic on *Desmodium* sp. Managua (Hennen & McCain 1993: 983).

***Uromyces imperfectus* Arthur**

Rust fungi, parasitic on *Bauhinia* sp. Locality unknown (Berkeley & Curtis 1860: 126, as *Uredo bauhiniae*, Arthur 1920c: 472, Stevenson 1926: 26, Cummins 1978: 238).

***Uromyces oaxacanus* Dietel & Holw.**

Rust fungi, parasitic on *Cnidocolus* sp. Jinotega (MyCoPortal 2024).

***Uromyces striatus* Schroeter**

Rust fungi, parasitic on *Medicago sativa*. Managua (Litzenberger & Stevenson 1957: 12, McGuire & Crandall 1967: 151).

**Family PUCCINIOSIRACEAE Cummins & Y. Hirats.
(1 genus, 1 species)**

Genus *Puccinosira* Lagerh. (1 species)

***Puccinosira pallidula* (Speg.) Henn.**

Rust fungi, parasitic on *Triumfetta* sp. Matagalpa (Hennen & McCain 1993: 980).

**Family RAVENELIACEAE Leppik
(3 genera, 7 species)**

Genus *Dicheirinia* Arthur (1 species)

***Dicheirinia binata* (Berk. & M.A. Curtis) Arthur**

Rust fungi, parasitic on *Erythrina* sp. Río San Juan (Berkeley & Curtis 1860: 125, as *Triphragmium binatum* and *Lecythea pezizaeformis*, Arthur 1918a: 428, Arthur 1925b: 718, Cummins 1935a: 157, Spaulding 1961: 86, Cummins 1978: 345).

Genus *Ravenelia* Berk. (4 species)

***Ravenelia lonchocarpicola* Speg.**

Rust fungi, parasitic on *Lonchocarpus guatemalensis*. Jinotega (MyCoPortal 2024).

***Ravenelia roemerianae* Long**

Rust fungi, parasitic on *Acacia farnesiana*. Locality unknown (Girard 1968: 81).

Ravenelia spegazziniana J.C. Lindq.

Rust fungi, parasitic on *Acacia farnesiana*. Locality unknown (Hernández & Hennen 2002: 972, Hernández & Hennen 2003: 747).

Ravenelia spinulosa Dietel & Holw.

Rust fungi, parasitic on *Senna pallida*. Estelí (MyCoPortal 2024).

Genus *Sphenospora* Dietel (2 species)

Sphenospora kevorkianii Linder

Rust fungi, parasitic on *Epidendrum difforme*. Atlántico Norte (Linder 1944: 464, Girard 1968: 81).

Sphenospora smilacina Syd.

Rust fungi, parasitic on *Smilax* sp. Atlántico Norte (MyCoPortal 2024).

**Family SKIERKACEAE Aime & McTaggart
(1 genus, 1 species)**

Genus *Skierka* Racib. (1 species)

Skierka holwayi Arthur

Rust fungi, parasitic on *Thouinidium decandrum*. Chontales (MyCoPortal 2024).

**Family SPHAEROPHRAGMIACEAE Cummins & Y. Hirats.
(1 genus, 1 species)**

Genus *Sphaerophragmium* Magnus (1 species)

Sphaerophragmium fimbriatum Mains

Rust fungi, parasitic on *Dalbergia* sp. Locality unknown (Cummins & Stevenson 1956: 174, Cummins 1943: 121, Cummins 1978: 351, Lohsomboon *et al.* 1994: 916).

**Family UROPYXIDACEAE (P. Syd. & Syd.) Cummins & Y. Hirats.
(1 genus, 1 species)**

Genus *Prospodium* Arthur (1 species)

Prospodium appendiculatum (Kuntze) Arthur

Rust fungi, parasitic on *Tecoma stans*. Río San Juan (Ellis & Everhart 1896: 67, as *Uredo cuticulosa*, Stevenson 1926: 29, as *U. cuticulosa*, Arthur 1927: 822, Hernández & Hennen 2003: 736).

PUCINIALES genera *incertae sedis*

Genus *Aecidium* Pers. (3 species)

***Aecidium byrsonimatis* Henn.**

Rust fungi, parasitic on *Byrsonima crassifolia*. Locality unknown (Arthur 1918b: 540, as *Aecidium singulare*, Spaulding 1961: 16).

***Aecidium lantanae* Mayor**

Rust fungi, parasitic on *Lantana trifolia*. Locality unknown (Arthur 1924: 635, as *Aecidium verbenae*, Jackson 1932: 63).

***Aecidium liabi* Mayor**

Rust fungi, parasitic on *Liabum* sp. Locality unknown (Hennen *et al.* 1972: 372, Cummins 1978: 406).

Genus *Hemileia* Berk. & Broome (1 species)

***Hemileia vastatrix* Berk. & Broome**

Rust fungi, parasitic on *Coffea arabica*. Carazo (Llano 1977: 999 Ritschel 2005: 61).

Genus *Uredo* Pers. (5 species)

***Uredo behnickiana* Henn.**

Rust fungi, parasitic on *Epidendrum* sp. Locality unknown (Girard 1968: 81).

***Uredo cajani* Syd. & P. Syd.**

Rust fungi, parasitic on *Cajanus cajan*. Managua (MyCoPortal 2024).

***Uredo campeliae* F. Kern & Whetzel**

Rust fungi parasitic on *Campelia zanonía*. Locality unknown (Cummins & Stevenson 1956: 178).

***Uredo rubescens* Arthur**

Rust fungi, parasitic on *Dorstenia contrajerva*. Managua (MyCoPortal 2024).

***Uredo scabies* Cooke**

Rust fungi parasitic on *Vanilla planifolia*. Managua (Cummins & Stevenson 1956: 182, Litzenberger & Stevenson 1957: 18).

Order SEPTOBASIDIALES Couch ex Donk
(1 family, 1 genus, 4 species)

Family SEPTOBASIDIACEAE Racib.
(1 genus, 4 species)

Genus *Septobasidium* Pat. (4 species)

Septobasidium curtisii (Berk. & Desm.) Boedijn & B.A. Steinm.
Parasitic on *Citrus* sp. Locality unknown (McGuire & Crandall 1967: 135).

Septobasidium pseudopedicellatum Burt
Parasitic on *Citrus* sp. Locality unknown (IPSA 2021: 10, as *Pseudobasidium pseudopedicilliatum*).

Septobasidium rhabarbarinum (Mont.) Bres.
Parasitic on trunk of living tree. Río San Juan (Ellis & MacBride 1896: 190, as *Thelephora retiformis*, Burt 1916: 337, as *Septobasidium frustulosum*, Couch 1938: 122).

Septobasidium sublilacinum (Ellis & Everh.) Burt
Parasitic on living branches. Río San Juan (endemic) (Ellis & Everhart 1896: 67, as *Thelephora sublilacina*, Burt 1916: 337, Couch 1938: 122).

Subphylum USTILAGINOMYCOTINA Doweld

Class EXOBASIDIOMYCETES Begerow, M. Stoll & R. Bauer

Order ENTYLOMATALES R. Bauer & Oberw.
(1 family, 1 genus, 3 species)

Family ENTYLOMATACEAE R. Bauer & Oberw.
(1 genus, 3 species)

Genus *Entyloma* de Bary (3 species)

Entyloma compositarum Farl. ex G.P. Clinton
Smut fungi, parasitic on *Viguiera cordata*. Madriz, Masaya (Piepenbring 2003: 204).

Entyloma dahliae Syd. & P. Syd.
Smut fungi, parasitic on *Dahlia* sp. Madriz, Matagalpa (Litzenberger & Stevenson 1957: 8, Piepenbring 2003: 205).

Entyloma galinsogae Syd. & P. Syd.

Smut fungi, parasitic on *Galinsoga urticaefolia*. Managua (Piepenbring 2003: 208).

Order GEORGEFISCHERIALES R. Bauer, Begerow & Oberw.
(1 family, 1 genus, 1 species)

Family EBALLISTRACEAE R. Bauer, Begerow, A. Nagler & Oberw.
(1 genus, 1 species)

Genus *Eballistra* R. Bauer, Begerow, A. Nagler & Oberw. (1 species)

Eballistra oryzae (Syd. & P. Syd.) R. Bauer, Begerow, A. Nagler & Oberw.
Smut fungi, parasitic on *Oryza latifolia*, *Oryza sativa*. León (McGuire & Crandall 1967: 123, as *Entyloma oryzae*, Wellman 1977: 281, Piepenbring 2003: 217).

Order TILLETIALES Kreisel ex R. Bauer & Oberw.
(2 families, 2 genera, 5 species)

Family ERRATOMYCETACEAE Denchev & T. Denchev
(1 species, 1 species)

Genus *Erratomyces* M. Piepenbr. & R. Bauer (1 species)

Erratomyces patelii (Pavgi & Thirum.) M. Piepenbr. & R. Bauer
Smut fungi, parasitic on *Phaseolus vulgaris*. Estelí, Managua (Piepenbring & Bauer 1997: 933, Piepenbring 2003: 208).

Family TILLETIACEAE J. Schröt
(1 genus, 4 species)

Genus *Tilletia* Tul. & C. Tul. (4 species)

Tilletia ayresii Berk.

Smut fungi, on *Panicum maximum*. Managua, Matagalpa (Piepenbring 2003: 232).

Tilletia caries (DC.) Tul. & C. Tul.

Smut fungi, parasitic on *Triticum aestivum*. Locality unknown (McGuire & Crandall 1967: 127).

Tilletia horrida Takah.

Smut fungi, parasitic on *Oryza sativa*. Locality unknown (McGuire & Crandall 1967: 124, as *Neovossia horrida*).

Tilletia ixophori Durán

Smut fungi, parasitic on *Ixophorus unisetus*. Managua (Piepenbring 2003: 240).

Class USTILAGINOMYCETES R. Bauer, Oberw. & Vánky

Order USTILAGINALES G. Winter
(7 genera, 18 species)

Family ANTHRACOIDEACEAE Denchev
(4 genera, 6 species)

Genus *Cintractia* Cornu (3 species)

***Cintractia amazonica* Syd. & P. Syd.**

Smut fungi, parasitic on *Rhynchospora barbata*. Atlántico Norte (Piepenbring 2003: 48, Kruse *et al.* 2021: 147).

***Cintractia limitata* G.P. Clinton**

Smut fungi, parasitic on *Cyperus ligularis*. Atlántico Norte, Managua (Piepenbring 2003: 55 [in part]).

***Cintractia tangensis* Henn.**

Smut fungi, parasitic on *Cyperus articulatus*. Managua (Piepenbring 2003: 55, as *Cintractia limitata* [in part], Kruse *et al.* 2021: 147).

Genus *Farysia* Racib. (1 species)

***Farysia chardoniana* Zundel**

Smut fungi, parasitic on *Carex polystachya*. Matagalpa (Piepenbring 2003: 60).

Genus *Leucocintractia* M. Piepenbr., Begerow & Oberw. (1 species)

***Leucocintractia leucodermoides* M. Piepenbr. & Begerow**

Smut fungi, on *Rhynchospora holoschoenoides*. Atlántico Norte (Piepenbring 2003: 71).

Genus *Ustanciosporium* Vánky (1 species)

***Ustanciosporium neomontagnei* M. Piepenbr. & Begerow**

Smut fungi, on *Rhynchospora globosa*. Atlántico Norte (Piepenbring 2003: 146).

Family USTILAGINACEAE Tul. & C. Tul.
(3 genera, 12 species)

Genus *Anthracocystis* Bref. (1 species)

Anthracocystis cenchri (Lagerh.) McTaggart & R.G. Shivas
Smut fungi, parasitic on *Cenchrus pilosus*. Chinandega, Managua, Masaya (Litzenberger & Stevenson 1957: 6, as *Sorosporium syntherismae*, Lenné 1990: 26, as *S. syntherismae*, Piepenbring 2003: 92, as *Sporisorium cenchri*).

Genus *Sporisorium* Ehrenb. ex Link (7 species)

Sporisorium cruentum (J.G. Kühn) Vánky
Smut fungi, parasitic on *Sorghum bicolor*. Carazo, Managua, Estelí (Litzenberger & Stevenson 1957: 17, as *Sphacelotheca cruenta*, McGuire & Crandall 1967: 122, as *S. cruenta*, Piepenbring 2003: 98).

Sporisorium fastigiatum Vánky
Smut fungi, parasitic on *Andropogon angustatus*. Masaya (Piepenbring 2003: 106).

Sporisorium holwayi (G.P. Clinton & Zundel) Vánky
Smut fungi, on *Andropogon bicornis*. Atlántico Norte (Piepenbring 2003: 108).

Sporisorium reilianum (J.G. Kühn) Langdon & Full.
Smut fungi, parasitic on *Zea mays*. Locality unknown (IPSA 2021: 11, as *Sphacelotheca reiliana*).

Sporisorium scitamineum (Syd.) M. Piepenbr., M. Stoll & Oberw.
Smut fungi, on *Saccharum officinarum*. Locality unknown (Piepenbring 2003: 127).

Sporisorium sorghi Ehrenb. ex Link
Smut fungi, parasitic on *Sorghum bicolor*. Carazo, Managua, Estelí (Litzenberger & Stevenson 1957: 17, as *Sphacelotheca sorghi*, McGuire & Crandall 1967: 123, as *S. sorghi*, Piepenbring 2003: 128).

Sporisorium vanderystii (Henn.) Langdon & Full.
Smut fungi, parasitic on *Andropogon* sp. Locality unknown (Lenné 1990: 7, as *Cintractia vanderystii*).

Genus *Ustilago* (Pers.) Roussel (4 species)

Ustilago ixophori Durán
Smut fungi, parasitic on *Ixophorus unisetus*. Managua (Piepenbring 2003: 173).

***Ustilago maydis* (DC.) Corda**

Smut fungi, parasitic on *Zea mays*. Estelí, Jinotega, Managua (Litzenberger & Stevenson 1957: 19, McGuire & Crandall 1967: 119, Piepenbring 2003: 173).

***Ustilago schroeteriana* Henn.**

Smut fungi, parasitic on *Paspalum turriforme*. Jinotega (Piepenbring 2003: 182).

***Ustilago tritici* (Bjerk.) Rostr.**

Smut fungi, parasitic on *Triticum aestivum*. Locality unknown (McGuire & Crandall 1967: 127).

Phylum BLASTOCLADIOMYCOTA T.Y. James

**Class PHYSODERMATOMYCETES Tedersoo, Sanchez-Ramirez,
Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg &
Abarenkov**

**Order PHYSODERMATALES Caval.-Sm.
(1 family, 1 genus, 1 species)**

**Family PHYSODERMATACEAE Sparrow
(1 genus, 1 species)**

Genus *Physoderma* Wallr. (1 species)

***Physoderma maydis* (Miyabe) Miyabe**

Parasitic on *Zea mays*. Chinandega, Managua (Litzenberger & Stevenson 1957: 19, McGuire & Crandall 1967: 119).

Phylum CHYTRIDIOMYCOTA Doweld

Class RHIZOPHYDIOMYCETES Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

Order RHIZOPHYDIALES Letcher (1 family, 1 genus, 1 species)

Family BATRACHOCHYTRIACEAE Doweld (1 genus, 1 species)

Genus *Batrachochytrium* Longcore, Pessier & D.K. Nichols (1 species)

Batrachochytrium dendrobatidis Longcore, Pessier & D.K. Nichols
Parasitic on frogs *Agalychnis callidryas*, *Craugastor fitzingeri*, *C. lauraster*, *Dendropsophus microcephalus*, *Incilius valliceps*, *Lithobates brownorum*, *Lithobates maculatus*, *Rhinella marina*, *Smilisca baudinii*, *C. phaeota*. Jinotega, Nueva Segovia, Rivas (García-Roa et al. 2014: 65).

Phylum GLOMEROMYCOTA C. Walker & A. Schüssler

Class ARCHAEOSPOROMYCETES Sieverd., G.A. Silva, B.T. Goto & Oehl

Order ARCHAEOSPORALES C. Walker & A. Schüssler (1 family, 1 genus, 2 species)

Family AMBISPORACEAE C. Walker, Vestberg & A. Schüssler (1 genus, 2 species)

Genus *Ambispora* C. Walker, Vestberg & A. Schüssler (2 species)

Ambispora jimgerdemannii (Spain, Oehl & Sieverd.) C. Walker
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Morton et al. 1997: 626, as *Acaulospora gerdemannii*, Picone 2000: 739, as *A. gerdemannii*).

Ambispora leptoticha (N.C. Schenck & G.S. Sm.) C. Walker, Vestberg & A. Schüssler
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Morton et al. 1997: 628, as *Glomus leptotichum*, Picone 2000: 739, as *G. leptotichum*, Morton & Redecker 2001: 184, as *Archaeospora leptoticha*).

Class GLOMEROMYCETES Caval.-Sm.

Order DIVERSISPORALES C. Walker & A. Schüßler
(1 family, 1 genus, 9 species)

Family ACAULOSPORACEAE J.B. Morton & Benny
(1 genus, 9 species)

Genus *Acaulospora* Gerd. & Trappe (9 species)

Acaulospora bireticulata F.M. Rothwell & Trappe
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora colombiana (Spain & N.C. Schenck) Kaonongbua, J. Morton & Bever
Arbuscular mycorrhizal, on soil. Atlántico Sur (Picone 2000: 739, as *Entrophospora colombiana*).

