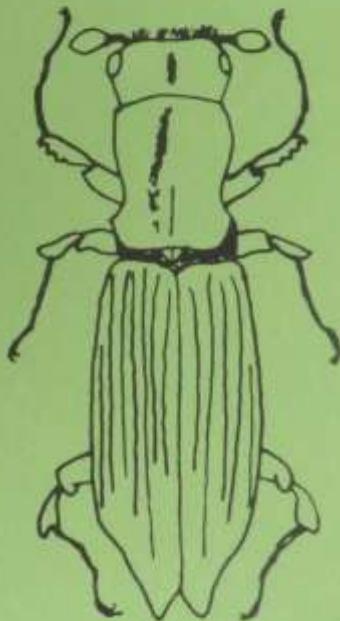


REVISTA NICARAGUENSE DE ENTOMOLOGIA

Nº. 3.

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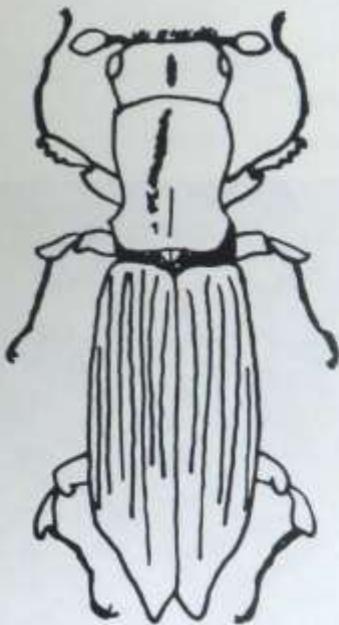
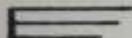
PUBLICACION DEL MUSEO ENTOMOLÓGICO
SERVICIO ENTOMOLÓGICO AUTÓNOMO
LEÓN, NICARAGUA.

MXMLXXXVIII

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Editor responsable :
Jean-Michel Maes.
Servicio Entomológico Autónomo.
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Nicaragua.

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Esta publicación está vendida al público a precio de costo para permitir a los editores futuras publicaciones.

El Servicio Entomológico Autónomo tiene por objetivo ayudar al estudio de la Entomología en Nicaragua.

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Dibujo de la portada : *Platypus* sp.

CONTENIDO DEL NUMERO 3.

MNES Jean-Michel & EQUINUA-MARTINEZ Armando - Catalogo de
Scolytidae y Platypodidae (Coleoptera) de Nicaragua.
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CATALOGO DE
SCOLYTIDAE Y PLATYPODIDAE
(COLEOPTERA) DE NICARAGUA.

Por Jean-Michel MAES * &
Armando EQUIHUA MARTINEZ **

Resumen.

En este catalogo se presentan las 46 especies de Coleoptera Scolytidae y las 12 especies de Coleoptera Platypodidae reportados de Nicaragua. Para cada especie se indica la distribucion geografica, la sinonimia, hospederos y enemigos naturales conocidos. Una bibliografia es agregada.

Abstract.

This catalogue presents the 46 species of Coleoptera Scolytidae and 12 species of Coleoptera Platypodidae presently known from Nicaragua. For each species it's indicated the geographic distribution, synonymy, host plants and natural enemies. A bibliography is aggregated for the known Nicaraguan species.

Introduccion.

Los Scolytidae y Platypodidae, del orden Coleoptera, son comunmente llamados escarabajos descortezadores o escarabajos ambrosia, segun que sean floeofagos (alimentandose de floema de arboles y arbustos) o xilomycetofagos (alimentandose de hongos que cultivan en tuneles que cavan en el interior de la madera). Algunas especies comen tambien semillas, madera y algunas plantas herbaceas.

Estos insectos son casi siempre los primeros en atacar una planta moribunda o recien muerta y su ataque es muy caracteristico. En algunos casos pueden atacar plantas sanas y se vuelven plagas de importancia economica, principalmente en area de forestales o fruticolas (*Dendroctonus*, *Ips*, *Scolytus*, *Platypus*, *Hypothenemus*, *Xyleborus*, *Xylotandrus*).

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Los Scolytidae son pequeños, máximo 6 mm. (muchas veces 2 a 4 mm.), de color café o negro, de forma cilíndrica. Tienen antenas cortas terminadas en maza de 3 a 4 segmentos. Muchos géneros (*Ips*, *Scolytus*) tienen los élitros aplastados oblicuamente y a veces con algunas espinas.

El sistema de galerías de las especies floeofágas consta de las siguientes partes: un túnel de entrada, corto, cilíndrico y dirigido oblicuamente en el hospedero (posiblemente para proteger la entrada del agua); una cámara nupcial, en el túnel de entrada, tres a cinco veces más grande que el insecto; una galería de oviposición, construida por la hembra para poner los huevos; túneles larvarios, construidos por las larvas, muchas veces son perpendiculares a la galería de oviposición.

El ciclo biológico es corto, uno a dos meses. La larva es gorda, en forma de C, blanca y apoda.

La lucha contra los Scolytidae se puede hacer de manera química, aplicando sobre los troncos; pero el resultado es poco eficiente. El tratamiento químico pone en peligro a los enemigos naturales de los Scolytidae (Ostomidae, Staphylinidae, Carabidae, etc.). Se puede luchar contra esta plaga usando la hormona de agrupación así como la feromonía sexual, específica de cada especie. Se puede también luchar limpiando los bosques de todos los árboles muertos y atacados.

Los Platypodidae son de forma más alargada y de tamaño más grande que los Scolytidae, muchas veces llegan a 8 y hasta 10 mm. Se reconocen por sus antenas con el último segmento en forma de disco. Son en su mayoría xilomicetófagos.

Catálogo de las especies de Nicaragua.

I. Familia SCOLYTIDAE.

A. Sub-familia HYLEBININAE.

Hylastes tenuis EICHHOFF 1868.

= *Hylastes criticus* EICHHOFF 1868.

Distribución: USA, México, Nicaragua (reporte nuevo) (Nueva Segovia).

Fitófago: Pinaceae: *Pinus*.

Phloeoborus asper ERICHSON 1836.

= *Phloeoborus imbricornis* EICHHOFF 1868.

= *Phloeoborus ovatus* CHAPUIS 1869.

= *Phloeoborus rugatus* BLANDFORD 1897.

Distribución: México, Nicaragua (Chontales), Guiana, Brasil.

Phloeoborus beltii BLANDFORD 1897.

Distribución: Nicaragua (Chontales).

- Phloeoborus punctorugosus* CHAPUIS 1869.
= *Phloeoborus breviscultus* CHAPUIS 1869.
= *Phloeoborus nitidicollis* CHAPUIS 1873.
Distribución : México, Nicaragua, Brasil.
Hospederos : Lecythidaceae : *Lecythis*.
Myrtaceae : *Psidium*.
Rubiaceae : *Coffea*.
- Phloeoborus rufus* ERICHSON 1836.
= *Phloeoborus elongatus* CHAPUIS 1869.
= *Phloeoborus rugipennis* EGGER 1942.
Distribución : Guatemala, Belize, El Salvador, Nicaragua,
Costa Rica, Panamá, Guyana francesa, Brasil, Argentina.
- Phloeoborus scaber* ERICHSON 1836.
= *Phloeoborus caelatus* BLANCHARD 1846.
= *Phloeoborus sericeus* CHAPUIS 1869.
= *Phloeoborus opacithorax* SCHEDL 1940.
Distribución : México, Guatemala, Nicaragua (Chontales),
Panamá, Colombia, Guyana francesa, Bolivia, Brasil.
Hospederos : Fabaceae.
- Dendroctonus adjunctus* BLANDFORD 1897.
roundheaded pine beetle, escarabajo descortezador.
= *Dendroctonus convexifrons* HOPKINS 1909.
Distribución : USA, México, Guatemala, Nicaragua (Esteli,
Matagalpa).
Hospederos : Pinaceae : *Pinus*.
Enemigos naturales :
HYM. Aulacidae : *Aulacus aneurus*.
- Dendroctonus frontalis* ZIMMERMAN 1868.
southern pine bark beetle.
= *Dendroctonus arizonicus* HOPKINS 1909.
Distribución : USA, México, Guatemala, Honduras, Nicaragua
(Matagalpa).
Hospederos : Pinaceae : *Pinus*.
Vector de Fungi : *Ceratostomella pini* (moho azul).
Ceratocystis minor (moho azul).
Enemigos naturales :
HET. Anthocoridae : *Scolopostelis mississippiensis*.
Scolopostelis sp.
Lyctocoris elongatus.
Lyctocoris stali.
Aradidae : *Aradus cinnamomeus*.
Pentatomidae : *Diocles chrysorrhoeus*.
COL. Cleridae : *Thanatus dubius*.
Coccinellidae : *Nephus bioculatus*.
Cucujidae : *Ahsverus advena*.
Elateridae : *Lacon impressicollis*.
Melanotus sp.

Histeridae : *Cylistix cylindricus.*
 Hister cylindricus.
 Platysoma attenuata.
 Platysoma cylindrica.
 Platysoma parallelum.
 Plegaderus transversus.
 Plegaderus sp.
Ostomidae : *Tenebroides collaris.*
 Tenebroides virescens.
 Corticotomus sp.
Colydiidae : *Aulonium tuberculatum.*
 Lasconotus referendarious.
Tenebrionidae : *Corticeus glaber.*
Staphylinidae : *Tachinus sp.*
 Xantholinus sp.
DIP. Dolichopodidae : *Medetera bistrigata.*
 Medetera modestus.
 Medetera vidua.
 Medetera nigripes.
 Medetera maura.
HYM. Braconidae : *Dendroster sulcatus.*
 Doryctes anatolicus.
 Ecphylus schwartzi.
 Spathius pallidus.
 Spathius canadiensis.
 Atanycolus cosmosifrons.
 Cenocoelius nigrisoma.
 Caeloides pissodis.
 Meteorus hypophloei.
 Meteorus sp.
Torymidae : *Roptrocerus xylophagorum.*
 Roptrocerus ectoptogastri.
Pteromalidae : *Heydenia unica.*
 Dinotiscus dendroctoni.
 Dinotiscus burkei.
 Rhopalicus pulchripennis.
Eurytomidae : *Eurytoma cleri.*
 Eurytoma conica.
 Eurytoma sp.
ACA. Tarsonemidae : *Tarsonemus ips.*
 Tarsonemus krantzi.
 Tarsonemus wilkinsoni.
 Tarsonemus suskii.
 Heterotarsonemus lindquisti.
 Iponemus calligraphi.
 Iponemus confusus.
 Iponemus truncatus.
Gamasidae : *Gamasolaelaps subcorticalis.*
 Eugamasus lyriformis.