Acaulospora elegans Trappe & Gerd.
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora foveata Trappe & Janos
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora longula Spain & N.C. Schenck
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora mellea Spain & N.C. Schenck
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora scrobiculata Trappe
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora spinosa C. Walker & Trappe
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Acaulospora tuberculata Janos & Trappe
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Order GIGASPORALES S.P. Gautam & U.S. Patel
(3 families, 3 genera, 4 species)

Family GIGASPORACEAE J.B. Morton & Benny
(1 genus, 1 species)

Genus *Gigaspora* Gerd. & Trappe (1 species)

Gigaspora gigantea (T.H. Nicolson & Gerd.) Gerd. & Trappe
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Family RACOCETRACEAE Oehl, Sieverd. & F.A. Souza
(1 genus, 1 species)

Genus *Cetraspora* Oehl, F. A. Souza & Sieverd. (1 species)

Cetraspora pellucida (T.H. Nicolson & N.C. Schenck) Oehl, F.A. Souza & Sieverd.
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739, as *Scutellospora pellucida*).

Family SCUTELLOSPORACEAE Sieverd., F.A. Souza & Oehl
(1 genus, 2 species)

Genus *Scutellospora* C. Walker & F.E. Sanders (2 species)

Scutellospora calospora (T.H. Nicolson & Gerd.) C. Walker & F.E. Sanders
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Scutellospora coralloidea (Trappe, Gerd. & I. Ho) C. Walker & F.E. Sanders
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Order GLOMERALES J.B. Morton & Benny
(1 family, 3 genera, 6 species)

Family GLOMERACEAE Piroz. & Dalpé
(3 genera, 6 species)

Genus *Funneliformis* C. Walker & A. Schüssler (1 species)

Funneliformis geosporus (T.H. Nicolson & Gerd.) C. Walker & A. Schüssler
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739, as *Glomus geosporum*).

Genus *Glomus* Tul. & C. Tul. (4 species)

Glomus clavisporum (Trappe) R.T. Almeida & N.C. Schenck
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Glomus coremioides (Berk. & Broome) D. Redecker & J.B. Morton
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739, as *Sclerocystis coremioides*).

Glomus rubiforme (Gerd. & Trappe) R.T. Almeida & N.C. Schenck
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Glomus spinosum H.T. Hu
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739).

Genus *Rhizoglomus* Sieverd., G.A. Silva & Oehl (1 species)

Rhizoglomus clarum (T.H. Nicolson & N.C. Schenck) Sieverd., G.A. Silva & Oehl
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739, as *Glomus clarum*).

Class PARAGLOMEROMYCETES Oehl, G.A. Silva, B.T. Goto & Sieverd.

Order PARAGLOMERALES C. Walker & A. Schüssler
(1 family, 1 genus, 1 species)

Family PARAGLOMERACEAE J.B. Morton & D. Redecker
(1 genus, 1 species)

Genus *Paraglomus* J.B. Morton & D. Redecker (1 species)

Paraglomus occultum (C. Walker) J.B. Morton & D. Redecker
Arbuscular mycorrhizal, on pasture soil. Atlántico Sur (Picone 2000: 739, as *Glomus occultum*, Morton & Redecker 2001: 190).

Phylum MONOBLEPHAROMYCOTA Doweld

Class MONOBLEPHARIDOMYCETES J.H. Schaffn.

Order MONOBLEPHARIDALES Sparrow
(1 family, 1 genus, 2 species)

Family GONAPODYACEAE H.E. Petersen ex P.M. Kirk, P.F. Cannon & J.C. David
(1 genus, 2 species)

Genus *Monoblepharella* Sparrow (2 species)

Monoblepharella laruei Springer

Isolated from soil, hempseed bait. Atlántico Sur (Springer 1945: 210, fig. 24-26, Sparrow 1960: 724).

Monoblepharella taylorii (Sparrow) Sparrow

Isolated from soil, hempseed bait. Locality unknown (Sparrow 1960: 721).

Phylum MUCOROMYCOTA Doweld

Subphylum MUCOROMYCOTINA Benny

Class MUCOROMYCETES Doweld

Order MUCORALES Fr.

(3 families, 3 genera, 6 species)

Family CUNNINGHAMELLACEAE Naumov ex R.K. Benj.

(1 genus, 1 species)

Genus *Cunninghamella* Matr. (1 species)

Cunninghamella elegans Lendn.

Saprobic isolated from seed of *Pinus caribaea*. Locality unknown (HerbIMI 2024).

Family MUCORACEAE Dumort

(1 genus, 3 species)

Genus *Mucor* Fresen. (3 species)

Mucor hiemalis Wehmer

Saprobic isolated on *Nothofagus antarctica*. Locality unknown (HerbIMI 2024).

Mucor plumbeus Bonord.

Saprobic isolated on *Pinus caribaea*. Locality unknown (HerbIMI 2024).

Mucor racemosus Fresen.

Saprobic isolated on *Pinus caribaea*. Locality unknown (HerbIMI 2024).

Family RHIZOPODACEAE K. Voigt & P.M. Kirk
(1 genus, 2 species)

Genus *Rhizopus* Ehrenb. (2 species)

Rhizopus arrhizus A. Fisch.

Parasitic on *Phaseolus vulgaris*. Estelí, Jinotega, León, Matagalpa, Rivas (Carcache 1999: 41, as *Rhizopus oryzae*, Martínez-García 2019: 16, as *R. oryzae*).

Rhizopus stolonifer (Ehrenb.) Vuill.

Parasitic on *Allium cepa*, *Gossypium hirsutum*, *Zea mays*. Estelí, Jinotega, Matagalpa, Rivas (Carcache 1999: 45, IPSA 2021:11).

Phylum ROZELLOMYCOTA Doweld

ROZELLOMYCOTA genera *incertae sedis*

Genus *Rozella* Cornu (1 species)

Rozella allomycetis (Doweld) Letcher

Parasitic on *Allomyces* sp. Atlántico Sur (Sparrow 1960: 178).

FUNGUS-LIKE ORGANISMS

Phylum MYXOMYCOTA Traub

Class MYXOMYCETES G. Winter

Subclass CERATIOMYXOMYCETIDAE G.W. Martin ex G.W. Martin & Alexop.

Order CERATIOMYXALES G.W. Martin ex M.L. Farr & Alexop.
(1 family, 1 genus, 1 species)

Family CERATIOMYXACEAE J. Schröt.
(1 genus, 1 species)

Genus *Ceratiomyxa* J. Schröt. (1 species)

Ceratiomyxa fruticulosa T. Macbr.

Myxomycetes, saprobic on rotten wood. León, Río San Juan (MacBride & Smith 1896: 73, as *Ceratiomyxa mucida*, Farr 1976: 18, Lado & Wrigley de Basanta 2008: 219, Ubau-Matamoros 2016a: 32).

Subclass MYXOGASTROMYCETIDAE G.W. Martin

Order CRIBRARIALES T. Macbr.
(3 families, 4 genera, 6 species)

Family CRIBRARIACEAE Corda
(1 genus, 1 species)

Genus *Cribraria* Pers. (1 species)

Cribraria cancellata (Batsch) Nann.-Bremek.

Myxomycetes, saprobic on dead wood. Río San Juan (MacBride 1893: 378, as *Cribraria exilis*, Farr 1976: 42, as *Dictydium cancellatum*, Lado & Wrigley de Basanta 2008: 221).

Family DICTYDIAETHALIACEAE Luer. ss.
(1 genus, 1 species)

Genus *Dictydiaethalium* Rostaf. (1 species)

Dictydiaethalium plumbeum (Schumacher) Rostaf. ex Lister

Myxomycetes, saprobic on wood. Rivas (MacBride 1893: 378, as *Clathroptychium rugulosum*, Farr 1976: 33, Lado & Wrigley de Basanta 2008: 222).

Family RETICULARIACEAE Chevall. ex Corda
(2 genera, 4 species)

Genus *Lycogala* Adans. (3 species)

Lycogala conicum Pers.

Myxomycetes, saprobic on rotten wood. Río San Juan (MacBride & Smith 1896: 74, Farr 1976: 34, Lado & Wrigley de Basanta 2008: 229).

Lycogala epidendrum (J.C. Buxb. ex L.) Fr.

Myxomycetes, saprobic on dead wood. Granada, León, Rivas, Río San Juan (MacBride 1893: 379, MacBride & Smith 1896: 73, Farr 1976: 35, Lado & Wrigley de Basanta 2008: 229, Ubau-Matamoros 2016a: 32).

Lycogala exiguum Morgan

Myxomycetes, saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Genus *Tubifera* J.F. Gmel. (1 species)

Tubifera microsperma (Berk. & M.A. Curtis) G.W. Martin

Myxomycetes, saprobic on rotten wood. León (MacBride & Smith 1896: 73, as *Tubulina stipitata*, Farr 1976: 32, Lado & Wrigley de Basanta 2008: 238).

Order TRICHIALES T. Macbr.
(2 families, 5 genera, 10 species)

Family ARCYRIACEAE Rostaf. ex Cooke
(2 genera, 5 species)

Genus *Arcyria* F.H. Wigg. (3 species)

Arcyria cinerea (Bull.) Pers.

Myxomycetes, saprobic on dead wood. Rivas, Río San Juan (MacBride 1893: 379, as *Arcyria digitata*, MacBride & Smith 1896: 73, as *A. digitata*, Farr 1976: 69, Lado & Wrigley de Basanta 2008: 217).

Arcyria denudata (L.) Wettst.

Myxomycetes, saprobic on dead wood. León, Rivas, Río San Juan (MacBride 1893: 379, as *Arcyria punicea*, MacBride & Smith 1896: 73, as *A. punicea*, Farr 1976: 71, Lado & Wrigley de Basanta 2008: 217).

Arcyria obvelata (Oeder) Onsberg

Myxomycetes, saprobic on wood. Río San Juan (MyCoPortal 2024 as *Arcyria nutans*).

Genus *Perichaena* Fr. (2 species)

Perichaena chrysosperma (Curr.) Lister

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 379, as *Cornuvia wrightii*, Farr 1976: 61, Lado & Wrigley de Basanta 2008: 231).

Perichaena depressa Lib.

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 379, Farr 1976: 63, Lado & Wrigley de Basanta 2008: 231).

Family TRICHIACEAE Chevall.
(3 genera, 5 species)

Genus *Hemitrichia* Rostaf. (3 species)

Hemitrichia calyculata (Speg.) M.L. Farr

Myxomycetes, saprobic on dead wood. Locality unknown (Farr 1976: 96, Lado & Wrigley de Basanta 2008: 227).

Hemitrichia clavata (Pers.) Rostaf.

Myxomycetes, saprobic on dead wood. Rivas, Río San Juan (MacBride 1893: 380, as *Hemiarcyria clavata*, MacBride & Smith 1896: 74, Farr 1976: 97).

***Hemitrichia serpula* (Scop.) Rostaf.**

Myxomycetes, saprobic on dead wood. Carazo, Rivas, Río San Juan (MacBride 1893: 380, as *Hemiarcyria serpula*, MacBride & Smith 1896: 74, Farr 1976: 100, González & Orozco 2006: 1, Lado & Wrigley de Basanta 2008: 227).

Genus *Metatrichia* Ing (1 species)

***Metatrichia vesparia* (Batsch) Nann.-Bremek. ex G.W. Martin & Alexop.**

Myxomycetes, saprobic on dead wood. Rivas, Río San Juan (MacBride 1893: 380, as *Hemiarcyria rubiformis*, MacBride & Smith 1896: 74, as *H. rubiformis*, Farr 1976: 83, Lado & Wrigley de Basanta 2008: 230).

Genus *Trichia* Haller (1 species)

***Trichia decipiens* (Pers.) T. Macbr.**

Specimens examined: **Nicaragua:** Chinandega, Chichigalpa, Ingenio San Antonio (12° 33'04"N, 87° 02'13"W, 52 m), 25 Nov. 2022, R. Soza (no coll).

Myxomycetes, saprobic on dead wood. Chinandega (New country record).

**Order PHYSARALES T. Macbr.
(2 families, 4 genera, 16 species)**

**Family DIDYMIACEAE Rostaf. ex Cooke
(1 genus, 3 species)**

Genus *Didymium* Schrad. (3 species)

***Didymium intermedium* J. Schröt.**

Myxomycetes, saprobic on dead leaves. Río San Juan (Martin & Alexopoulos 1969: 387, Farr 1976: 225, Lado & Wrigley de Basanta 2008: 224).

***Didymium iridis* (Ditmar) Fr.**

Myxomycetes, saprobic on a banana peel. Río San Juan (MacBride & Smith 1896: 74, as *Didymium proximum*, Farr 1976: 226, Lado & Wrigley de Basanta 2008: 225).

***Didymium squamulosum* (Alb. & Schwein.) Fr.**

Myxomycetes, saprobic on small stems of a piperaceous plant. Río San Juan (MacBride & Smith 1896: 74, Farr 1976: 232, Lado & Wrigley de Basanta 2008: 225).

Family PHYSARACEAE Chevall.
(3 genera, 13 species)

Genus *Fuligo* Haller (1 species)

Fuligo septica (L.) F.H. Wigg.

Myxomycetes, saprobic on rotten wood. Rivas (MacBride 1893: 383, as *Fuligo varians*, Farr 1976: 110, Lado & Wrigley de Basanta 2008: 226).

Genus *Physarella* Peck (1 species)

Physarella oblonga (Berk. & M.A. Curtis) Morgan

Myxomycetes, saprobic on dead wood. Rivas, Río San Juan (MacBride 1893: 382, as *Tilmadoche oblonga*, MacBride & Smith 1896: 75, as *Physarella mirabilis*, Farr 1976: 192, Lado & Wrigley de Basanta 2008: 231).

Genus *Physarum* Pers. (11 species)

Physarum cinereum (Batsch) Pers.

Myxomycetes, saprobic on dead leaves. Locality unknown (Farr 1976: 128, Lado & Wrigley de Basanta 2008: 232).

Physarum compressum Alb. & Schwein.

Myxomycetes, saprobic on dead wood. Río San Juan (MyCoPortal 2024).

Physarum contextum (Pers.) Pers.

Myxomycetes, saprobic on dead wood. Locality unknown (MacBride 1922: 56, Farr 1976: 131, Lado & Wrigley de Basanta 2008: 232).

Physarum didermoides (Ach. ex Pers.) Rostaf.

Myxomycetes, saprobic on dead wood. Rivas (MyCoPortal 2024).

Physarum galbeum Wingate

Myxomycetes, saprobic on dead wood. Río San Juan (MacBride & Smith 1896: 75, Farr 1976: 140, Lado & Wrigley de Basanta 2008: 232).

Physarum nicaraguense T. Macbr.

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 382, Torrend 1908: 138, Farr 1976: 149, Lado & Wrigley de Basanta 2008: 233).

Physarum nucleatum Rex

Myxomycetes, saprobic on dead wood. Locality unknown (MacBride 1922: 72, Farr 1976: 150, Lado & Wrigley de Basanta 2008: 234).

***Physarum polycephalum* Schwein.**

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 382, Farr 1976: 155, Lado & Wrigley de Basanta 2008: 234).

***Physarum stellatum* (Masse) G.W. Martin**

Myxomycetes, saprobic on dead wood and bark. León, Río San Juan (MacBride 1893: 382, as *Didymium barteri*, MacBride & Smith 1896: 75, as *Tilmadoche compacta*, Farr 1976: 162, Lado & Wrigley de Basanta 2008: 234).

***Physarum tenerum* Rex**

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 383, as *Physarum maculatum*, Farr 1976: 166, Lado & Wrigley de Basanta 2008: 235).

***Physarum viride* (Bull.) Pers.**

Myxomycetes, saprobic on dead wood. Locality unknown (MacBride 1922: 98, Farr 1976: 170, Lado & Wrigley de Basanta 2008: 235).

Subclass STEMONITOMYCETIDAE I.K. Ross

**Order STEMONITIDALES T. Macbr.
(1 family, 4 genera, 8 species)**

**Family STEMONITIDACEAE Fr.
(4 genera, 8 species)**

Genus *Collaria* Nann.-Bremek. (1 species)

***Collaria arcyrionema* (Rostaf.) Nann.-Bremek. ex Lado**

Myxomycetes, saprobic on a log. Río San Juan (MacBride 1893: 380, as *Comatricha shimekiana*, Farr 1976: 249, as *Lamproderma arcyrionema*, Lado & Wrigley de Basanta 2008: 219).

Genus *Stemonaria* Nann.-Bremek., R. Sharma & Y. Yamam. (1 species)

***Stemonaria longa* (Peck) Nann.-Bremek., R. Sharma & Y. Yamam.**

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 380, as *Comatricha longa*, Farr 1976: 259, as *C. longa*, Lado & Wrigley de Basanta 2008: 236).

Genus *Stemonitis* Gled. (5 species)

***Stemonitis axifera* (Bull.) T. Macbr.**

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 381, as *Stemonitis ferruginea*, Farr 1976: 269, Lado & Wrigley de Basanta 2008: 236).

***Stemonitis fusca* Roth**

Myxomycetes, saprobic on dead wood. Rivas, Río San Juan (MacBride 1893: 381, as *Stemonitis castillensis*, MacBride & Smith 1896: 74, as *S. maxima*, Farr 1976: 271, Lado & Wrigley de Basanta 2008: 236).

***Stemonitis herbatica* Peck**

Myxomycetes, saprobic on dead wood. Rivas (MyCoPortal 2024).

***Stemonitis smithii* T. Macbr.**

Myxomycetes, saprobic on dead wood. León, Río San Juan (MacBride 1893: 381, MacBride & Smith 1896: 74, Farr 1976: 270, as *Stemonitis axifera* var. *smithii*).