Digmasellidae : *Dendrolaelaps neodisetus.*
Dendrolaelaps rotori.
Dendrolaelaps isodontatus.
Dendrolaelaps neocornutus.
Dendrolaelaps variopunctatus.
Dendrolaelaps quadrisetus.

Erythraeidae : *Leptus* sp.

Macrochelidae : *Macrocheles boudreauxi.*
Macrocheles mammifer.

Ascidae : *Proctolaelaps hystricoides.*
Proctolaelaps xyloteri.
Proctolaelaps fiseri.
Proctolaelaps bickleyi.
Proctolaelaps hystrix.
Proctolaelaps dendroctoni.
Androlaelaps casalis.

Acaridae : *Histiogaster arbosignis.*
Histiogaster rotundus.

Pyemotidae : *Pyemotes parviscolytii.*
Lasioseius dentatus.
Lasioseius epicriodopsis.
Lasioseius tuberculiger.
Hypoaspis praesternalis.
Hypoaspis vitzthumi.
Hypoaspis krantzi.
Cercopeltis coelonotus.
Pleuroctolaeno drymoegetes.
Uroobovella americana.
Uroobovella orri.

Bacteria : *Serratia marcescens.*
Serratia sp.
Pseudomonas sp.
Aerobacter sp.
Bacillus sp.

Nematoda : Sphaerulariidae : *Contortylenchus brevicomi.*
Anguillionema sp.

Fungi : *Beauveria bassiana.*
Aspergillus flavus.
Penicillium sp.
Fusarium solani.
Metarrhizium sp.

Foréticos :

ACA : Uropodidae : *Trichouropoda australis.*
Trichouropoda hirsuta.
Trichouropoda lamellosa.

Anoetidae : *Anoetus varia.*
Anoetus conjuncta.
Anoetus insolita.
Anoetus sordida.

Ereynetidae : *Ereynetoides scutulif.*

Dameosmidiae.

Parasitidae.

Cheltidae : *Cheltia* sp.

Oribatidae.
Pygmephorous bennetti.
Longoselius cuniculus.
Pseudochelylus sp.

Simbióticos :
Nematoda : *Aphelenchoides sp.*

Dendroctonus mexicanus HOPKINS 1905.
Distribución : México, Guatemala, Honduras, Nicaragua (Nueva Segovia, Madriz).
Hospederos : Pinaceae : *Pinus*.

Dendroctonus parallelocollis CHAPUIS 1869.
= *Dendroctonus aztecus* WOOD 1963.
Distribución : México, Guatemala, Honduras, Nicaragua (Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.

B. Sub-familia SCOLYTINAE.

Camptocerus auricomus BLANDFORD 1896.
Distribución : Nicaragua (Chontales), Costa Rica, Panamá, Venezuela.
Fitófago : Meliaceae : *Cedrela*.
Burseraceae : *Protium*.

Scolytus dimidiatus CHAPUIS 1869.
Distribución : Cuba, México, Guatemala, Nicaragua (Matagalpa), Costa Rica, Venezuela.
Fitófago : Fabaceae : *Lonchocarpus*.

Scolytus incognitus EGGERS 1951.
Distribución : México, Nicaragua (Matagalpa).

Pycnarthrum hispidum (FERRARI) 1867.
= *Hypoborus hispidus* FERRARI 1867.
= *Nemobius lambottei* CHAPUIS 1869.
= *Pycnarthrum gracile* EICHHOFF 1878.
= *Pycnarthrum quadritalicolle* EICHHOFF 1878.
= *Pycnarthrum transversum* BLANDFORD 1897.
= *Pycnarthrum reimoseri* SCHEDL 1934.
Distribución : USA, Cuba, México, Guatemala, Honduras, El Salvador, Nicaragua (León), Panamá, Suramérica.
Hospederos : Moraceae : *Ficus*.

Gymnochilus reitteri (EICHHOFF) 1878.
= *Gymnochilus reitteri* EICHHOFF 1878.
= *Problechilus striatus* EGgers 1932.
= *Problechilus bicolor* EGgers 1932.
= *Gymnochilus bicolor*.
Distribución : México, Guatemala, Nicaragua, Costa Rica, Panamá.
Fitófago : Moraceae : *Ficus*.