***Stemonitis splendens* Rostaf.**

Myxomycetes, saprobic on dead wood. Rivas (MacBride 1893: 381, Farr 1976: 276, Lado & Wrigley de Basanta 2008: 236).

Genus *Stemonitopsis* (Nann.-Bremek.) Nann.-Bremek. (1 species)

***Stemonitopsis typhina* (F.H. Wigg.) Nann.-Bremek.**

Myxomycetes, saprobic on rotten wood. Río San Juan (MacBride 1893: 381, as *Comatricha typhina*, MacBride & Smith 1896: 74, as *C. typhina*, Farr 1976: 265, as *C. typhina*, Lado & Wrigley de Basanta 2008: 237).

Phylum OOMYCOTA Arx

Class PERONOSPOROMYCETES M.W. Dick

Order PERONOSPORALES A.N. Beketov

(2 families, 9 genera, 28 species)

Family PERONOSPORACEAE de Bary

(7 genera, 21 species)

Genus *Hyaloperonospora* Constant. (1 species)

***Hyaloperonospora parasitica* (Pers.) Constant.**

Parasitic on *Citrullus lanatus*. Locality unknown (McGuire & Crandall 1967: 142, as *Peronospora parasitica*).

Genus *Peronosclerospora* (S. Ito) Hara (3 species)

***Peronosclerospora maydis* (Racib.) C.G. Shaw**

Parasitic on *Zea mays*. Locality unknown (IPSA 2021: 9).

Peronosclerospora sacchari (T. Miyake) Shirai & Hará

Parasitic on *Saccharum officinarum*. Locality unknown (McGuire & Crandall 1967: 128, as *Sclerospora sacchari*).

Peronosclerospora sorghi (W. Weston & Uppal) C.G. Shaw

Parasitic on *Sorghum bicolor*. Locality unknown (IPSA 2021: 9).

Genus *Peronospora* Corda (2 species)

Peronospora destructor (Berk.) Casp. ex Berk.

Parasitic on *Allium cepa*, *Allium sativum*, *Citrullus lanatus*, *Cucumis melo*. Locality unknown (McGuire & Crandall 1967: 140 as *Peronospora schleidenii*, IPSA 2021: 9).

Peronospora hyoscyami de Bary

Parasitic on *Nicotiana tabacum*. Locality unknown (IPSA 2021: 9, as *Peronospora hyoscyami* f. *tabacina*).

Genus *Phytophthora* de Bary (10 species)

Phytophthora angustata T. Jung, L. Garcia, Mendieta-Araica & Balci

Isolated from naturally fallen necrotic leaves. Granada (endemic) (Jung *et al.* 2024: 345, fig. 69a-x).

Phytophthora calidophila T. Jung, Balci, L. Garcia & Mendieta-Araica

Isolated from naturally fallen necrotic leaves. Matagalpa (endemic) (Jung *et al.* 2024: 283, fig. 27a-z, aa).

Phytophthora cinnamomi Rands

Parasitic on *Ananas comosus*, *Persea americana*. Locality unknown (IPSA 2021: 9).

Phytophthora citrophthora (R.E. Sm. & E.H. Sm.) Leonian

Parasitic on *Citrus* sp. Locality unknown (IPSA 2021: 9).

Phytophthora infestans (Mont.) de Bary

Parasitic on *Capsicum annuum*, *Ipomoea batatas*, *Solanum lycopersicum*, *Solanum tuberosum*. Jinotega, Managua, Matagalpa (Litzenberger & Stevenson 1957: 12, McGuire & Crandall 1967: 125, IPSA 2021: 9).

Phytophthora multiplex T. Jung, Balci, Broders & M. Horta Jung

Isolated from fallen leaves. Granada (Jung *et al.* 2024: 290).

Phytophthora nicotianae Breda de Haan

Parasitic on *Ananas comosus*, *Citrus* sp., *Nicotiana tabacum*. Locality unknown (McGuire & Crandall 1967: 133, as *Phytophthora parasitica*, IPSA 2021: 10).

Phytophthora obovoidea T. Jung, Y. Balci, L. Garcia & B. Mendieta-Araica
Isolated from naturally fallen necrotic leaves. Granada, Matagalpa, Rivas (Jung *et al.* 2024: 294, fig. 33a-y).

Phytophthora palmivora (E.J. Butler) E.J. Butler
Parasitic on *Carica papaya*, *Cocos nucifera*, *Elaeis guineensis*, *Theobroma cacao*. Atlántico Sur (Gómez *et al.* 1990: 3, McGuire & Crandall 1967: 132, Wellman 1977: 130, IPSA 2019: 10).

Phytophthora tropicalis Aragaki & J.Y. Uchida
Isolated from naturally fallen necrotic leaves. Carazo, Granada (Jung *et al.* 2024: 298, fig. 35a-v).

Genus *Phytopythium* Abad, de Cock, Bala, A. Lodhi & Lévesque (3 species)

Phytopythium chamaehyphon (Sideris) Abad, de Cock, Bala, A. Lodhi & Lévesque
Isolated from rhizosphere soil of *Xanthosoma sagittifolium*. Atlántico Sur, Río San Juan (Ramírez-Reynosa 2021: 25).

Phytopythium helicoides (Drechsler) Abad, de Cock, Bala, A. Lodhi & Lévesque
Isolated from rhizosphere soil of *Xanthosoma sagittifolium*. Río San Juan (Ramírez-Reynosa 2021: 25).

Phytopythium vexans (de Bary) Abad, de Cock, Bala, A.M. Lodhi & Lévesque
Isolated from rhizosphere of *Xanthosoma sagittifolium*. Atlántico Sur (Ramírez-Reynosa 2021: 25).

Genus *Pseudoperonospora* Rostov. (1 species)

Pseudoperonospora cubensis (Berk. & M.A. Curtis) Rostovzev
Parasitic on *Citrullus lanatus*, *Cucumis melo*, *Cucumis sativus*, *Cucurbita pepo*. Managua (Litzenberger & Stevenson 1957: 6, McGuire & Crandall 1967: 142).

Genus *Sclerophthora* Thirum., C.G. Shaw & Naras. (1 species)

Sclerophthora macrospora (Sacc.) Thirum., C.G. Shaw & Naras.
Parasitic on *Zea mays*. Locality unknown (IPSA 2021: 11).

Family PYTHIACEAE Schroet.
(2 genera, 7 species)

Genus *Globisporangium* Uzuhashi, Tojo & Kakish. (2 species)

Globisporangium splendens (Hans Braun) Uzuhashi, Tojo & Kakish.
Parasitic on *Ananas comosus*. Atlántico Sur (Gómez *et al.* 1990: 3, as *Pythium splendens*).

Globisporangium ultimum (Trow) Uzuhashi, Tojo & Kakish.
Parasitic on *Sesamum indicum*. Locality unknown (IPSA 2021: 11, as *Pythium ultimum*).

Genus *Pythium* Pringsh. (5 species)

Pythium aphanidermatum (Edson) Fitzp.
Parasitic on *Phaseolus vulgaris*, *Zea mays*. Locality unknown (IPSA 2021: 10).

Pythium arrhenomanes Drechsler
Parasitic on *Saccharum officinarum*. Locality unknown (IPSA 2021: 10).

Pythium deliense Meurs
Isolated from rhizosphere soil of *Xanthosoma sagittifolium* and *Nicotiana tabacum*. Atlántico Sur (Drechsler 1960: 17, as *Pythium indicum*, van der Plaats-Niterink 1981: 51, Ramírez-Reynosa 2021: 25).

Pythium insidiosum De Cock, L. Mend., A.A. Padhye, Ajello & Kaufman
Unknown host. Locality unknown (Rivierre *et al.* 2005: 479).

Pythium myriotylum Drechsler
Parasitic on *Colocasia esculenta*, *Xanthosoma sagittifolium*. Locality unknown (IPSA 2021: 10).

AN ANNOTATED CHECKLIST OF FUNGI AND FUNGUS-LIKE TAXA OF NICARAGUA (No estoy Seguro que sea necesario esta seccion, repite el catalogo de forma condensada).

ASCOMYCETES (228 SPECIES)

Ascomycota

Pezizomycotina

Dothideomycetes

Dothideomycetidae

Myriangiales

Elsinoaceae

Elsinoë brasiliensis (revisar si se debe poner acento. GBIF no pone acento.

<https://www.gbif.org/pt/species/6107883>)

Elsinoë fawcettii

Elsinoë mangiferae

Elsinoë perseae

Elsinoë phaseoli

Elsinoë poinsettiae

Elsinoë psidii

Myriangiaceae

Myriangium duriae

Pleosporomycetidae

Hysteriales

Hysteriaceae

Psilogonium clavispurum

Rhytidhysterion rufulum

Pleosporales

Astrosphaeriellaceae

Astrosphaeriella uberina

Mycopepon smithii

Melanommataceae

Byssosphaeria diffusa

Byssosphaeria rhodomphala

Byssosphaeria schiedermayriana

Phaeosphaeriaceae

Phaeosphaeria oryzae

Pleosporaceae

Pleospora herbarum

Roussoellaceae

Immotthia atrograna

Sporormiaceae

Sporormiella minima

Family incertae sedis

Ostropella albocincta

Subclass incertae sedis

Asterinales

Asterinaceae

Asterina bullata

Lembosiaceae

Lembosia tenella

Parmulariales

Parmulariaceae

Hysterostomella tetracerae

Venturiales

Venturiaceae

Dimeriella sacchari

Order incertae sedis

Dysrhynchaceae

Dysrhynchis oligotricha

Parodiellaceae

Parodiella perisporioides

Phaeodimeriellaceae

Phaeodimeriella trinitensis

Eurotiomycetes

Chaetothyriomycetidae

Chaetothyriales

Coccodiniaceae

Limacinula musicola

Laboulbeniomycetes

Laboulbeniales

Ceratomycetaceae

Autoicomycetes falcatus

Ceratomyces ansatus

Laboulbeniaceae

Chaetomyces pinophili

Cryptandromyces pinguis

Cryptandromyces tricornis

Gloeandromyces dickii

Laboulbenia cristata

Laboulbenia dentifera

Laboulbenia galeritae
Laboulbenia melanotheca
Laboulbenia mexicana
Peyritsiella vulgata
Prolixandromyces lingulatus
Prolixandromyces rhinoceralis
Prolixandromyces veliae
Rickia apiculifera
Rickia bifida
Rickia passalina
Triceromyces poissonii
Lecanoromycetes
Lecanoromycetidae
Micropeltidales
Micropeltidaceae
Micropeltis subapplanata
Leotiomyces
Helotiales
Ascodichaenaceae
Ascodichaena rugosa
Cenangiaceae
Encoelia nicaraguensis
Chlorociboriaceae
Chlorociboria aeruginascens
Erysiphaceae
Blumeria graminis
Erysiphe betae
Erysiphe polygoni
Erysiphe quercicola
Golovinomyces cichoracearum
Leveillula taurica
Podosphaera macularis
Podosphaera pannosa
Podosphaera xanthii
Gelatinodiscaceae
Ascocoryne sarcoides
Lachnaceae
Erioscyphella abnormis
Sclerotiniaceae
Sclerotinia sclerotiorum
Leotiales
Leotiaceae
Leotia lubrica
Rhytismatales
Rhytismataceae
Lophodermium platyplacum

Ploioderma hedgcockii
Pezizomycetes
Pezizales
Ascobolaceae
Ascobolus scatigenus
Glaziellaceae
Glaziella aurantiaca
Helvellaceae
Helvella atra
Pyronemataceae
Anthracobia melaloma
Scutellinia blumenaviensis
Scutellinia cubensis
Scutellinia erinaceus
Scutellinia scutellata
Sarcoscyphaceae
Cookeina speciosa
Cookeina tricholoma
Cookeina venezuelae
Geodina guanacastensis
Phillipsia domingensis
Phillipsia lutea
Sarcosomataceae
Pseudoplectania carranzae
Sordariomycetes
Diaporthomycetidae
Jobellisiales
Jobellisiaceae
Jobellisia nicaraguensis
Magnaporthales
Magnaporthaceae
Gaeumannomyces graminis
Ophioceraceae
Ophioceras castillensis
Hypocreomycetidae
Coronophorales
Nitschkiaceae
Acanthonitschkea horrida
Fracchiacea heterogenea
Scortechiniaceae
Scortechinia culcitella
Hypocreales
Clavicipitaceae
Balansia nigricans
Balansia oryzae-sativae
Balansia strangulans

Claviceps tripsaci
Moelleriella epiphylla
Moelleriella phyllogena
Moelleriella turbinata
Myriogenospora atramentosa
Myriogenospora bresadolana
Myriogenospora paspali
Cordycipitaceae
Ascopolyporus philodendri
Cordyceps militaris
Hypocreaceae
Hypocrea alutacea
Hypocrea substipitata
Hypomyces lactifluorum
Hypomyces microspermus
Nectriaceae
Calostilbe striispora
Corallomycetella elegans
Corallonectria jatrophae
Cosmospora episphaeria
Cosmospora flavoviridis
Ophiocordycipitaceae
Ophiocordyceps dipterigena
Ophiocordyceps melolonthae
Microascales
Ceratocystidaceae
Ceratocystis fimbriata
Sordariomycetidae
Boliniales
Boliniaceae
Camarops biporosa
Camarops polysperma
Meliolales
Meliolaceae
Irenopsis selaginellarum
Meliola furcata
Meliola musae
Meliola nicaraguensis
Meliola trichostroma
Phyllachorales
Phyllachoraceae
Phyllachora bonariensis
Phyllachora cynodontis
Phyllachora inclusa
Phyllachora maydis
Phyllachora minutissima

Phyllachora permeans
Telimenaceae
Telimenia balansae
Telimenia tenuis
Sordariales
Chaetomiaceae
Amesia nigricolor
Arcopilus cupreus
Chaetomium convolutum
Chaetomium globosum
Chrysocorona lucknowensis
Collariella bostrychodes
Collariella gracilis
Corynascus sepedonium
Dichotomopilus dolichotrichus
Dichotomopilus funicola
Dichotomopilus indicus
Dichotomopilus reflexus
Ovatospora brasiliensis
Ovatospora medusarum
Subramaniula fusispora
Thermothielavioides terrestris
Sordariaceae
Sordaria fimicola
Xylariomycetidae
Amphisphaeriales
Hyponectriaceae
Physalospora wildemaniana
Xylariales
Diatrypaceae
Diatrypella pauper
Eutypa flavovirens
Eutypella stellulata
Graphostromataceae
Biscogniauxia capnodes
Biscogniauxia nummularia
Camillea bilabiata
Camillea cyclops
Camillea fossulata
Camillea heterostoma
Camillea labellum
Camillea leprieurii
Camillea mucronata
Camillea tinctor
Hypoxylaceae
Annulohypoxylon annulatum

Annulohypoxyton pouceanum
Annulohypoxyton stygium
Annulohypoxyton thouarsianum
Annulohypoxyton truncatum
Daldinia caldariorum
Daldinia childiae
Daldinia clavata
Daldinia eschscholtzii
Daldinia placentiformis
Entonaema liquescens
Hypoxyton fragiforme
Hypoxyton haematostroma
Hypoxyton hypomiltum
Hypoxyton investiens
Hypoxyton lenormandii
Hypoxyton perforatum
Hypoxyton rubiginosum
Hypoxyton subgilvum
Jackrogersella multiformis
Phylacia globosa
Phylacia poculiformis
Phylacia sagrana
Phylacia turbinata
Pyrenopolyporus hunteri
Pyrenopolyporus nicaraguensis
Theissenia pyrenocrata
Thuemenella cubispora
Lopadostomataceae
Creosphaeria sassafras
Jumillera hypophlaea
Xylariaceae
Dematophora arcuata
Dematophora bunodes
Dematophora gigantea
Dematophora pepo
Kretzschmaria clavus
Kretzschmaria deusta
Kretzschmaria pavimentosa
Kretzschmaria zonata
Kretzschmariella culmorum
Nemania bipapillata
Nemania confluens
Nemania diffusa
Penzigia turbinata
Rosellinia gigaspora
Xylaria anisopleura

Xylaria arbuscula
Xylaria brevipes
Xylaria corniformis
Xylaria cornu-damae
Xylaria cubensis
Xylaria curta
Xylaria dichotoma
Xylaria frustulosa
Xylaria gracillima
Xylaria guianensis
Xylaria heliscus
Xylaria hypoxyton
Xylaria longipes
Xylaria multiplex
Xylaria obovata
Xylaria olobapha
Xylaria polymorpha
Xylaria pumila
Xylaria rhytidophloea
Xylaria schweinitzii
Xylaria scruposa
Xylaria telfairii
Xylaria titan
Family incertae sedis
Stromatoneurospora phoenix
Xylobotryomycetes
Xylobotryales
Xylobotryaceae
Xylobotryum portentosum
Ascomycota incertae sedis
Orphanocoela maydis

COELOMYCETES (62 SPECIES)

Ascomycota
Pezizomycotina
Dothideomycetes
Dothideomycetidae
Capnodiales
Capnodiaceae
Capnodium coffeae
Mycosphaerellales
Mycosphaerellaceae
Dothistroma septosporum
Lecanosticta guatemalensis
Lecanosticta jani