Ips calligraphus (GERMAR) 1924.
= *Bosstrichus calligraphus* GERMAR 1824.
= *Bosstrichus exesus* SAY 1826.
= *Tomicus praemorosus* EICHHOFF 1868.
= *Tomicus interstitialis* EICHHOFF 1869.
= *Ips ponderosae* SWAINE 1925.
Distribución : Canadá, USA, México, Guatemala, Honduras,
Nicaragua (Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.

Ips grandicollis (EICHHOFF) 1868.
engraver beetle.
= *Tomicus grandicollis* EICHHOFF 1868.
= *Tomicus cacographus* LECONTE 1868.
= *Tomicus cribricollis* EICHHOFF 1869.
= *Ips chagnoni* SWAINE 1916.
= *Ips cloudcrofti* SWAINE 1924.
Distribución : Canadá, USA, México, Guatemala, Belize,
Honduras, Nicaragua (León, Esteli, Madriz, Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.
Enemigos naturales :
COL. Oستomidae : *Tennochila virescens*.
HYM. Braconidae : *Dendroster sulcatus*.
Spathius pallidus.
Caeloides pissodis.
Heterospilus sp.
Torymidae : *Roptrocerus xylophagorum*.
Pteromalidae : *Dinotiscus dendroctoni*.
Tomicobia tibialis.
Heydenia unica.
Rhopalicus pulchripennis.
Rhopalicus tutela.
Eurytomidae : *Eurytoma conica*.
ACA. Tarsonemidae : *Pseudotarsonemoides americanus*.
Foréticos : ACA. Anoetidae : *Anoetus varia*.

Xylosandrus morigerus (BLANDFORD) 1894.
carcoma parda del café, brown coffee borer, brauner
kaffeezweigbohrer.
= *Xyleborus morigerus* BLANDFORD 1894.
= *Xyleborus coffeeae* WURTH 1908.
= *Xylosandrus luzonicus* EGGERS 1923.
Distribución : África, Asia, USA, México, Honduras, Nicaragua
(Zelaya), Costa Rica, Panamá, Colombia, Venezuela, Brasil.
Hospederos : Bombacaceae : *Bombax*.
Fabaceae : *Crotalaria*, *Tephrosia*.
Lauraceae : *Cinnamomum*.
Meliaceae : *Swietenia*.
Mimosaceae : *Leucaena*.
Orchidaceae : *Dendrobium*.
Rubiaceae : *Coffea*.
Sterculiaceae : *Theobroma*.
Theaceae : *Camellia*.

Verbenaceae : *Tectona*.

Mutualismo : Fungi.

Enemigos naturales :

HYM. Eulophidae : *Tetrastichus xyleborum*.

Xyleborus affinis EICHHOFF 1868.

- = *Xyleborus affinis* var. *parvus* EICHHOFF 1879.
- = *Xyleborus affinis* var. *mascarensis* EICHHOFF 1879.
- = *Xyleborus affinis* var. *fuscobrunneus* EICHHOFF 1879.
- = *Xyleborus sacchari* HOPKINS 1915.
- = *Xyleborus subaffinis* EGgers 1933.
- = *Xyleborus proximus* EGgers 1943.

Distribución : África, Asia, Hawaii, USA, I. Mauricia, Cuba, Puerto Rico, I. Nevis, Guadalupe, St. Vincent, Granada, Barbados, México, Belize, Guatemala, Honduras, El Salvador, Nicaragua (León, Zelaya), Costa Rica, Panamá, Colombia, Venezuela, Trinidad, Tobago, Guyana francesa, Brasil, Perú, Argentina.

Hospederos : Agavaceae : *Dracaena*.

Anacardiaceae : *Spondias*.

Burseraceae : *Bursera*.

Fabaceae : *Erythrina*.

Lauraceae : *Perses*.

Poaceae : *Saccharum*.

Xyleborus ferrugineus (FABRICIUS) 1801 .

ambrosia beetle.

- = *Bostrichus ferrugineus* FABRICIUS 1801.
- = *Toxicus trypanaeoides* WOLLASTON 1867.
- = *Xyleborus fuscatus* EICHHOFF 1868.
- = *Xyleborus impressus* EICHHOFF 1868.
- = *Xyleborus confusus* EICHHOFF 1868.
- = *Xyleborus retusicollis* ZIMMERMANN 1868.
- = *Xyleborus bispinatus* EICHHOFF 1868.
- = *Xyleborus amplicollis* EICHHOFF 1869.
- = *Xyleborus insularis* SHARP 1885.
- = *Xyleborus tanganus* HAGEDORN 1910.
- = *Xyleborus soltaui* HOPKINS 1915.
- = *Xyleborus nyssae* HOPKINS 1915.
- = *Xyleborus hopkinsi* BEESON 1929.
- = *Xyleborus argentinensis* SCHEDL 1931.
- = *Xyleborus schedli* EGgers 1934.
- = *Xyleborus notatus* EGgers 1941.
- = *Xyleborus subitus* SCHEDL 1949.

Distribución : África, Asia, Hawaii, USA, Cuba, Puerto Rico, Guadalupe, Dominica, St. Vincent, Grenada, Barbados, México, Belize, Guatemala, El Salvador, Nicaragua (León, Zelaya), Costa Rica, Panamá, Venezuela, Trinidad, Guyana, Ecuador, Brasil, Chile, Argentina.