Septoria dianthi
Septoria lycopersici
Septoria vignae
Pleosporomycetidae
Pleosporales
Didymellaceae
Allophoma nicaraguensis
Allophoma tropica
Ascochyta malvicola
Ascochyta phaseolorum
Ascochyta sorghi
Boeremia exigua
Didymella maydis
Epicoccum sorghinum
Phoma costaricensis
Stagonosporopsis caricae
Leptosphaeriaceae
Sphaerellopsis filum
Massarinaceae
Stagonospora sacchari
Neocamarosporiaceae
Neocamarosporium betae
Dothideomycetes incertae sedis
Botryosphaeriales
Botryosphaeriaceae
Lasiodiplodia theobromae
Macrophomina phaseolina
Phyllostictaceae
Phyllosticta batatas
Phyllosticta bixina
Phyllosticta coffeicola
Phyllosticta gossypina
Phyllosticta musae
Phyllosticta nicotianae
Phyllosticta oryzae
Phyllosticta phaseolina
Planistromellaceae
Kellermania macrospora
Leotiomyces
Phacidiales
Phacidiaceae
Allantophomopsiella pseudotsugae
Sordariomycetes
Diaporthomycetidae
Diaporthales
Cytosporaceae

Cytospora pinastri
Cytospora pini
Cytospora sacchari
Diaporthaceae
Diaporthe citri
Diaporthe phaseolorum
Diaporthe rudis
Phomopsis cedrelae
Stenocarpella maydis
Erythrogloeaceae
Erythrogloeum pini-acicola
Hypocreomycetidae
Glomerellales
Glomerellaceae
Colletotrichum capsici
Colletotrichum coccodes
Colletotrichum coffeanum
Colletotrichum dematium
Colletotrichum falcatum
Colletotrichum gloeosporioides
Colletotrichum gossypii
Colletotrichum graminicola
Colletotrichum lindemuthianum
Colletotrichum lineola
Colletotrichum lini
Colletotrichum musae
Colletotrichum nigrum
Colletotrichum orbiculare
Colletotrichum truncatum
Microascales
Microascaceae
Pithoascus nidicola
Sordariomycetidae
Chaetosphaeriales
Chaetosphaeriaceae
Dinemasporium strigosum
Xylariomycetidae
Amphisphaeriales
Sporocadaceae
Pestalotiopsis mangiferae
Pestalotiopsis palmarum
Ascomycota incertae sedis
Aristastoma oeconomicum
Chaetoseptoria wellmanii

HYPHOMYCETES (216 SPECIES)

Ascomycota**Pezizomycotina****Dothideomycetes****Dothideomycetidae****Capnodiales****Capnodiaceae***Leptoxylum fumago***Cladosporiales****Cladosporiaceae***Cladosporium cucumerinum**Cladosporium herbarum**Cladosporium oxysporum**Cladosporium tenuissimum***Mycosphaerellales****Extremaceae***Castanedospora pachyanthicola***Mycosphaerellaceae***Asperisporium caricae**Catenulocercospora fusimaculans**Cercospora beticola**Cercospora canescens**Cercospora citrullina**Cercospora coffeicola**Cercospora gossypina**Cercospora janseana**Cercospora kikuchii**Cercospora lactucae-sativae**Cercospora longipes**Cercospora physalidis**Cercospora psoraleae-bituminosae**Cercospora ricinella**Cercospora sapindi**Cercospora sesami**Cercospora sorghi**Cercospora zeae-maydis**Cercospora zebrina**Cercospora zinniae**Clarohilum henningsii**Nothopassalora personata**Passalora arachidicola**Passalora caladii**Passalora fulva**Passalora koepkei**Passalora manihotis**Passalora sojina**Passalora vaginae**Pseudocercospora bixae**Pseudocercospora cruenta**Pseudocercospora fijiensis**Pseudocercospora griseola**Pseudocercospora musae**Pseudocercospora pini-densiflorae**Pseudocercospora purpurea**Pseudocercospora stizolobii**Pseudocercospora ulei**Ramularia phaseoli**Ramularia pistiae**Ramulariopsis gossypii**Ramulispora sorghi**Scolecotigmina palmivora***Teratosphaeriaceae***Acrodontium crateriforme**Stenella citri-grisea***Pleosporomycetidae****Pleosporales****Corynesporascaceae***Corynespora cassiicola**Corynespora sesameum**Corynespora torulosa***Dictyosporiaceae***Dendryphiella vinosa***Didymosphaeriaceae***Pseudopithomyces chartarum**Pseudopithomyces maydis**Pseudopithomyces sacchari***Massariaceae***Helminthosporium sesami**Helminthosporium solani***Periconiaceae***Periconia byssoides***Pleosporaceae***Alternaria alternata**Alternaria atra**Alternaria brassicae**Alternaria chartarum**Alternaria citri**Alternaria cucumerina**Alternaria dauci**Alternaria flagelloidea**Alternaria macrospora**Alternaria padwickii*

Alternaria porri
Alternaria ricini
Alternaria sesami
Alternaria solani
Alternaria tenuissima
Bipolaris bicolor
Bipolaris cookei
Bipolaris cynodontis
Bipolaris gigantea
Bipolaris heveae
Bipolaris maydis
Bipolaris oryzae
Bipolaris sacchari
Bipolaris sorokiniana
Curvularia cymbopogonis
Curvularia hawaiiensis
Curvularia lunata
Curvularia ravenelii
Curvularia verruculosa
Exserohilum turcicum
Pyrenophora tritici-repentis
Tetraplophaeriaceae
Tetraploa aristata
Torulaceae
Torula herbarum
Torula verrucospora
Family incertae sedis
Repetophragma cubense
Subclass incertae sedis
Kirschsteiniotiales
Family incertae sedis
Brachysporiella gayana
Brachysporiella setosa
Venturiales
Sympoventuriaceae
Ochroconis humicola
Eurotiomycetes
Eurotiomycetidae
Eurotiales
Aspergillaceae
Aspergillus awamori
Aspergillus caesiellus
Aspergillus candidus
Aspergillus flavus
Aspergillus fumigatus
Aspergillus glaucus

Aspergillus nidulans
Aspergillus niger
Aspergillus ochraceus
Aspergillus oryzae
Aspergillus parasiticus
Aspergillus spinosus
Aspergillus sydowii
Aspergillus tamarii
Aspergillus terreus
Aspergillus ustus
Aspergillus wentii
Penicillium atosanguineum
Penicillium brefeldianum
Penicillium brevicompactum
Penicillium chrysogenum
Penicillium citrinum
Penicillium dierckxii
Penicillium digitatum
Penicillium expansum
Penicillium gladioli
Penicillium janthinellum
Penicillium javanicum
Penicillium parvum
Penicillium pulvillorum
Penicillium simplicissimum
Penicillium verrucosum
Penicillium viridicatum
Trichocomaceae
Talaromyces flavus
Talaromyces rugulosus
Talaromyces variabilis
Sclerococomycetidae
Sclerococcales
Dactylosporaceae
Fusichalara novae-zelandiae
Leotiomycetes
Helotiales
Ploettnerulaceae
Cadophora gregata
Sclerotiniaceae
Amphobotrys ricini
Botrytis cinerea
Orbiliomycetes
Orbiliales
Orbiliaceae
Arthrobotrys musiformis

Dactylellina haptotyla
Sordariomycetes
Diaporthomycetidae
Distoseptisporales
Distoseptisporaceae
Distoseptispora adscendens
Magnaporthales
Magnaporthaceae
Magnaporthiopsis maydis
Nakataea oryzae
Pyriculariaceae
Neocordana musae
Pyricularia grisea
Pyricularia oryzae
Sporidesmiales
Sporidesmiaceae
Sporidesmium nodipes
Hypocreomycetidae
Glomerellales
Plectosphaerellaceae
Musicillium theobromae
Verticillium alboatrum
Hypocreales
Bionectriaceae
Gliomastix roseogrisea
Clavicipitaceae
Metarhizium anisopliae
Metarhizium rileyi
Ustilaginoidea virens
Cordycipitaceae
Akanthomyces lecanii
Beauveria bassiana
Hypocreaceae
Gliocladium caespitosum
Myrotheciomycetaceae
Trichothecium roseum
Nectriaceae
Albonectria rigidiuscula
Bisifusarium dimerum
Fusarium acuminatum Ellis
Fusarium chlamydosporum
Fusarium circinatum
Fusarium equiseti
Fusarium fujikuroi
Fusarium graminearum
Fusarium incarnatum

Fusarium lateritium
Fusarium musae
Fusarium oxysporum
Fusarium poae
Fusarium proliferatum
Fusarium sambucinum
Fusarium subglutinans
Fusarium tricinctum
Fusarium verticillioides
Fusicolla merismoides
Neocosmospora phaseoli
Neocosmospora solani
Neocosmospora vasinfecta
Ophiocordycipitaceae
Harposporium harposporiferum
Purpureocillium lilacinum
Sarocladiaceae
Sarocladium oryzae
Sarocladium strictum
Stachybotryaceae
Paramyrothecium roridum
Microascales
Ceratocystidaceae
Thielaviopsis paradoxa
Microascaceae
Microascus paisii
Parascedosporium putredinis
Pisorisporiomycetidae
Pisorisporiales
Family incertae sedis
Brocciosphaera microspora
Savoryellomycetidae
Savoryellales
Savoryellaceae
Rhexoacrodictys erecta
Sordariomycetidae
Cephalothecales
Cephalothecaceae
Phialemonium inflatum
Chaetosphaeriales
Chaetosphaeriaceae
Chloridium codinaeoides
Cryptophiale kakombensis
Sporoschisma juvenile
Xyladelphia pulchriseta
Coniochaetales

Cordanaceae*Cordana abramovii***Sordariales****Chaetomiaceae***Humicola fuscoatra***Xylariomycetidae****Amphisphaeriales****Apiosporaceae***Nigrospora oryzae**Nigrospora sacchari**Nigrospora sphaerica***Beltraniaceae***Beltrania rhombica***Xylariales****Cainiaceae***Vesiculozygosporium echinosporum***Microdochiaceae***Microdochium albescens**Microdochium nivale**Microdochium sorghi***Zygosporiaceae***Zygosporium masonii**Zygosporium oscheoides***Family incertae sedis***Melanographium citri***Sordariomycetes incertae sedis***Stanjehughesia curviapicis***Saccharomycotina****Saccharomycetes****Saccharomycetales****Dipodascaceae***Geotrichum candidum***Ascomycota incertae sedis***Corynesporopsis isabelicae**Helicofilia madrasensis**Pseudopetrakia kambakkamensis**Septosporiopsis elaeidis***Basidiomycota****Agaricomycotina****Agaricomycetes****Agaricales****Marasmiaceae***Moniliophthora roreri***Corticiales****Corticaceae***Tretopileus sphaerophorus***LICHENS (419 SPECIES)****Ascomycota****Pezizomycotina****Arthoniomycetes****Arthoniales****Arthoniaceae***Arthonia accolens**Arthonia circumtincta**Arthonia complanata**Arthonia cyanea**Arthonia interducta**Arthonia meizomorpha**Arthonia microsperma**Arthonia pseudopegraphina**Arthonia taediosa**Coniocarpon cinnabarinum**Cryptothecia phlyctidiformis**Cryptothecia subnidulans**Helicobolomyces cinnabarinula**Herpothallon roseocinctum**Herpothallon rubrocinctum**Tylophoron moderatum***Lecanographaceae***Lecanographa lyncea***Opegraphaceae***Opegrapha microsperma**Opegrapha millegrana**Opegrapha primana**Opegrapha vulgata***Roccellaceae***Cresponea flava**Cresponea melanocheiloides**Dichosporidium nigrocinctum**Mazosia dispersa**Mazosia longispora**Mazosia melanophthalma**Mazosia paupercula**Mazosia phyllosema**Mazosia pilosa**Mazosia praemorsa**Mazosia rotula***Family incertae sedis***Bactrospora incana**Bactrospora myriadea*

Candelariomycetes
Candelariomycetidae
Candelariales
Candelariaceae
Candelaria concolor
Dothideomycetes
Pleosporomycetidae
Pleosporales
Mycoporaceae
Mycoporum lacteum
Dothideomycetes incertae sedis
Eremithallales
Melaspileaceae
Melaspilea urceolata
Monoblastiales
Monoblastiaceae
Anisomeridium foliicola
Strigulales
Strigulaceae
Phyllobathelium firmum
Phyllobathelium nigrum
Puiggariella nemathora
Racoplaca maculata
Strigula antillarum
Strigula concreta
Strigula nitidula
Strigula smaragdula
Strigula viridis
Trypetheliales
Trypetheliaceae
Astrothelium aeneum
Astrothelium bicolor
Astrothelium cecidiogenum
Astrothelium diplocarpum
Astrothelium floridanum
Astrothelium megaspermum
Astrothelium nicaraguense
Astrothelium nitidiusculum
Astrothelium phlyctaena
Astrothelium robustum
Astrothelium subscoria
Astrothelium variolosum
Constrictolumina cinchonae
Pseudobogoriella hemisphaerica
Pseudobogoriella miculiformis
Pseudopyrenula cerei

Pseudopyrenula diluta
Pseudopyrenula subnudata
Trypethelium eluteriae
Eurotiomycetes
Chaetothyriomycetidae
Pyrenulales
Pyrenulaceae
Anthracotheicum prasinum
Pyrenula aggregata
Pyrenula bahiana
Pyrenula chilensis
Pyrenula chlorospila
Pyrenula cocoas
Pyrenula confinis
Pyrenula duplicans
Pyrenula globifera
Pyrenula leucostoma
Pyrenula mamillana
Pyrenula microcarpa
Pyrenula micromma
Pyrenula ochraceoflava
Pyrenula pyrenuloides
Pyrenula quassiicola
Pyrenula schiffneri
Pyrenula thelomorpha
Verrucariales
Verrucariaceae
Dermatocarpon miniatum
Phylloblastia amazonica
Mycocaliciomycetidae
Mycocaliciales
Mycocaliciaceae
Sphinctrina tubaeformis
Lecanoromycetes
Lecanoromycetidae
Caliciales
Caliciaceae
Amandinea diorista
Amandinea efflorescens
Amandinea multisporea
Baculifera imshaugiana
Baculifera micromera
Buellia soledata
Buellia subdisciformis
Calicium hyperelloides
Calicium salicinum

Cratiria americana
Cratiria obscurior
Dirinaria applanata
Dirinaria aspera
Dirinaria confluens
Dirinaria confusa
Dirinaria papillulifera
Dirinaria picta
Dirinaria purpurascens
Gassicurtia ferruginascens
Pyxine berteroaana
Pyxine caesiopruinosa
Pyxine cocoas
Pyxine eschweileri
Pyxine petricola
Pyxine pungens
Stigmatochroma gerontoides

Physciaceae

Heterodermia albicans
Heterodermia antillarum
Heterodermia granulifera
Heterodermia speciosa
Hyperphyscia adglutinata
Hyperphyscia isidiata
Klauskalbia flabellata
Klauskalbia obscurata
Leucodermia boryi
Leucodermia leucomelos
Leucodermia lutescens
Physcia aipolia
Physcia atrostriata
Physcia clementei
Physcia crispa
Physcia erumpens
Physcia integrata
Physcia poncinsii
Physcia solediosa
Physcia undulata
Polyblastidium albicans
Polyblastidium casarettianum
Polyblastidium japonicum
Rinodina dolichospora

Lecanorales

Catillariaceae

Catillaria endochroma

Cladoniaceae

Cladia aggregata
Cladonia cartilaginea
Cladonia ceratophylla
Cladonia chlorophaea
Cladonia didyma
Cladonia fimbriata
Cladonia macilenta
Cladonia macrophylliza
Cladonia nana
Cladonia pulverulenta
Cladonia pyxidata
Cladonia ramulosa
Cladonia subcariosa
Cladonia subradiata
Cladonia subsquamosa
Cladonia subtenuis
Stereocaulon cornutum
Stereocaulon ramulosum
Stereocaulon vesuvianum
Stereocaulon virgatum

Lecanoraceae

Lecanora argentata
Lecanora coronulans
Lecanora helva
Lecanora leprosa
Lecanora pallida
Lecanora praeferenda
Lecanora thysanophora
Lecanora tropica

Malmideaceae

Malmidea cineracea
Malmidea furfurosa
Malmidea granifera
Malmidea leptoloma
Malmidea rhodopis
Malmidea vinosa

Parmeliaceae

Bulbothrix apophysata
Bulbothrix goebelii
Bulbothrix suffixa
Canoparmelia caroliniana
Canoparmelia cryptochlorophaea
Canoparmelia texana
Crespoa crozalsiana
Hypotrachyna aspera
Hypotrachyna flavida

Parmelinopsis minarum
Parmotrema conformatum
Parmotrema crinitum
Parmotrema cristiferum
Parmotrema dilatatum
Parmotrema dominicanum
Parmotrema eciliatum
Parmotrema endosulphureum
Parmotrema flavescens
Parmotrema flavotinctum
Parmotrema hababianum
Parmotrema haitiense
Parmotrema latissimum
Parmotrema mesotropum
Parmotrema praesorediosum
Parmotrema rampoddense
Parmotrema reticulatum
Parmotrema robustum
Parmotrema rubifaciens
Parmotrema subrugatum
Parmotrema tinctorum
Parmotrema xanthinum
Parmotrema zollingeri
Remototrachyna costaricensis
Usnea baileyi
Usnea ceratina
Usnea cornuta
Usnea jelskii
Usnea mexicana
Usnea perplectata
Usnea rubicunda
Xanthoparmelia plittii
Xanthoparmelia subramigera
Pilocarpaceae
Byssolecania hymenocarpa
Byssoloma chlorinum
Byssoloma discordans
Byssoloma leucoblepharum
Byssoloma minutissimum
Byssoloma subdiscordans
Byssoloma subpolychromum
Calopadia foliicola
Calopadia fusca
Calopadia lecanorella
Calopadia subcoerulescens
Eugeniella palleola

Fellhanera naevia
Lasioloma appendiculatum
Lasioloma arachnoideum
Sporopodium leprieurii
Tapellaria albomarginata
Tapellaria epiphylla
Tapellaria nana
Tapellaria nigrata
Ramalinaceae
Bacidina medialis
Bacidina pallidocarnea
Bacidina pseudohyphophorifera
Bacidopsis microphylla
Badimia dimidiata
Phyllopsora confusa
Phyllopsora gossypina
Phyllopsora rappiana
Phyllopsora santensis
Ramalina alludens
Ramalina camptospora
Ramalina celastri
Ramalina complanata
Ramalina rectangularis
Ramalina stenospora
Ramalina subcalicaris
Ramalina usnea
Ramboldiaceae
Ramboldia russula
Lecideales
Lecideaceae
Porpidia crustulata
Peltigerales
Coccocarpiaceae
Coccocarpia erythroxyli
Coccocarpia palmicola
Coccocarpia pellita
Collemataceae
Enchylium conglomeratum
Leptogium austroamericanum
Leptogium azureum
Leptogium chloromelum
Leptogium cochleatum
Leptogium denticulatum
Leptogium isidiosellum
Leptogium marginellum
Leptogium phyllocarpum

*Leptogium standleyi**Leptogium tremelloides***Pannariaceae***Lepidocollema marianum**Parmeliella pannosa**Physma byrsaeum***Peltigeraceae***Lobariella crenulata**Peltigera dolichorhiza**Pseudocyphellaria aurata**Sticta beauvoisii**Sticta macrophylla**Sticta swartzii**Sticta weigelia**Sticta xanthotropa***Rhizocarpales****Rhizocarpaceae***Rhizocarpon reductum***Teloschistales****Brigantiaeaceae***Letrouitia vulpina***Megalosporaceae***Megalospora tuberculosa***Teloschistaceae***Athallia pyracea**Calogaya lobulata**Caloplaca erythrantha**Lacrima epiphora**Oxneriopsis bassiae**Teloschistes exilis**Teloschistes flavicans***Ostropomycetidae****Graphidales****Diploschistaceae***Carbacanthographis triphoroides**Ocellularia rhodostroma**Wirthiotrema glaucopallens**Wirthiotrema trypaneoides***Fissurinaceae***Clandestinotrema stylothecium**Dyplolabia afzelii***Gomphillaceae***Aderkomyces albostrigosus**Aderkomyces dilatatus**Asterothyrium pittieri**Asterothyrium rotuliforme**Calenia depressa**Calenia lueckingii**Echinoplaca diffluens**Echinoplaca leucotrichoides**Echinoplaca pellicula**Gyalectidium caucasicum**Gyalectidium filicinum**Tricharia carnea**Tricharia urceolata**Tricharia vainioi***Graphidaceae***Allographa acharii**Allographa chrysocarpa**Allographa consanguinea**Allographa farinulenta**Allographa longula**Allographa ovata**Allographa rhizicola**Allographa rimulosa**Allographa rustica**Allographa striatula**Allographa vestitoides**Allographa xanthospora**Diorygma confluens**Diorygma poitaei**Diorygma pruinsum**Diorygma tibellii**Glyphis cicatricosa**Glyphis scyphulifera**Glyphis substriatula**Graphis anfractuosa**Graphis assimilis**Graphis conferta**Graphis desquamescens**Graphis furcata**Graphis glaucescens**Graphis hiascens**Graphis leptocarpa**Graphis leptoclada**Graphis librata**Graphis lineola**Graphis oxyclada**Graphis paraschiffneri**Graphis platycarpella**Graphis scripta**Graphis tenella*

Hemithecius implicatum
Leiorreuma exaltatum
Phaeographis caesiodisca
Phaeographis caesiohians
Phaeographis dendritica
Phaeographis epruinosa
Phaeographis intricans
Phaeographis neotricosa
Phaeographis punctiformis
Phaeographis schizoloma
Platythecium colliculosum
Sarcographa labyrinthica
Thalloloma cinnabarinum
Thalloloma hypoleptum
Thelotremataceae
Chapsa sublilacina
Chroodiscus coccineus
Leucodecton compunctellum
Leucodecton glaucescens
Thelotrema porinoides
Gyalectales
Coenogoniaceae
Coenogonium dilucidum
Coenogonium epiphyllum
Coenogonium geralense
Coenogonium interpositum
Coenogonium isidiosum
Coenogonium leprieurii
Coenogonium linkii
Coenogonium lisowskii
Coenogonium minimum
Coenogonium subzonatum
Coenogonium usambarensis
Gyalectaceae
Gyalecta nana
Trichotheliaceae
Porina africana
Porina alba
Porina atriceps
Porina atrocoerulea
Porina distans
Porina dolichophora
Porina epimelaena
Porina epiphylla
Porina farinosa
Porina fulvella

Porina karnatakensis
Porina limbulata
Porina lucida
Porina mastoidea
Porina moralesiae
Porina nitidula
Porina nucula
Porina octomera
Porina pseudomalmei
Porina rubentior
Porina rubescens
Porina rudiuscula
Porina rufula
Porina subcarpineae
Porina subepiphylla
Porina subinterstes
Porina tetracerae
Porina tetramera
Porina tijucana
Trichothelium alboatrum
Trichothelium bipindense
Trichothelium epiphyllum
Trichothelium intermedium
Trichothelium minus
Trichothelium sipmanii
Pertusariales
Pertusariaceae
Pertusaria dehiscens
Pertusaria depressa
Pertusaria flavens
Pertusaria sinuomexicana
Pertusaria tetrathalamia
Pertusaria texana
Thelenellales
Thelenellaceae
Aspidothelium cinerascens
Aspidothelium fugiens
Basidiomycota
Agaricomycotina
Agaricomycetes
Agaricales
Lichenomphaliaceae
Cora pavonia
Dictyonema sericeum

BASIDIOMYCETES (462 SPECIES)

Basidiomycota**Agaricomycotina****Agaricomycetes****Agaricales****Agaricaceae***Agaricus endoxanthus**Agaricus sylvaticus**Chlorophyllum molybdites**Cystolepiota petasiformis**Cystolepiota seminuda**Cystolepiota sistrata**Echinoderma asperum**Lepiota clypeolaria**Lepiota epicharis**Lepiota erythrosticta**Lepiota ianthinosquamosa**Lepiota phaeosticta**Lepiota subcristata**Lepiota subflavescens**Leucoagaricus guatupoensis**Leucoagaricus lilaceus**Leucoagaricus rubrotinctus**Leucoagaricus sulphurellus**Leucocoprinus birnbaumii**Leucocoprinus brebissonii**Leucocoprinus cepistipes**Leucocoprinus cretaceus**Leucocoprinus fragilissimus**Podaxis pistillaris**Rugosospora pseudorubiginosa**Tulostoma exasperatum***Amanitaceae***Amanita aureofloccosa**Amanita brunnescens**Amanita flavoconia**Amanita fuscostriata**Amanita jacksonii**Amanita liloi**Amanita muscaria**Amanita polypyraxis**Amanita velatipes***Callistosporiaceae***Macrocybe titans**Pseudolaccaria pachyphylla***Clavariaceae***Clavaria fragilis**Clavaria zollingeri**Clavulinopsis amoena**Clavulinopsis laeticolor***Clitocybaceae***Clitocybe dealbata**Collybia sacchari***Crepidotaceae***Crepidotus crocophyllus**Crepidotus flavus**Crepidotus mollis**Crepidotus roseus**Crepidotus variabilis***Entolomataceae***Entoloma murrayi**Entoloma virescens**Nolanea avilana***Fistulinaceae***Porodiscus pendulus***Hydnangiaceae***Laccaria ohiensis***Hygrocybaceae***Hygroaster nodulisporus**Hygrocybe cantharellus**Hygrocybe conica**Hygrocybe flavescens**Hygrocybe miniata**Hygrocybe nigrescens***Hymenogastraceae***Gymnopilus chrysopellus**Gymnopilus lateritius**Gymnopilus luteofolius**Gymnopilus palmicola**Gymnopilus russipes**Gymnopilus subtropicus**Psilocybe cubensis**Psilocybe mexicana***Inocybaceae***Inocybe lasserii**Inocybe martinica**Inocybe viridumbonata**Inosperma calamistratum***Lycoperdaceae***Apioperdon pyriforme**Calvatia bicolor**Calvatia cyathiformis*

*Calvatia gigantea**Calvatia rugosa**Lycoperdon fuligineum**Lycoperdon perlatum**Lycoperdon pratense***Lyophyllaceae***Tricholosporum violaceum***Marasmiaceae***Brunneocorticium corynecarpon**Crinipellis carecomoeis**Crinipellis pseudostipitaria**Crinipellis purpurea**Crinipellis scabella**Crinipellis tucumanensis**Hymenogloea papyracea**Marasmius aripoensis**Marasmius berteroi**Marasmius cladophyllus**Marasmius conicopapillatus**Marasmius corrugatus**Marasmius crinis-equi**Marasmius dennisii**Marasmius graminicola**Marasmius griseoradiatus**Marasmius guyanensis**Marasmius haematocephalus**Marasmius hakgalensis**Marasmius helvolus**Marasmius leoninus**Marasmius leucorotalis**Marasmius leveilleanus**Marasmius neosessilis**Marasmius niveus**Marasmius pallipes**Marasmius perlongispermus**Marasmius rhabarbarinus**Marasmius rhyssophyllus**Marasmius rotula**Marasmius ruforotula**Marasmius tageticolor**Marasmius trinitatis**Marasmius vigintifolius**Moniliophthora perniciosa**Tetrapyrgos alba**Tetrapyrgos longicystidiata***Mycenaceae***Filoboletus gracilis**Mycena alcalina**Mycena alphetophora**Mycena citricolor**Mycena haematopus**Mycena holoporphyrus**Mycena margarita**Mycena pearsoniana**Mycena sanguinolenta**Panellus pusillus***Nidulariaceae***Cyathus intermedius**Cyathus poeppigii**Cyathus setosus**Cyathus stercoreus**Cyathus striatus**Cyathus triplex***Omphalotaceae***Collybiopsis luxurians**Collybiopsis omphalodes**Collybiopsis subpruinosa**Connopus acervatus**Gymnopus dryophilus**Gymnopus iocephalus**Gymnopus johnstonii**Gymnopus lodgeae**Gymnopus montagnei**Lentinula aciculospora**Marasmiellus coilobasis**Marasmiellus dealbatus**Marasmiellus guadelupensis**Marasmiellus nanus**Marasmiellus neotropicus**Marasmiellus volvatus**Neonothopanus hygrophanus***Phyllotopsidaceae***Pleurocybella porrigens**Tricholomopsis aurea**Tricholomopsis tropica***Physalacriaceae***Armillaria mellea**Cyptotrama asprata**Dactylosporina steffenii**Oudemansiella cubensis**Strobilurus conigenoides**Xerula hispida*

Pleurotaceae

Hohenbuehelia angustata
Hohenbuehelia fluxilis
Hohenbuehelia nigra
Hohenbuehelia petaloides
Nothopanus eugrammus
Pleurotus djamor
Pleurotus ostreatus
Pleurotus pulmonarius

Pluteaceae

Pluteus albosipitatus
Pluteus cervinus
Pluteus chrysophlebius
Pluteus nanus
Pluteus salicinus
Pluteus umbrosus

Porotheleaceae

Gerronema bryogeton
Gerronema cyathiforme
Gerronema strombodes
Hydropus brunneoumbonatus
Hydropus nigrita
Lactocollybia epia
Megacollybia platyphylla
Trogia cantharelloides

Psathyrellaceae

Candolleomyces candolleanus
Candolleomyces trinitatensis
Candolleomyces tuberculatus
Coprinellus disseminatus
Coprinellus micaceus
Coprinopsis brunneofibrillosa
Coprinopsis lagopus
Coprinopsis stercorea
Parasola conopilea
Parasola plicatilis
Psathyrella copriniceps
Psathyrella erinensis

Pterulaceae

Myrmecopterula moniliformis

Schizophyllaceae

Schizophyllum commune
Schizophyllum fasciatum
Schizophyllum umbrinum

Strophariaceae

Agrocybe retigera

Deconica coprophila
Hypholoma subviride

Tricholomataceae

Ripartitella alba

Volvariellaceae

Volvariella cubensis
Volvariella volvacea

Xeromphalinaceae

Xeromphalina campanella
Xeromphalina tenuipes

Family incertae sedis

Dendrothele strumosa
Lycogalopsis solmsii
Panaeolina foenisecii
Panaeolus antillarum
Panaeolus semiovatus

Amylocorticiales**Amylocorticiaceae**

Agroathelia rolfsii

Auriculariales**Auriculariaceae**

Auricularia angiospermarum
Auricularia brasiliana
Auricularia cornea
Auricularia fuscusuccinea
Auricularia nigricans
Auricularia tremellosa

Family incertae sedis

Pseudohydnum gelatinosum

Boletales**Boletaceae**

Boletellus coccineus
Heimioporus ivoryi
Hemileccinum subglabripes
Lanmaoa flavorubra
Neoboletus subvelutipes
Phylloporus centroamericanus
Pulveroboletus ravenelii
Strobilomyces strobilaceus
Tylopilus nicaraguensis
Xerocomus morrisii
Xerocomus pseudoboletinus

Boletinellaceae

Phlebopus beniensis

Calostomataceae

Calostoma cinnabarinum

Gyroporaceae*Gyroporus castaneus***Rhizopogonaceae***Rhizopogon nigrescens***Sclerodermataceae***Pisolithus arhizus**Scleroderma cepa**Scleroderma citrinum**Scleroderma verrucosum***Serpulaceae***Serpula costaricensis***Suillaceae***Suillus decipiens**Suillus granulatus***Cantharellales****Botryobasidiaceae***Botryobasidium vagum***Ceratobasidiaceae***Rhizoctonia solani**Thanatephorus microsclerotium***Hydnaceae***Cantharellus cibarius**Cantharellus cinnabarinus**Craterellus cornucopioides**Hydnum repandum***Corticiales****Corticaceae***Corticium koleroga**Necator salmonicolor**Waitea circinata***Geastrales****Geastraceae***Geastrum javanicum**Geastrum lloydianum**Geastrum saccatum**Geastrum schweinitzii**Geastrum triplex***Gloeophyllales****Gloeophyllaceae***Gloeophyllum sepiarium**Gloeophyllum striatum**Heliocybe sulcata**Neolentinus lepideus**Osmoporus mexicanus***Gomphales****Clavariadelphaceae***Clavariadelphus truncatus***Gomphaceae***Phaeoclavulina cyanocephala**Phaeoclavulina zippelii**Ramaria stricta***Hymenochaetales****Coltriciaceae***Coltricia cinnamomea**Coltricia fomicola**Coltricia fonsecoensis***Hirschioporaceae***Nigrohirschioporus sector**Pallidohirschioporus biformis**Perennihirschioporus**fumosoavellaneus***Hymenochaetaceae***Fomitiporella umbrinella**Fomitiporia robusta**Fulvifomes crocatus**Fulvifomes luteoumbinus**Fulvifomes merrillii**Fulvifomes nilgheriensis**Fulvifomes rimosus**Fulvifomes robiniae**Fuscoporia ferrea**Fuscoporia ferruginosa**Fuscoporia gilva**Fuscoporia licnoides**Fuscoporia longisetulosa**Fuscoporia nicaraguensis**Fuscoporia rufitincta**Fuscoporia senex**Hymenochaete damicornis**Hymenochaete luteobadia**Hymenochaete microcycla**Inonotus obliquus**Inonotus porrectus**Mensularia radiata**Onnia tomentosa**Phellinus igniarius**Phellinus pomaceus**Phylloporia chrysites**Phylloporia pectinata**Pseudoinonotus dryadeus**Pyrrhoderma noxium**Tropicoporus dependens*

Tropicoporus extensus
Tropicoporus linteus
Nigrofomitaceae
Nigrofomes melanoporus
Rickenellaceae
Cotylidia aurantiaca
Cotylidia diaphana
Rigidoporaceae
Rigidoporus microporus
Rigidoporus ulmarius
Schizoporaceae
Xylodon flaviporus
Xylodon paradoxus
Sideraceae
Sidera vulgaris
Trichaptaceae
Trichaptum byssogenum
Trichaptum perrottetii
Phallales
Clathraceae
Aseroë rubra
Blumenavia rhacodes
Clathrus chrysomycelinus
Clathrus columnatus
Clathrus crispus
Laternea pusilla
Laternea triscapa
Ligiella rodrigueziana
Lysuraceae
Lysurus sphaerocephalus
Phallaceae
Mutinus argentinus
Phallus impudicus
Phallus indusiatus
Phallus merulinus
Staheliomyces cinctus
Protophallaceae
Protuberia maracuja
Polyporales
Adustoporiaceae
Adustoporia sinuosa
Fomitopsidaceae
Fomitopsis cupreorosea
Fomitopsis dochmia
Fomitopsis feei
Fomitopsis lignea

Fomitopsis marianii
Fomitopsis pinicola
Fomitopsis quercina
Fomitopsis stereoides
Ganodermataceae
Amauroderma calcigenum
Amauroderma exile
Amauroderma schomburgkii
Cristataspora coffeata
Foraminispora rugosa
Ganoderma applanatum
Ganoderma australe
Ganoderma dorsale
Ganoderma lionnetii
Ganoderma lucidum
Ganoderma oerstedii
Ganoderma parvulum
Ganoderma stipitatum
Irpicaceae
Byssomerulius incarnatus
Ceriporia purpurea
Ceriporia reticulata
Gloeoporus thelephoroides
Irpex rosettiformis
Vitreoporus dichrous
Laetiporaceae
Laetiporus sulphureus
Phaeolus schweinitzii
Meripilaceae
Physisporinus lineatus
Physisporinus vinctus
Physisporinus vitreus
Panaceae
Cymatoderma caperatum
Panus lecomtei
Panus strigellus
Phanerochaetaceae
Bjerkandera adusta
Bjerkandera fumosa
Phlebiopsis crassa
Phlebiopsis papyrina
Podoscyphaceae
Podoscypha nitidula
Podoscypha petalodes
Podoscypha ravenelii
Podoscypha surinamensis