Hospederos : Anacardiaceae : *Mangifera*.

Araliaceae : *Sciadodendron*.

Arecaceae : *Cocos*.

Burseraceae : *Bursera*.

Caesalpiniaceae : *Delonix*.
Fabaceae : *Erythrina*.
Moraceae : *Ficus*.
Pinaceae : *Pinus*.
Sapindaceae : *Thouinidium*.
Sterculiaceae : *Theobroma*.
Tiliaceae : *Heliocarpus*.
Urticaceae : *Urera*.
Mutualismo : Fungi : *Fusarium solani*.
Graphium sp.
Cephalosporium sp.
Ceratocystis fimbriata.
Simbiótico : Bacteria.

Xyleborus intrusus BLANDFORD 1898.
= *Xyleborus howardi* HOPKINS 1915.
= *Xyleborus fitchi* HOPKINS 1915.
= *Xyleborus scopulorum* HOPKINS 1915.
Distribución : USA, México, Guatemala, Honduras, Nicaragua
(Esteli, Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.

Xyleborus macer BLANDFORD 1898.
Distribución : México, Guatemala, Nicaragua, Costa Rica,
Panamá, Colombia, Venezuela.
Hospederos : Sterculiaceae : *Theobroma*.

Xyleborus princeps BLANDFORD 1898.
= *Xyleborus spathipennis* var. *ohausi* HAGEDORN 1912.
Distribución : Nicaragua, Panamá, Ecuador.

Xyleborus pubescens ZIMMERMANN 1869.
= *Xyleborus pini*, EICHHOFF 1868.
= *Xyleborus propinquus* EICHHOFF 1869.
Distribución : Canadá, USA, México, Guatemala, Nicaragua,
Sudamérica.
Hospederos : Pinaceae : *Pinus*.

Xyleborus volvulus (FABRICIUS) 1775.
= *Bosstrichus volvulus* FABRICIUS 1775.
= *Xyleborus terquatus* EICHHOFF 1868.
= *Xyleborus alternans* EICHHOFF 1869.
= *Xyleborus badius* EICHHOFF 1869.
= *Xyleborus kraatzi philippensis* EICHHOFF 1878.
= *Xyleborus interstitialis* EICHHOFF 1878.
= *Xyleborus hubbardi* HOPKINS 1915.
= *Xyleborus schwarzi* HOPKINS 1915.
= *Xyleborus rileyi* HOPKINS 1915.
= *Xyleborus grenadensis* HOPKINS 1915.
= *Xyleborus vagabundus* SCHEDL 1949.

Distribución : África, Asia, Hawaii, USA, Cuba, Puerto Rico, Dominica, Hispaniola, Granada, México, Belize, Guatemala, Honduras, Nicaragua (León, Managua, Zelaya, Estelí, Nueva Segovia), Costa Rica, Panamá, Brasil, Perú, Argentina.
Hospederos : Anacardiaceae : *Spondias*, *Mangifera*, *Anacardium*, *Astronium*.
Araliaceae : *Sciadodendron*, *Dendropanax*.
Arecaceae : *Cocos*.
Bignoniaceae : *Jacaranda*.
Burseraceae : *Bursera*.
Caesalpiniaceae : *Delonix*.
Caricaceae : *Carica*.
Casuarinaceae : *Casuarina*.
Clusiaceae : *Vismia*.
Combretaceae : *Terminalia*.
Euphorbiaceae : *Hura*.
Fabaceae : *Erythrina*.
Lecythidaceae : *Eschweilera*.
Meliaceae : *Cedrela*.
Mimosaceae : *Inga*, *Enterolobium*.
Moraceae : *Ficus*.
Pinaceae : *Pinus*.
Sapindaceae : *Thouinidium*, *Melicocca*.
Sapotaceae : *Pouteria*.
Sterculiaceae : *Theobroma*.
Tiliaceae : *Helioarpus*.

Xyleborus sp.

Distribución : Nicaragua (Nueva Segovia, Matagalpa, Masaya, Carazo, Granada, Zelaya).
Hospederos : Bromeliaceae : *Ananas*.
Poaceae : *Saccharum*.
Sterculiaceae : *Theobroma*.

Hypothenemus crudiae (PANZER) 1791.

- = *Batrachus crudiae* PANZER 1791.
- = *Stephanoderes crudiae*.
- = *Batrachus plumeriae* NORDLINGER 1856.
- = *Cryphalus hispidulus* LECONTE 1868.
- = *Hypothenemus nanus* HAGEDORN 1909.
- = *Stephanoderes differens* HOPKINS 1915.
- = *Stephanoderes guatemalensis* HOPKINS 1915.
- = *Stephanoderes brasiliensis* HOPKINS 1915.
- = *Stephanoderes paraguayensis* HOPKINS 1915.
- = *Stephanoderes lecontei* HOPKINS 1915.
- = *Stephanoderes polyphagus* COSTA LIMA 1924.
- = *Stephanoderes fallax* COSTA LIMA 1924.
- = *Stephanoderes largipennis* PIZA JUNIOR 1924.
- = *Stephanoderes uniseriatus* EGGERS 1924.
- = *Stephanoderes hivacea* BEESON 1935.
- = *Stephanoderes lebronnei* BEESON 1935.
- = *Stephanoderes hawaiiensis* SCHEDL 1941.