Podoscypha venustula

Polyporaceae

Atroporus rufoatratus

Coriolopsis brunneoleuca

Coriolopsis byrsina

Coriolopsis caperata

Cubamycetes cubensis

Cubamycetes flavidus

Cyanoporus fuligo

Dentocorticium portoricense

Earliella scabrosa

Favolus brasiliensis

Favolus philippinensis

Fomes fasciatus

Funalia rigida

Funalia supina

Hexagonia hydroides

Hexagonia tenuis

Hexagonia variegata

Hjortstamia rimosissima

Lentinus arcularius

Lentinus berteroii

Lentinus crinitus

Lentinus scleropus

Lentinus swartzii

Lentinus tricholoma

Lentinus velutinus

Lentinus villosus

Lopharia cinerascens

Neofavolus alveolaris

Perenniporia alboincarnata

Perenniporia martia

Perenniporia medulla-panis

Perenniporia subannosa

Picipes badius

Picipes dictyopus

Picipes melanopus

Polyporus leprieurii

Polyporus varius

Poriella subacida

Porogramme albocincta

Porogramme epimiltina

Porogramme graphica

Porogramme subargentea

Trametes acuta

Trametes betulina

Trametes elegans

Trametes hirsuta

Trametes marianna

Trametes maxima

Trametes membranacea

Trametes meyenii

Trametes modesta

Trametes polyzona

Trametes repanda

Trametes sanguinea

Trametes versicolor

Trametes villosa

Postiaceae

Amaropostia stiptica

Cyanosporus caesius

Steccherinaceae

Antrodiella liebmanni

Antrodiella versiculis

Junghuhnia nitida

Nigroporus vinosus

Russulales

Auriscalpiaceae

Artomyces pyxidatus

Bondarzewiaceae

Heterobasidion annosum

Echinodontiaceae

Larssoniporia tropicalis

Peniophoraceae

Baltazaria galactina

Lachnocladium denudatum

Peniophora incarnata

Radulum rhabarbarinum

Russulaceae

Lactarius indigo

Russula brevipes

Russula cyanoxantha

Russula emetica

Russula virescens

Stereaceae

Stereum hirsutum

Stereum ostrea

Thelephorales

Thelephoraceae

Thelephora palmata

Dacrymycetes

Dacrymycetales

Dacrymycetaceae

Calocera cornea

Dacryopinax elegans

Dacryopinax spathularia

Tremellomycetes

Tremellales

Phaeotremellaceae

Phaeotremella foliacea

Tremellaceae

Tremella fuciformis

Tremella mesenterica

Tremella rubromaculata

Pucciniomycotina

Atractiellomycetes

Atractiellales

Phleogenaceae

Phleogena faginea

Microbotryomycetes

Sporidiobolales

Sporidiobolaceae

Sporobolomyces carnicolor

Pucciniomycetes

Septobasidiales

Septobasidiaceae

Septobasidium curtisii

Septobasidium pseudopedicellatum

Septobasidium rhabarbarinum

Septobasidium sublilacinum

**ARBUSCULAR MYCORRHIZAL
GLOMEROMYCOTA (22 SPECIES)**

Glomeromycota

Archaeosporomycetes

Archaeosporales

Ambisporaceae

Ambispora jimgerdemannii

Ambispora leptoticha

Glomeromycetes

Diversisporales

Acaulosporaceae

Acaulospora bireticulata

Acaulospora colombiana

Acaulospora elegans

Acaulospora foveata

Acaulospora longula

Acaulospora mellea

Acaulospora scrobiculata

Acaulospora spinosa

Acaulospora tuberculata

Gigasporales

Gigasporaceae

Gigaspora gigantea

Racocetraceae

Cetraspora pellucida

Scutellosporaceae

Scutellospora calospora

Scutellospora coralloidea

Glomerales

Glomeraceae

Funneliformis geosporus

Glomus clavisporum

Glomus coremioides

Glomus rubiforme

Glomus spinosum

Rhizoglomus clarum

Paraglomeromycetes

Paraglomerales

Paraglomeraceae

Paraglomus occultum

MICROFUNGI (11 SPECIES)

Blastocladiomycota

Physodermatomycetes

Physodermatales

Physodermataceae

Physoderma maydis

Chytridiomycota

Rhizophydiomycetes

Rhizophydiales

Batrachochytriaceae

Batrachochytrium dendrobatidis

Monoblepharomycota

Monoblepharidomycetes

Monoblepharidales

Gonapodyaceae

Monoblepharella laruei

Monoblepharella taylorii

Mucoromycota

Mucoromycotina

Mucoromycetes

Mucorales**Cunninghamellaceae***Cunninghamella elegans***Mucoraceae***Mucor hiemalis**Mucor plumbeus**Mucor racemosus***Rhizopodaceae***Rhizopus arrhizus**Rhizopus stolonifer***Rozellomycota incertae sedis***Rozella allomycetis***RUST FUNGI (87 SPECIES)****Basidiomycota****Pucciniomycotina****Pucciniomycetes****Pucciniales****Coleosporiaceae***Coleosporium eupatorii**Coleosporium paraphysatum**Coleosporium steviae**Coleosporium viguierae***Cronartiaceae***Cronartium quercuum***Crossopsoraceae***Crossopsora byrsonimatis**Kweilingia divina***Phakopsoraceae***Phakopsora nishidana**Phakopsora pallescens**Phakopsora zeae***Pucciniaceae***Endophyllum circumscriptum**Endophyllum decoloratum**Puccinia arachidis**Puccinia canaliculata**Puccinia cenchri**Puccinia chaetochloae**Puccinia cnici-oleracei**Puccinia conoclinii**Puccinia cynanchi**Puccinia cynodontis**Puccinia deformata**Puccinia dochmia**Puccinia eleocharidis**Puccinia fumosa**Puccinia gnaphaliicola**Puccinia gouaniae**Puccinia graminis**Puccinia heliconiae**Puccinia heterospora**Puccinia hodgsoniana**Puccinia hydrocotyles**Puccinia invaginata**Puccinia investita**Puccinia irregularis**Puccinia kuehnii**Puccinia lateripes**Puccinia lateritia**Puccinia liberta**Puccinia macropoda**Puccinia medellinensis**Puccinia melampodii**Puccinia melanocephala**Puccinia mogiphanis**Puccinia nakanishikii**Puccinia oahuensis**Puccinia obtecta**Puccinia polysora**Puccinia purpurea**Puccinia recondita**Puccinia ruelliae-bourgaei**Puccinia scleriae**Puccinia sepulta**Puccinia sorghi**Puccinia spegazzinii**Puccinia thaliae**Puccinia tillandsiae**Uromyces appendiculatus**Uromyces bidenticola**Uromyces bonaerensis**Uromyces celosiae**Uromyces dolicholi**Uromyces eragrostidis**Uromyces euphorbiae**Uromyces hedysari-paniculati**Uromyces imperfectus**Uromyces oaxacanus**Uromyces striatus***Pucciniosiraceae**

Puccinosira pallidula
Raveneliaceae
Dicheirinia binata
Ravenelia lonchocarpicola
Ravenelia roemerianae
Ravenelia spegazziniana
Ravenelia spinulosa
Sphenospora kevorkianii
Sphenospora smilacina
Skierkaceae
Skierka holwayi
Sphaerophragmiaceae
Sphaerophragmium fimbriatum
Uropyxidaceae
Prospodium appendiculatum
Puccinales incertae sedis
Aecidium byrsonimatis
Aecidium lantanae
Aecidium liabi
Hemileia vastatrix
Uredo behnickiana
Uredo cajani
Uredo campeliae
Uredo rubescens
Uredo scabies

SMUT FUNGI (27 SPECIES)

Basidiomycota
Ustilaginomycotina
Exobasidiomycetes
Entylomatales
Entylomataceae
Entyloma compositarum
Entyloma dahliae
Entyloma galinsogae
Georgefischeriales
Eballistraceae
Eballistra oryzae
Tilletiales
Erratomycetaceae
Erratomyces patelii
Tilletiaceae
Tilletia ayresii
Tilletia caries
Tilletia horrida

FUNGUS-LIKE ORGANISMS

MYXOMYCETES (42 SPECIES)

Myxomycetes
Ceratiomyxomycetidae
Ceratiomyxales
Ceratiomyxaceae
Ceratiomyxa fruticulosa
Myxogastromycetidae
Cribrariales
Cribrariaceae
Cribraria cancellata
Dictydiaethaliaceae
Dictydiaethalium plumbeum
Reticulariaceae
Lycogala conicum
Lycogala epidendrum
Lycogala exiguum
Tubifera microsperma
Physarales
Didymiaceae
Didymium intermedium
Didymium iridis
Didymium squamulosum
Physaraceae
Fuligo septica
Physarella oblonga
Physarum cinereum
Physarum compressum
Physarum contextum
Physarum didermoides
Physarum galbeum
Physarum nicaraguense
Physarum nucleatum
Physarum polycephalum
Physarum stellatum
Physarum tenerum
Physarum viride
Trichiales
Arcyriaceae
Arcyria cinerea
Arcyria denudata
Arcyria obvelata
Perichaena chrysosperma

Perichaena depressa

Trichiaceae

Hemitrichia calyculata

Hemitrichia clavata

Hemitrichia serpulata

Metatrichia vesparia

Trichia decipiens

Stemonitomycetidae

Stemonitidales

Stemonitidaceae

Collaria arcyronema

Stemonaria longa

Stemonitis axifera

Stemonitis fusca

Stemonitis herbatica

Stemonitis smithii

Stemonitis splendens

Stemonitopsis typhina

Sclerophthora macrospora

Pythiaceae

Globisporangium splendens

Globisporangium ultimum

Pythium aphanidermatum

Pythium arrhenomanes

Pythium deliense

Pythium insidiosum

Pythium myriotylum

OOMYCOTA (EGG FUNGI OR WATER MOULDS) (28 SPECIES)

Oomycota

Peronosporomycetes

Peronosporales

Peronosporaceae

Hyaloperonospora parasitica

Peronosclerospora maydis

Peronosclerospora sacchari

Peronosclerospora sorghi

Peronospora destructor

Peronospora hyoscyami

Phytophthora angustata

Phytophthora calidophila

Phytophthora cinnamomi

Phytophthora citrophthora

Phytophthora infestans

Phytophthora multiplex

Phytophthora nicotianae

Phytophthora obovoidea

Phytophthora palmivora

Phytophthora tropicalis

Phytopythium chamaehyphon

Phytopythium helicoides

Phytopythium vexans

Pseudoperonospora cubensis

DOUBTFUL RECORDS AND EXCLUDED SPECIES

Alternaria musae Bouriquet & Bataille

Recorded in Nicaragua by IPSA (2021). Doubtful record, this species is known currently only from Madagascar.

Asterina congregata Berk. & M.A. Curtis

This species was originally described from Nicaragua by Berkeley & Curtis (1860), based on specimens collected by C. Wright. Theissen (1913) considered this taxon as a doubtful species and excluded it from the genus *Asterina*.

Asterina ostiolata Berk. & M.A. Curtis

This species was originally described from Nicaragua by Berkeley & Curtis (1860), based on specimens collected by C. Wright. Theissen (1912) considered this taxon as a doubtful species and excluded it from the genus *Asterina*.

Campanophyllum proboscideum (Fr.) Cifuentes & R.H. Petersen

Recorded in Matagalpa, Nicaragua by Stanger & Smith (2015), doubtful record, it belongs to *Pleurotus* sp.

Cercospora atrofiliiformis J.M. Yen, T.C. Lo & C.C. Chi

Recorded in Nicaragua by IPSA (2021). Doubtful record, this species is distributed from China and Taiwan (Crous & Braun 2003).

Cercospora caricae Chupp. & Cif.

Recorded in Nicaragua by McGuire & Crandall (1967). Doubtful record according to Delgado (2011).

Chrysonilia sitophila (Mont.) Arx

Recorded in Nicaragua by Wellman (1977). Doubtful record according to Delgado (2011).

Cladosporium pallidum Berk. & M.A. Curtis

This species was originally described from Nicaragua by Berkeley & Curtis (1860), based on specimens collected by C. Wright. Doubtful species according to Delgado (2011).

Coniosporium subseriatum Ellis & Everh.

This species was originally described from Nicaragua by Ellis & Everhart (1896), based on specimens collected by C.L. Smith in Castillo Viejo, Río San Juan. Doubtful species according to Delgado (2011).

Coprinellus xanthothrix (Romagn.) Vilgalys, Hopple & Jacq. Johnson
Recorded in Matagalpa, Nicaragua by Stanger & Smith (2015), doubtful record, identity unknown.

Crinipellis procera G. Stev.

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is known currently only from New Zealand (Kerekes & Desjardin 2009).

Dermoloma atrocinerum (Pers.) P.D. Orton

Recorded in Río San Juan, Nicaragua by González *et al.* (2004). Currently this species is synonymous with *Dermoloma cuneifolium* (Fr.) Singer ex Bon., a species distributed mainly in the northern hemisphere.

Engleromyces goetzei Henn.

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is known currently only from Africa (Dennis 1961).

Ganoderma neglectum Pat.

This species was originally described from Nicaragua by Patouillard (1887). According to Moncalvo & Ryvarden (1997), the type material is in very poor condition and there is no additional material.

Ganoderma pseudoferreum (Wakef.) Overeem & B.A. Steinm.

Recorded in Nicaragua by Wellman (1977). Currently this species is synonymous with *Ganoderma philippii* (Bres. & Henn. ex Sacc.) Bres., a species distributed mainly in Southeast Asia (Núñez & Ryvarden 2000).

Gloeosporium maxillariae Allesch.

Recorded in Nicaragua by Litzenberger & Stevenson (1957). Doubtful record, this species is **originary** from Germany, Europe.

Gymnopus erythropus (Pers.) Antonín, Halling & Noordel.

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is distributed from the northern hemisphere (Antonín & Noordeloos 1997).

Harknessia tetracerae Ellis & Everh.

This species was originally described from Nicaragua by Ellis & Everhart (1904), based on specimens collected by C.F. Baker. Doubtful species, the type has not been found and identity unknown.

Hygrocybe colemanniana (A. Bloxam) P.D. Orton & Watling

Recorded in Río San Juan, Nicaragua by González & Orozco (2007). Doubtful record, this species is distributed from the northern hemisphere (Boertmann 1996).

***Hymenula atrovirens* Berk. & M.A. Curtis**

This species was originally described from Nicaragua by Berkeley & Curtis (1860), based on specimens collected by C. Wright. Doubtful species, the type has not been found and identity unknown.

***Hypocrea fibula* (De Not.) Sacc.**

Recorded in Río San Juan, Nicaragua by Smith (1893). Doubtful species according to Seaver (1910b).

***Hypocrea hirsuta* Ellis & Everh.**

This species was originally described from Nicaragua by Smith (1893), based on specimens collected by C.L. Smith in Rivas and Río San Juan. Doubtful species, it is apparently a species of *Rosellinia* (Samuels & Rossman 1992).

***Lecidea cinereolutescens* Nyl.**

Recorded in Nicaragua by Pfister & Sayre (1978) doubtful record, identity unknown.

***Lentinus tigrinus* (Bull.) Fr.**

Recorded in Río San Juan, Nicaragua by Saldívar (2018). Doubtful record, this species is distributed from the northern hemisphere and Africa (Pegler 1983).

***Marasmiellus quercophilus* (Pouzar) J.S. Oliveira**

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is distributed from the northern hemisphere (Antonín & Noordeloos 1993).

***Marasmiellus tricolor* (Alb. & Schwein.) Singer**

Recorded in Río San Juan, Nicaragua by Saldívar (2018). Doubtful record, this species is distributed from the northern hemisphere (Antonín & Noordeloos 1993).

***Marasmius lepreurii* Mont.**

Recorded in Nicaragua by Saldívar (2015), doubtful record, identity unknown.

***Mycena chusqueophila* Singer**

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is known currently only from Chile (Singer & Moser 1965).

***Mycena hiemalis* (Osbeck) Quél.**

Recorded in Managua, Nicaragua by Soza *et al.* (2023), doubtful record.

***Mycena renati* Quél.**

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is distributed from the northern hemisphere (Maas Geesteranus 1986).

Naucoria striatula P.D. Orton

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is distributed from the northern hemisphere (Reid 1984).

Nectria obscurata Ellis & Everh.

This species was originally described from Nicaragua by Smith (1893), based on specimens collected by C.L. Smith in Río San Juan. Doubtful species according to Seaver (1910b).

Nummularia glycyrrhiza (Berk. & M.A. Curtis) Sacc.

Recorded in Río San Juan, Nicaragua by Smith (1893). Doubtful species according to Læssøe *et al.* (1989).

Phoma heterospora Speg.

Recorded in Nicaragua by IPSA (2021), doubtful record, identity unknown.

Phoma oryzae Catt.

Recorded in Nicaragua by IPSA (2021), doubtful record, identity unknown.