Distribución : Asia, África, Hawaii, USA, Cuba, Puerto Rico, Grenada, México, Guatemala, Honduras, Nicaragua (León), Costa Rica, Panamá, Trinidad, Venezuela, Guyana, Colombia, Ecuador, Brasil, Paraguay, Argentina.
Hospederos : Anacardiaceae : *Mangifera*, *Spondias*.
Apocynaceae.
Arecaceae : *Cocos*.
Aristolochiaceae : *Aristolochia*.
Asclepiadaceae : *Hatelea*, *Sarcostemma*.
Asteraceae : *Bidens*.
Betulaceae : *Betula*.
Bignoniaceae : *Bignonia*.
Bombacaceae : *Ceiba*.
Burseraceae : *Bursera*.
Capparidaceae : *Forchhameria*, *Capparis*,
Morrisonia.
Caesalpiniaceae : *Caesalpina*, *Bauhinia*, *Cassia*.
Caricaceae : *Carica*.
Combretaceae : *Bucida*, *Quisqualis*.
Convolvulaceae : *Ipomoea*.
Cucurbitaceae : *Luffa*.
Euphorbiaceae : *Euphorbia*, *Manihot*, *Jatropha*,
Ricinus.
Fabaceae : *Astragalus*, *Misteria*, *Dalbergia*,
Dioctrea, *Diphysa*, *Glycine*.
Fagaceae : *Quercus*.
Juglandaceae : *Juglans*, *Carya*.
Lauraceae : *Cinnamomum*.
Liliaceae : *Aloe*, *Smilax*, *Yucca*.
Magnoliaceae : *Magnolia*.
Malaceae : *Crataegus*, *Malus*.
Malvaceae : *Abutilon*, *Sida*.
Mimosaceae : *Acacia*, *Inga*.
Moraceae : *Ficus*, *Morus*.
Passifloraceae : *Passiflora*.
Pinaceae : *Pinus*.
Rhizophoraceae : *Rhizophora*.
Rosaceae : *Prunus*.
Rubiaceae.
Rutaceae : *Citrus*.
Sapindaceae : *Thouinia*, *Paulinia*, *Serjania*.
Sapotaceae : *Sideroxylon*, *Achras*.
Sterculiaceae : *Theobroma*.
Theophrastaceae : *Jacquinia*.
Tiliaceae : *Helicocarpus*, *Grewia*.
Ulmaceae : *Celtis*.
Urticaceae : *Boehmeria*.
Verbenaceae : *Clerodendron*.

Hypothenemus erectus LECONTE 1876.

- = *Stephanoderes erecta*.
- = *Hypothenemus validus* BLANDFORD 1904.
- = *Stephanoderes puncticollis* HOPKINS 1915.

- = *Stephanoderes cubensis* HOPKINS 1915.
- = *Stephanoderes brunneicollis* HOPKINS 1915.
- = *Stephanoderes discedens* SCHEDL 1950.
- Distribución : USA, Cuba, St. Thomas, México, Guatemala, Honduras, Nicaragua (Zelaya), Venezuela.
- Hospederos :

 - Anacardiaceae : *Spondias*, *Toxicodendron*.
 - Annonaceae : *Annona*.
 - Arecaceae : *Cocos*.
 - Bignoniaceae.
 - Borraginaceae : *Cordia*.
 - Caesalpiniaceae : *Caesalpina*.
 - Capparidaceae : *Capparis*, *Forchhammeria*.
 - Clusiaceae : *Vismia*.
 - Combretaceae : *Laguncularia*.
 - Euphorbiaceae : *Croton*.
 - Fabaceae : *Lonchocarpus*, *Cynometra*.
 - Fagaceae : *Quercus*.
 - Loranthaceae : *Phoradendron*.
 - Melastomaceae : *Miconia*.
 - Mimosaceae : *Acacia*, *Pithecellobium*, *Inga*, *Mimosa*, *Prosopis*.
 - Moraceae : *Ficus*, *Trophis*.
 - Rhamnaceae : *Ziziphus*, *Condalia*.
 - Rhizophoraceae : *Rhizophora*.
 - Rosaceae : *Rubus*.
 - Rubiaceae.
 - Sapindaceae : *Thouinia*, *Thouinidium*, *Paulinia*, *Seriania*.
 - Sterculiaceae : *Guazuma*.
 - Ulmaceae : *Celtis*.
 - Verbenaceae : *Avicennia*.

Hypothenemus eruditus WESTWOOD 1836.

- = *Cryphalus aspericollis* WOLLASTON 1860.
- = *Bostrius boieldieui* PERRAUD 1864.
- = *Cryphalus obscurus* FERRARI 1867.
- = *Stephanoderes germani* EICHHOFF 1878.
- = *Stephanoderes myrmecion* EICHHOFF 1878.
- = *Stephanoderes ehlersii* EICHHOFF 1878.
- = *Hypothenemus insularis* PERKINS 1900.
- = *Cryphalus basjoo* NIISIMA 1910.
- = *Hypothenemus tuberculatus* HAGEDORN 1912.
- = *Cosmoderes schwartzi* HOPKINS 1915.
- = *Hypothenemus bradfordi* HOPKINS 1915.
- = *Hypothenemus flavosquamulosus* HOPKINS 1915.
- = *Hypothenemus nigricollis* HOPKINS 1915.
- = *Hypothenemus pruni* HOPKINS 1915.
- = *Hypothenemus rumseyi* HOPKINS 1915.
- = *Hypothenemus asiminiae* HOPKINS 1915.
- = *Hypothenemus hamamelidis* HOPKINS 1915.
- = *Hypothenemus tenuis* HOPKINS 1915.
- = *Hypothenemus myristicae* HOPKINS 1915.
- = *Hypothenemus lineatifrons* HOPKINS 1915.

- = *Hypothenemus sacchari* HOPKINS 1915.
- = *Hypothenemus webbi* HOPKINS 1915.
- = *Hypothenemus koebelei* HOPKINS 1915.
- = *Hypothenemus mali* HOPKINS 1915.
- = *Hypothenemus parvus* HOPKINS 1915.
- = *Hypothenemus flavipes* HOPKINS 1915.
- = *Hypothenemus punctifrons* HOPKINS 1915.
- = *Hypothenemus nigripennis* HOPKINS 1915.
- = *Hypothenemus ferrugineus* HOPKINS 1915.
- = *Hypothenemus heathi* HOPKINS 1915.
- = *Hypothenemus punctipennis* HOPKINS 1915.
- = *Stephanoderes elongatus* HOPKINS 1915.
- = *Stephanoderes evonymyi* HOPKINS 1915.
- = *Stephanoderes flavicollis* HOPKINS 1915.
- = *Stephanoderes pygmaeus* HOPKINS 1915.
- = *Stephanoderes subconcentratus* HOPKINS 1915.
- = *Stephanoderes unicolor* HOPKINS 1915.
- = *Hypothenemus bicolor* EGGERS 1919.
- = *Hypothenemus ehlersi rotroui* PEYERIMHOFF 1919.
- = *Hypothenemus juglandis* BLACKMAN 1922.
- = *Hypothenemus intersetosus* EGgers 1928.
- = *Stephanoderes gracilis* EGgers 1929.
- = *Hypothenemus lezjavai* PJATINZKY 1929.
- = *Hypothenemus citri* EBLING 1935.
- = *Stephanoderes erythrinae* EGgers 1936.
- = *Stephanoderes subcylindricus* EGgers 1940.
- = *Hypothenemus dubius* SCHEDL 1940.
- = *Hypothenemus glabratulus* SCHEDL 1942.
- = *Archeophalus ealensis* EGgers 1944.
- = *Hypothenemus glabratellus* SCHEDL 1953.

Distribución : África, Europa, Asia, Hawái, USA, Cuba,
I.Nevís, México, Guatemala, Honduras, Nicaragua (Zelaya),
Costa Rica, Panamá, Colombia, Brasil, Argentina.

Hospederos : Anacardiaceae : Mangifera, Spondias.

Apocynaceae : Thevetia, Plumeria.

Arecaceae : Cocos.

Asclepiadaceae : Sarcostemma.

Bignoniaceae.

Bixaceae : Bixa.

Bombacaceae : Ceiba.

Boraginaceae : Cordia.

Caesalpiniaceae : Caesalpina.

Capparidaceae : Capparis.

Caricaceae : Carica.

Cecropiaceae : Cecropia.

Convolvulaceae.

Cucurbitaceae : Luffa.

Euphorbiaceae : Manihot, Hura, Jatropha.

Fabaceae : Lonchocarpus.

Lauraceae.

Mimosaceae : Acacia, Pithecellobium.

Moraceae : Ficus, Tropis.

Rhamnaceae : Ziziphus.

Rubiaceae.
Sapindaceae : Cupania.
Sterculiaceae : Theobroma, Guazuma.
Ulmaceae : Celtis.
Verbenaceae : Avicennia.

Hypothenemus hampei (FERRARI) 1867.

carcoma del fruto del cafeto, coffee berry borer,
kaffeekirschenkafer, scolyte du grain de café, barenillo
del grano de café, broca do café.

= *Cryphalus hampei* FERRARI 1867.

= *Stephanoderes hampei*.

= *Stephanoderes coffeae* HAGENDORN 1910.

= *Stephanoderes cooki* HOPKINS 1915.

= *Xyleborus coffeivorus* VAN DER WEELE 1910.

= *Xyleborus coffeicola* CAMPOS NOVAES 1922.

= *Stephanoderes punctatus* EGGERS 1924.

Distribución : África, Asia, Puerto Rico, México, Guatemala,
Nicaragua, Colombia, Brasil.