Phylloporus centroamericanus Singer & L.D. Gómez

Recorded in Granada, Nicaragua by Ubau-Matamoros (2016a), doubtful record, it belongs to *Gymnopilus* sp.

Pluteus leoninus (Schaeff.) P. Kumm.

Recorded in Jinotega, Nicaragua by Saldívar (2015). Doubtful record, this species is distributed from the northern hemisphere (Vellinga 1990).

Polyporus nicaraguensis Berk. & M.A. Curtis

This species was originally described from Nicaragua by Berkeley & Curtis (1860), based on specimens collected by C. Wright. According to Lowe (1954) and Ryvarden (1984) the type has not been found and identity unknown.

Polystictus lutescens (Pers.) Fr.

Recorded in Río San Juan Nicaragua by Ellis & MacBride (1896), doubtful species, identity unknown.

Poria fuligo* var. *aurantiotingens Ellis & T. Macbr.

This species was originally described from Nicaragua by Ellis & MacBride (1896), however, according to Ryvarden (1979) the correct type locality of this species is "Jalapa, Mexico", There are now no specimens of the variety from Nicaragua *ni* either herbarium.

***Pyrenotrichum splitgerberi* Mont.**

Recorded in Rivas (Ometepe Island), Nicaragua by Breuss (2002). Doubtful species. According to Lücking (2007) the thallus morphology of the type collection indicates that *Pyrenotrichum* could be identical with either *Tapellaria* or *Calopadia*, which differ in their apothecial characters.

***Rosellinia protuberans* P. Karst.**

Recorded in Río San Juan, Nicaragua by Smith (1893). Doubtful species, according to Ju & Rogers (1996) this is probably an *Anthostomella* or *Lopadostoma*.

***Rosellinia bakeri* Ellis**

Recorded in Chinandega, Nicaragua by Ellis (1905). Doubtful species, Ju & Rogers (1996) commented that this is either a *Rosellinia* or a uniperitheciate member of the genus *Nemania*.

***Russula aquosa* Leclair**

Recorded in Matagalpa, Nicaragua by Stanger & Smith (2015), doubtful record, identity unknown.

***Schizostoma stupeum* Ellis & Everh.**

This species was originally described from Nicaragua by Ellis & Everhart (1896), based on specimens collected by C.L. Smith in Río San Juan. According to Chesters & Bell (1970) it is not a member of *Schizostoma*, identity unknown.

***Tricholoma myomyces* (Pers.) J.E. Lange**

Recorded in Jinotega, Nicaragua by Saldívar (2015). Currently this species is synonymous with *Tricholoma terreum* (Schaeff.) P. Kumm. A species distributed mainly in the northern hemisphere (Christensen & Noordeloos 1999).

***Verrucaria thelena* var. *albidior* Nyl.**

This species was originally described from Nicaragua by Nylander (1863), based on specimens collected by E. Tuckerman. Doubtful species, according to Hawksworth (1985) it belongs to the genus *Anisomeridium*.

INDEX OF HOST

(cuando pones el hospedero, es referencia general o es hospedero reportado en Nicaragua ¿?)

KINGDOM: ANIMALIA

Family Aphididae: *Akanthomyces lecanii*

Family Bufonidae

Incilius valliceps (Wiegmann, 1833): *Batrachochytrium dendrobatidis*

Rhinella horribilis (Wiegmann, 1833): *Batrachochytrium dendrobatidis*

Family Carabidae

Galerita mexicana Chaudoir, 1872: *Laboulbenia melanotheca*

Galerita ruficollis Dejean, 1825: *Laboulbenia melanotheca*

Galerita sp: *Laboulbenia galeritae*, *Laboulbenia mexicana*

Notiobia sp: *Laboulbenia dentifera*

Family Cercopidae

Aeneolamia varia (Fabricius, 1787): *Metarhizium anisopliae*

Family Cicadellidae

Dalbulus maidis (DeLong, 1923): *Metarhizium anisopliae*

Family Craugastoridae

Craugastor fitzingeri (Schmidt, 1857): *Batrachochytrium dendrobatidis*

Craugastor lauraster (Savage, McCranie & Espinal, 1996): *Batrachochytrium dendrobatidis*

Family Curculionidae

Cosmopolites sordidus (Germar, 1823): *Beauveria bassiana*

Hypothenemus hampei (Ferrari 1867): *Aspergillus ochraceus*, *Beauveria bassiana*

Family Hippoboscidae

Trichobius joblingi Wenzel, 1966: *Gloeandromyces dickii*

Family Hydrophilidae

Tropisternus sp: *Autoicomyces falcatus*, *Ceratomyces ansatus*

Family Hylidae

Agalychnis callidryas (Cope, 1862): *Batrachochytrium dendrobatidis*

Dendropsophus microcephalus (Cope, 1886): *Batrachochytrium dendrobatidis*

Smilisca baudinii (Duméril and Bibron, 1841): *Batrachochytrium dendrobatidis*

Smilisca phaeota (Cope, 1862): *Batrachochytrium dendrobatidis*

Family Lyonetiidae

Leucoptera coffeella (Guérin-Méneville 1842): *Beauveria bassiana*,
Metarhizium anisopliae

Family Mesoveliidae

Mesovelia mulsanti White, 1879: *Triceromyces poissonii*

Family Noctuidae

Helicoverpa zea (Boddie, 1850): *Metarhizium rileyi*

Spodoptera frugiperda (Smith, 1797): *Metarhizium rileyi*

Family Passalidae: *Rickia apiculifera*, *Rickia bifida*, *Rickia passalina*

Family Plutellidae

Plutella xylostella (Linnaeus, 1758): *Beauveria bassiana*

Family Ranidae

Lithobates brownorum (Sanders, 1973): *Batrachochytrium dendrobatidis*

Lithobates maculatus (Brocchi, 1877): *Batrachochytrium dendrobatidis*

Family Scarabaeidae

Phyllophaga sp: *Metarhizium anisopliae*

Family Staphylinidae

Euconnus sp: *Cryptandromyces pinguis*, *Cryptandromyces tricornis*

Paederus sp: *Laboulbenia cristata*

Pinophilus sp: *Chaetomyces pinophili*

Philonthus parvimanus Sharp, 1885: *Peyritschiella vulgate*

Family Veliidae

Platyvelia brachialis (Stål 1860): *Prolixandromyces lingulatus*,

Prolixandromyces rhinoceralis, *Prolixandromyces veliae*

KINGDOM: FUNGI

Family Blastocladiaceae

Allomyces sp: *Rozella allomycetis*

Family Boletaceae

Boletellus coccineus (Sacc.) Singer: *Hypomyces microspermus*

Family Corticiaceae

Tretopileus sphaerophorus (Berk. & M.A Curtis) Hughes: *Helicofilia*
madrasensis

Family Russulaceae

Lactarius sp: *Hypomyces lactifluorum*

Family Xylariaceae

Xylaria corniformis (Fr.) Fr.: *Cosmospora episphaeria*

KINGDOM: PLANTAE

Acanthaceae

Ruellia haenkeana (Nees) Wasm.: *Puccinia lateripes*
Ruellia sp: *Puccinia ruelliae-bourgaei*

Family Amaranthaceae

Alternanthera sp: *Puccinia macropoda*
Alternanthera laguroides (Standl.) Standl.: *Puccinia mogiphanis*
Beta vulgaris L.: *Cercospora beticola*, *Neocamarosporium betae*
Gomphrena sp: *Uromyces bonaerensis*
Iresine calea (Ibáñez) Standl.: *Uromyces celosiae*

Family Amaryllidaceae

Allium cepa L.: *Alternaria porri*, *Aspergillus niger*, *Fusarium oxysporum*,
Peronospora destructor, *Pleospora herbarum*, *Rhizopus stolonifer*
Allium sativum L.: *Peronospora destructor*

Family Anacardiaceae

Mangifera indica L.: *Cladosporium herbarum*, *Colletotrichum*
gloeosporioides, *Elsinoë mangiferae*, *Lasiodiplodia theobromae*, *Pestalotiopsis*
mangiferae
Spondias sp: *Meliola nicaraguensis*

Family Apiaceae

Daucus carota L.: *Alternaria dauci*, *Lasiodiplodia theobromae*

Family Apocynaceae

Gonolobus sp.: *Puccinia cynanchi*

Family Araceae

Colocasia esculenta (L.) Schott: *Pythium myriotylum*
Philodendron sp: *Ascopolyporus philodendri*
Pistia stratiotes L.: *Ramularia pistiae*

Xanthosoma sagittifolium (L.) Schott: *Passalora caladii*, *Phytopythium chamaehyphon*, *Phytopythium helicoides*, *Phytopythium vexans*, *Pythium delicense*, *Pythium myriotylum*

Family Araliaceae

Hydrocotyle mexicana Schltdl. & Cham.: *Puccinia hydrocotyles*

Family Arecaceae

Cocos nucifera L.: *Curvularia lunata*, *Helicofilia madrasensis*, *Lasiodiplodia theobromae*, *Pestalotiopsis palmarum*, *Phytophthora palmivora*, *Pseudopithomyces chartarum*, *Pseudopithomyces sacchari*, *Scolecotigmina palmivora*, *Tretopileus sphaerophorus*

Elaeis guineensis Jacq.: *Fusarium oxysporum*, *Pestalotiopsis palmarum*, *Phytophthora palmivora*

Roystonea sp: *Curvularia lunata*, *Nigrospora sphaerica*, *Vesiculozygosporium echinosporum*, *Zygosporium masonii*, *Zygosporium oscheoides*

Family Asparagaceae

Agave sp.: *Lasiodiplodia theobromae*

Family Asteraceae

Achyrocline sp: *Puccinia investita*

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Bidens pilosa L.: *Uromyces bidenticola*

Carthamus tinctorius L.: *Cladosporium herbarum*, *Rhizoctonia solani*

Clibadium polygynum S.F. Blake: *Endophyllum decoloratum*

Dahlia sp: *Entyloma dahliae*

Emilia sp: *Puccinia cnici-oleracei*

Erigeron sp: *Puccinia cnici-oleracei*

Eupatorium macrophyllum L.: *Coleosporium eupatorii*

Eupatorium sp: *Puccinia conoclinii*, *Puccinia hodgsoniana*

Galinsoga quadriradiata Ruiz & Pav.: *Entyloma galinsogae*

Gnaphalium sp: *Puccinia gnaphaliicola*

Hebeclinium macrophyllum (L.) DC.: *Coleosporium steviae*

Helianthus annuus L.: *Macrophomina phaseolina*, *Neocosmospora solani*

Lactuca sativa L.: *Cercospora lactucae-sativae*

Liabum sp: *Aecidium liabi*

Melampodium sp: *Puccinia melampodii*

Mikania micrantha Kunth: *Puccinia spegazzinii*

Sinclairia discolor Hook. & Arn.: *Coleosporium paraphysatum*

Verbesina agricolarum Standl. & Steyerl.: *Coleosporium viguierae*

Verbesina pallens Benth.: *Puccinia irregularis*

Viguiera cordata (Hook. & Arn.) D'Arcy: *Entyloma compositarum*

Zinnia sp: *Cercospora zinnia*

Family Bignoniaceae

Tecoma stans (L.) Juss. ex Kunth: *Prospodium appendiculatum*

Family Bixaceae

Bixa orellana L.: *Erysiphe quercicola*, *Phyllosticta bixina*, *Pseudocercospora bixae*

Family Brassicaceae

Brassica oleracea L.: *Alternaria brassicae*

Brassica oleracea var. *capitata* L.: *Rhizoctonia solani*

Brassica pekinensis (Lour.) Rupr.: *Alternaria brassicae*

Brassica rapa L.: *Alternaria brassicae*

Family Bromeliaceae

Ananas comosus (L.) Merr.: *Globisporangium splendens*, *Lasiodiplodia theobromae*, *Phytophthora cinnamomi*, *Phytophthora nicotianae*
Tillandsia sp: *Puccinia tillandsiae*

Family Cactaceae

Hylocereus undatus (Haw.) Britton & Rose: *Fusarium oxysporum*

Family Cannaceae

Canna indica L.: *Puccinia thaliae*

Family Caricaceae

Carica papaya L.: *Asperisporium caricae*, *Corynespora cassiicola*, *Phytophthora palmivora*, *Stagonosporopsis caricae*

Family Caryophyllaceae

Dianthus caryophyllus L.: *Colletotrichum dematium*, *Septoria dianthi*

Family Clusiaceae

Clusia sp: *Lophodermium platyplacum*

Family Commelinaceae

Tradescantia zanoniana (L.) Sw.: *Uredo campeliae*

Family Convolvulaceae

Ipomoea batatas (L.) Lam.: *Cercospora physalidis*, *Colletotrichum gloeosporioides*, *Phyllosticta batatas*, *Phytophthora infestans*

Family Cucurbitaceae

Citrullus lanatus (Thunb.) Matsum. & Nakai: *Alternaria cucumerina*, *Cercospora citrulina*, *Cladosporium cucumerinum*, *Colletotrichum orbiculare*, *Fusarium oxysporum*, *Hyaloperonospora parasitica*, *Lasiodiplodia theobromae*, *Peronospora destructor*, *Pseudoperonospora cubensis*

***Citrullus vulgaris* Schrad.:** *Alternaria cucumerina*

***Cucumis melo* L.:** *Cladosporium cucumerinum*, *Colletotrichum orbiculare*, *Fusarium oxysporum*, *Lasiodiplodia theobromae*, *Peronospora destructor*, *Pseudoperonospora cubensis*

***Cucumis sativus* L.:** *Colletotrichum orbiculare*, *Golovinomyces cichoracearum*, *Pseudoperonospora cubensis*, *Rhizoctonia solani*

***Cucurbita pepo* L.:** *Golovinomyces cichoracearum*, *Pseudoperonospora cubensis*

***Sechium edule* (Jacq.) Sw.:** *Golovinomyces cichoracearum*, *Leveillula taurica*, *Microdochium nivale*

Family Cyperaceae

***Carex polystachya* Sw. ex Wahlenb.:** *Farysia chardoniana*

***Cyperus articulatus* L.:** *Cintractia tangensis*

***Cyperus ligularis* L.:** *Cintractia limitata*

***Cyperus rotundus* L.:** *Puccinia canaliculata*

***Eleocharis* sp:** *Puccinia eleocharidis*, *Puccinia liberta*

***Rhynchospora barbata* (Vahl) Kunth:** *Cintractia amazonica*

***Rhynchospora globosa* (Kunth) Roem. & Schult:** *Ustanciosporium neomontagnei*

***Rhynchospora holoschoenoides* (Rich.) Herter:** *Leucocintractia leucodermoides*

***Scirpus* sp:** *Puccinia obtecta*

Family Dilleniaceae

***Tetracera volubilis* L.:** *Hysterostomella tetracerae*

Family Euphorbiaceae

***Cnidoscolus* sp:** *Uromyces oaxacanus*

***Euphorbia adenoptera* Bertol.:** *Uromyces euphorbiae*

***Euphorbia pulcherrima* Willd. ex Klotzsch:** *Elsinoë poinsettiae*

***Hevea brasiliensis* (Willd.) Müll. Arg.:** *Bipolaris heveae*, *Pseudocercospora ulei*

***Manihot esculenta* Crantz:** *Clarohilum henningsii*, *Dematophora arcuata*, *Elsinoë brasiliensis*, *Lasiodiplodia theobromae*, *Passalora manihotis*

***Ricinus communis* L.:** *Alternaria ricini*, *Amphobotrys ricini*, *Cercospora ricinella*

Family Fabaceae

***Acacia farnesiana* (L.) Willd.:** *Ravenelia roemerianae*, *Ravenelia spagazziniana*

***Arachis hypogaea* L.:** *Agroathelia rolfii*, *Aspergillus flavus*, *Aspergillus niger*, *Macrophomina phaseolina*, *Nothopassalora personata*, *Passalora arachidicola*, *Puccinia arachidis*

***Bauhinia* sp:** *Telimena tenuis*, *Uromyces imperfectus*

***Caesalpinia* sp:** *Fuscoporia licnoides*, *Gloeophyllum striatum*

Cajanus cajan (L.) Huth: *Agroathelia rolfsii*, *Uredo cajan*, *Uromyces dolicholi*
Crotalaria pallida Aiton: *Rhizoctonia solani*
Crotalaria retusa L.: *Parodiella perisporioides*
Cyamopsis tetragonoloba (L.) Taub.: *Cercospora psoraleae-bituminosae*
Dalbergia sp: *Sphaerophragmium fimbriatum*
Desmodium sp: *Uromyces hedysari-paniculati*
Erythrina sp: *Dicheirinia binata*
Glycine max (L.) Merr.: *Alternaria alternata*, *Ascochyta phaseolorum*,
Cadophora gregata, *Cercospora canescens*, *Cercospora kikuchii*, *Corynespora*
cassiicola, *Diaporthe phaseolorum*, *Lasiodiplodia theobromae*, *Macrophomina*
phaseolina, *Paramyrothecium roridum*, *Passalora sojae*
Lablab purpureus (L.) Sweet: *Cercospora canescens*
Leucaena leucocephala (Lam.) de Wit: *Alternaria chartarum*
Lonchocarpus guatemalensis Benth.: *Ravenelia lonchocarpicola*
Lupinus angustifolius L.: *Colletotrichum dematium*, *Rhizoctonia solani*
Medicago lupulina L.: *Rhizoctonia solani*
Medicago sativa L.: *Agroathelia rolfsii*, *Colletotrichum dematium*,
Colletotrichum graminicola, *Uromyces striatus*
Mucuna deeringiana (Bort) Merr.: *Agroathelia rolfsii*
Mucuna pruriens (L.) DC.: *Pseudocercospora stizobii*
Phaseolus lunatus L.: *Elsinoë phaseoli*
Phaseolus vulgaris L.: *Agroathelia rolfsii*, *Aspergillus candidus*, *Aspergillus*
flavus, *Aspergillus fumigatus*, *Aspergillus glaucus*, *Aspergillus nidulans*,
Aspergillus niger, *Aspergillus ochraceus*, *Aspergillus oryzae*, *Aspergillus*
parasiticus, *Aspergillus terreus*, *Aspergillus ustus*, *Chaetoseptoria wellmanii*,
Colletotrichum capsica, *Colletotrichum gloeosporioides*, *Colletotrichum*
lindemuthianum, *Colletotrichum truncatum*, *Corynespora cassiicola*,
Erratomyces patelii, *Erysiphe betae*, *Erysiphe polygoni*, *Fusarium*
chlamydosporum, *Fusarium equiseti*, *Fusarium incarnatum*, *Fusarium*
oxysporum, *Fusarium poae*, *Fusarium tricinctum*, *Lasiodiplodia theobromae*,
Macrophomina phaseolina, *Neocosmospora phaseoli*, *Neocosmospora solani*,
Penicillium citrinum, *Phyllosticta phaseolina*, *Pseudocercospora griseola*,
Pythium aphanidermatum, *Ramularia phaseoli*, *Rhizoctonia solani*, *Rhizopus*
arrhizus, *Sclerotinia sclerotiorum*, *Uromyces appendiculatus*
Pisum sativum L.: *Podosphaera macularis*
Senna pallida (Vahl) H.S. Irwin & Barneby: *Ravenelia spinulosa*
Trifolium resupinatum L.: *Cercospora zebrina*
Vigna radiata (L.) R. Wilczek: *Fusarium oxysporum*
Vigna sp: *Septoria vignae*
Vigna unguiculata (L.) Walp.: *Agroathelia rolfsii*, *Aristastoma oeconomicum*,
Cercospora canescens, *Erysiphe polygoni*, *Pseudocercospora cruenta*

Family Heliconiaceae

Heliconia sp: *Puccinia heliconiae*

Family Iridaceae

Gladiolus hortulanus L.H. Bailey: *Cladosporium herbarum*

Family Lamiaceae

Hyptis pectinata (L.) Poit.: *Puccinia medellinensis*

Hyptis suaveolens (L.) Poit.: *Puccinia medellinensis*

Family Lauraceae

Persea americana Mill.: *Dematophora pepo*, *Elsinoë perseae*, *Lasiodiplodia theobromae*, *Phytophthora cinnamomi*, *Pseudocercospora purpurea*

Family Linaceae

Linum usitatissimum L.: *Colletotrichum lini*

Family Malpighiaceae

Byrsonima crassifolia (L.) Kunth: *Aecidium byrsonimatis*, *Crossospora byrsonimatis*

Family Malvaceae

Abutilon trisulcatum (Jacq.) Urb.: *Puccinia heterospora*

Anoda cristata (L.) Schltdl.: *Puccinia heterospora*

Bombax sp.: *Cratiria americana*, *Stigmatochroma gerontoides*

Gossypium hirsutum L.: *Alternaria macrospora*, *Ascochyta malvicola*, *Cercospora gossypina*, *Colletotrichum gossypii*, *Fusarium oxysporum*, *Fusarium sambucinum*, *Fusarium verticillioides*, *Lasiodiplodia theobromae*, *Leptoxylum fumago*, *Macrophomina phaseolina*, *Neocosmospora solani*, *Phyllosticta gossypina*, *Ramulariopsis gossypii*, *Rhizoctonia solani*, *Rhizopus stolonifera*, *Thanatephorus microsclerotium*, *Verticillium albo-atrum*

Guazuma ulmifolia Lam.: *Phaeodimeriella trinitensis*

Hibiscus cannabinus L.: *Neocosmospora solani*

Hibiscus sabdariffa L.: *Rhizoctonia solani*

Sida urens L.: *Puccinia heterospora*

Theobroma cacao L.: *Albonectria rigidiuscula*, *Ceratocystis fimbriata*, *Fusarium incarnatum*, *Fusarium lateritium*, *Fusarium sambucinum*, *Lasiodiplodia theobromae*, *Moniliophthora perniciosa*, *Moniliophthora roreri*, *Phytophthora palmivora*

Triumfetta sp.: *Pucciniosira pallidula*

Family Meliaceae

Cedrela mexicana M. Roem.: *Telimena balansae*

Cedrela odorata L.: *Phomopsis cedrelae*

Family Moraceae

Dorstenia contrajerva L.: *Uredo rubescens*

Ficus carica L.: *Phakopsora nishidana*

Family Musaceae

Musa paradisiaca L.: *Bisifusarium dimerum*, *Colletotrichum musae*, *Corynespora torulosa*, *Fusarium fujikuroi*, *Fusarium musae*, *Fusarium oxysporum*, *Fusarium verticillioides*, *Gliocladium caespitosum*, *Gliomastix roseogrisea*, *Meliola musae*, *Musicillium theobromae*, *Neocordana musae*, *Nigrospora sphaerica*, *Pestalotiopsis palmarum*, *Phyllosticta musae*, *Pseudocercospora fijiensis*, *Pseudocercospora musae*

Family Myrtaceae

Eucalyptus sp: *Pseudopetrakia kambakkamensis*

Psidium guajava L: *Colletotrichum coccodes*, *Elsinoë psidii*, *Meliola trichostroma*

Family Nothofagaceae

Nothofagus antarctica (G. Forst.) Oerst.: *Mucor hiemalis*

Family Orchidaceae

Epidendrum difforme Jacq.: *Sphenospora kevorkianii*

Epidendrum sp.: *Physalospora wildemaniana*, *Uredo behnickiana*

Vanilla planifolia Andrews: *Uredo scabies*

Family Passifloraceae

Passiflora holosericea L.: *Puccinia scleriae*

Family Pedaliaceae

Sesamum indicum L.: *Agroathelia rolfsii*

Family Pedaliaceae

Sesamum indicum L.: *Agroathelia rolfsii*, *Alternaria sesame*, *Cercospora sesami*, *Corynespora sesameum*, *Fusarium oxysporum*, *Globisporangium ultimum*, *Helminthosporium sesame*, *Lasiodiplodia theobromae*, *Macrophomina phaseolina*, *Neocosmospora solani*

Family Pinaceae

Pinus caribaea Morelet: *Allophoma tropica*, *Allophoma tropica*, *Aspergillus caesiellus*, *Aspergillus flavus*, *Aspergillus fumigatus*, *Aspergillus sydowii*, *Aspergillus tamarii*, *Aspergillus wentii*, *Cladosporium herbarum*, *Cunninghamella elegans*, *Humicola fuscoatra*, *Mucor plumbeus*, *Mucor racemosus*, *Penicillium atosanguineum*, *Penicillium brevicompactum*, *Penicillium citrinum*, *Penicillium dierckxii*, *Penicillium expansum*, *Penicillium simplicissimum*, *Ploiderma hedgcockii*, *Sporormiella minima*, *Talaromyces rugulosus*, *Talaromyces variabilis*, *Trichothecium roseum*

Pinus maximinoi H.E. Moore: *Penicillium verrucosum*, *Penicillium viridicatum*

***Pinus oocarpa* Schiede:** *Acrodontium crateriforme*, *Allantophomopsiella pseudotsugae*, *Aspergillus ustus*, *Boeremia exigua*, *Cronartium quercuum*, *Curvularia verruculosa*, *Cytospora pinastri*, *Cytospora pini*, *Dichotomopilus dolichotrichus*, *Dichotomopilus funicola*, *Dichotomopilus reflexus*, *Dothistroma septosporum*, *Erythrogloeum pini-acicola*, *Fusarium circinatum*, *Lasiodiplodia theobromae*, *Lecanosticta guatemalensis*, *Lecanosticta jani*, *Phialemonium inflatum*, *Pseudocercospora pini-densiflorae*

***Pinus pseudostrobus* Lindl.:** *Microascus paisii*, *Parascenedosporium putredinis*, *Pithoascus nidicola*

***Pinus tecunumanii* F. Schwerdtf. ex Eguiluz & Perry:** *Lecanosticta guatemalensis*

Family Poaceae

***Andropogon angustatus* (J. Presl) Steud.:** *Sporisorium fastigiatum*

***Andropogon bicornis* L.:** *Sporisorium holwayi*

***Andropogon* sp.:** *Sporisorium vanderystii*

***Cenchrus pilosus* Kunth:** *Anthracoctis cenchri*, *Puccinia cenchri*

***Chloris gayana* Kunth:** *Bipolaris sorokiniana*

***Chloris* sp:** *Phyllachora bonariensis*

***Chloris virgata* Sw.:** *Bipolaris sorokiniana*, *Phyllachora cynodontis*

***Cymbopogon* sp:** *Puccinia nakanishikii*

***Cynodon dactylon* (L.) Pers.:** *Bipolaris cynodontis*, *Bipolaris gigantea*, *Puccinia cynodontis*, *Sphaerellopsis filum*

***Digitaria eriantha* Steud.:** *Pyricularia grisea*

***Eragrostis* sp:** *Uromyces eragrostidis*

***Hyparrhenia rufa* (Nees) Stapf:** *Curvularia cymbopogonis*, *Puccinia oahuensis*

***Ixophorus unisetus* (J. Presl) Schldl.:** *Puccinia chaetochloae*, *Tilletia ixophori*, *Ustilago ixophori*

***Muhlenbergia* sp:** *Puccinia dochmia*

***Olyra latifolia* L.:** *Dysrhynchis oligotricha*, *Eballistra oryzae*, *Puccinia deformata*

***Oryza sativa* L.:** *Alternaria padwickii*, *Balansia oryzae-sativae*, *Bipolaris oryzae*, *Cercospora janseana*, *Curvularia lunata*, *Eballistra oryzae*, *Gaeumannomyces graminis*, *Microdochium albescens*, *Nakataea oryzae*, *Nigrospora oryzae*, *Phaeosphaeria oryzae*, *Phyllosticta oryzae*, *Pyricularia oryzae*, *Sarocladium oryzae*, *Tilletia horrida*, *Ustilaginoidea virens*, *Waitea circinata*

***Oryza* sp:** *Alternaria tenuissima*, *Cladosporium tenuissimum*

***Panicum maximum* Jacq.:** *Alternaria flagelloidea*, *Catenulocercospora fusimaculans*, *Tilletia ayresii*

***Panicum pilosum* Sw.:** *Balansia nigricans*

***Panicum polygonatum* Schrad.:** *Balansia strangulans*

***Paspalum conjugatum* P.J. Bergius:** *Myriogenospora paspali*

***Paspalum notatum* Flüggé:** *Cladosporium herbarum*

***Paspalum* sp:** *Myriogenospora atramentosa*, *Myriogenospora bresadolana*

***Paspalum turritiforme* R.W. Pohl:** *Ustilago schroeteriana*

Paspalum vaginatum Sw.: *Phyllachora minutissima*

Pennisetum clandestinum Hochst. ex Chiov.: *Pyricularia grisea*

Rhipidocladum racemiflorum (Steud.) McClure: *Kweilingia divina*

Saccharum officinarum L.: *Bipolaris sacchari*, *Cercospora longipes*, *Colletotrichum falcatum*, *Collybia sacchari*, *Cytospora sacchari*, *Dimeriella sacchari*, *Epicoccum sorghinum*, *Fusarium verticillioides*, *Nigrospora sacchari*, *Passalora koepkei*, *Passalora vaginae*, *Peronosclerospora sacchari*, *Puccinia kuehnii*, *Puccinia melanocephala*, *Pythium arrhenomanes*, *Sporisorium scitamineum*, *Stagonospora sacchari*, *Thielaviopsis paradoxa*

Sorghum bicolor (L.) Moench: *Ascochyta sorghi*, *Bipolaris cookei*, *Cercospora sorghi*, *Colletotrichum falcatum*, *Colletotrichum graminicola*, *Colletotrichum lineola*, *Exserohilum turcicum*, *Macrophomina phaseolina*, *Microdochium sorghi*, *Peronosclerospora sorghi*, *Puccinia purpurea*, *Puccinia sorghi*, *Ramulispora sorghi*, *Sporisorium cruentum*, *Sporisorium sorghi*

Sporobolus indicus (L.) R. Br.: *Curvularia ravenelii*

Stenotaphrum secundatum (Walter) Kuntze: *Pyricularia grisea*

Tripsacum latifolium Hitchc.: *Phakopsora pallescens*

Tripsacum laxum Nash: *Puccinia polysora*

Triticum aestivum L.: *Bipolaris sorokiniana*, *Blumeria graminis*, *Cladosporium herbarum*, *Fusarium graminearum*, *Puccinia graminis*, *Puccinia recondita*, *Pyrenophora tritici-repentis*, *Tilletia caries*, *Ustilago tritici*

Zea mays L.: *Bipolaris maydis*, *Cercospora sorghi*, *Cercospora zeae-maydis*, *Cladosporium herbarum*, *Claviceps tripsaci*, *Curvularia lunata*, *Didymella maydis*, *Exserohilum turcicum*, *Fusarium fujikuroi*, *Fusarium graminearum*, *Fusarium subglutinans*, *Fusarium verticillioides*, *Macrophomina phaseolina*, *Magnaporthiopsis maydis*, *Orphanocoela maydis*, *Peronosclerospora maydis*, *Phakopsora zeae*, *Phyllachora maydis*, *Physoderma maydis*, *Puccinia polysora*, *Puccinia sorghi*, *Pythium aphanidermatum*, *Rhizopus stolonifera*, *Sarocladium strictum*, *Sclerophthora macrospora*, *Sporisorium reilianum*, *Stenocarpella maydis*, *Ustilaginoidea virens*, *Ustilago maydis*

Zoysia matrella (L.) Merr.: *Curvularia lunata*, *Dinemasporium strigosum*

Family Polemoniaceae

Loeselia ciliata L.: *Puccinia fumosa*

Family Polygonaceae

Coccoloba uvifera (L.) L.: *Lembosia tenella*

Family Primulaceae

Jacquinia aurantiaca W.T. Aiton: *Phyllachora inclusa*

Family Rhamnaceae

Gouania lupuloides (L.) Urb.: *Puccinia gouaniae*, *Puccinia invaginata*

Family Rhizophoraceae

Rhizophora mangle L.: *Caloplaca erythrantha*, *Cratiria obscurior*, *Pyxine berteriana*, *Pyxine cocoes*

Family Rosaceae

Rosa sp: *Podosphaera pannosa*

Family Rubiaceae

Borreria sp: *Puccinia lateritia*

Coffea arabica L.: *Allophoma nicaraguensis*, *Aspergillus flavus*, *Aspergillus niger*, *Capnodium coffeae*, *Ceratocystis fimbriata*, *Cercospora coffeicola*, *Colletotrichum coffeanum*, *Colletotrichum gloeosporioides*, *Corticium koleroga*, *Dematophora bunodes*, *Hemileia vastatrix*, *Marasmius crinis-equi*, *Mycena citricolor*, *Necator salmonicolor*, *Phoma costaricensis*, *Phyllosticta coffeicola*, *Rhizoctonia solani*

Family Rutaceae

Citrus aurantiifolia (Christm.) Swingle: *Stenella citri-grisea*

Citrus aurantium L.: *Elsinoë fawcettii*, *Rhizoctonia solani*

Citrus limon (L.) Burm. F.: *Alternaria citri*, *Elsinoë fawcettii*

Citrus sinensis (L.) Osbeck: *Alternaria citri*, *Elsinoë fawcettii*, *Leptoxylum fumago*

Citrus sp: *Diaporthe citri*, *Lasiodiplodia theobromae*, *Penicillium digitatum*, *Phytophthora citrophthora*, *Phytophthora nicotianae*, *Septobasidium curtisii*, *Septobasidium pseudopedicellatum*

Family Sapindaceae

Melicoccus bijugatus Jacq.: *Cercospora sapindi*

Thouinidium decandrum (Bonpl.) Radlk.: *Skierka holwayi*

Family Selaginellaceae

Selaginella kunzeana A. Braun: *Irenopsis selaginellarum*

Selaginella sertata Spring: *Irenopsis selaginellarum*

Family Simaroubaceae

Simarouba amara Aubl.: *Armillaria mellea*

Family Smilacaceae

Smilax sp: *Sphenospora smilacina*

Family Solanaceae

Calibrachoa sp: *Podosphaera xanthii*

Capsicum annuum L.: *Botrytis cinerea*, *Cercospora physalidis*, *Colletotrichum capsica*, *Colletotrichum nigrum*, *Fusarium oxysporum*, *Phytophthora infestans*

Nicotiana tabacum L.: *Cercospora physalidis*, *Fusicolla merismoides*, *Peronospora hyoscyami*, *Phyllosticta nicotianae*, *Phytophthora nicotianae*, *Pythium deliense*, *Rhizoctonia solani*

Solanum lycopersicum L.: *Alternaria solani*, *Fusarium oxysporum*, *Leveillula taurica*, *Passalora fulva*, *Phytophthora infestans*, *Septoria lycopersici*

Solanum tuberosum L.: *Alternaria alternata*, *Alternaria solani*, *Cercospora physalidis*, *Helminthosporium solani*, *Phytophthora infestans*, *Rhizoctonia solani*

Family Verbenaceae

Lantana trifolia L.: *Aecidium lantanae*

Family Vitaceae

Cissus sp.: *Meliola furcata*

Cissus verticillata (L.) Nicolson & C.E. Jarvis: *Endophyllum circumscriptum*

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