Hospederos : Caesalpiniaceae : Caesalpina, Dialium.

Fabaceae : Phaseolus, Crotalaria, Tephrosia,
Centrosema.

Malvaceae : Hibiscus.

Mimosaceae : Acacia, Leucaena.

Oleaceae : Ligustrum.

Rosaceae : Rubus.

Rubiaceae : Coffea.

Vitaceae : Vitis.

Enemigos naturales :

HET. *Dindymus rubiginosus*.

HYM. Bethylidae : *Prorops nasuta*.

Cephalonomia stephanoderis.

Braconidae : *Heterospilus coffeicola*.

Formicidae : *Crematogaster* sp.

Acarina.

Fungi : *Beauveria bassiana*.

Beauveria rileyi.

Spicaria javanica.

Hypothenemus obscurus (FABRICIUS) 1801.

falsa broca del fruto de café.

= *Hylesinus obscurus* FABRICIUS 1801.

= *Stephanoderes obscurus*.

= *Stephanoderes asperulus* EICHHOFF 1872.

= *Stephanoderes cassiae* EICHHOFF 1878.

= *Hypothenemus kunnewanni* REITTER 1902.

= *Stephanoderes moschatae* SCHAUFUSS 1905.

= *Stephanoderes rufescens* HOPKINS 1915.

= *Stephanoderes buscki* HOPKINS 1915.

= *Stephanoderes amazonicus* EGGERS 1934.

= *Hypothenemus emarginatus* SCHEDL 1942.

Distribución : África, Asia, USA, Guadalupe, México,
Guatemala, Nicaragua (Granada, Carazo, Managua), Trinidad,
Guyana, Surinam, Colombia, Brazil.
Hospederos : Anacardiaceae : Mangifera.
Arecaceae : Phoenix.
Cecropiaceae : Cecropia.
Liliaceae : Smilax.
Loranthaceae : Phoradendron.
Moraceae : Ficus.
Rhizophoraceae : Rhizophora.
Rubiaceae : Coffea.
Sterculiaceae : Theobroma.

Hypothenemus parallellus (HOPKINS) 1915.
= *Stephanoderes parallelus* HOPKINS 1915.
Distribución : México, Nicaragua (Zelaya).
Fitófago : Mimosaceae : Leucaena.

- = *Stephanoderes seriatulus* EICHHOFF 1872.
- = *Stephanoderes pulvriulentus* EICHHOFF 1872.
- = *Stephanoderes vulgaris* SCAUFUSS 1897.
- = *Stephanoderes georgiae* HOPKINS 1915.
- = *Stephanoderes texanus* HOPKINS 1915.
- = *Stephanoderes minutus* HOPKINS 1915.
- = *Stephanoderes tamarindus* HOPKINS 1915.
- = *Stephanoderes pinii* HOPKINS 1915.
- = *Stephanoderes salicis* HOPKINS 1915.
- = *Stephanoderes floridensis* HOPKINS 1915.
- = *Stephanoderes fiebrigi* HOPKINS 1915.
- = *Stephanoderes ficus* HOPKINS 1915.
- = *Stephanoderes soltaui* HOPKINS 1915.
- = *Stephanoderes lucasi* HOPKINS 1915.
- = *Stephanoderes virentis* HOPKINS 1915.
- = *Stephanoderes pecanis* HOPKINS 1915.
- = *Stephanoderes nitidipennis* HOPKINS 1915.
- = *Stephanoderes nitidulus* HOPKINS 1915.
- = *Stephanoderes subopacicolpis* HOPKINS 1915.
- = *Stephanoderes niger* HOPKINS 1915.
- = *Stephanoderes robustus* BLACKMAN 1922.
- = *Stephanoderes darwinensis* SCHEDL 1942.
- = *Stephanoderes andersoni* WOOD 1954.
- = *Stephanoderes liquidambarae* WOOD 1954.

Distribución : Asia, USA, Cuba, México, Nicaragua, Panamá,
Paraguay.

Hospederos : Acanthaceae : Henrya.
Anacardiaceae : Mangifera, Spondias.
Annonaceae : Annona.
Apocynaceae : Stemmadenia, Plumeria.
Arecaceae : Cocos.
Asclepiadaceae : Matelea.
Bignoniaceae.
Bixaceae : Bixa.

Bombacaceae : *Ceiba*.
Capparidaceae : *Forchhameria*.
Caricaceae : *Carica*.
Cecropiaceae : *Cecropia*.
Convolvulaceae : *Ipomoea*.
Cucurbitacées : *Luffa*.
Euphorbiaceae : *Hura, Euphorbia, Jatropha, Croton, Sapium, Trophis*.
Lauraceae.
Mimosaceae : *Lysiloma*.
Moraceae : *Ficus*.
Sapindaceae : *Thouinia, Thouinidium, Paulinia*.
Sterculiaceae : *Theobroma, Guazuma*.
Tiliaceae : *Helicocarpus*.
Ulmaceae : *Celtis*.
Verbenaceae : *Avicennia*.

Hypothenemus sp.

= *Stephanoderes* sp.

Distribución : Nicaragua (Managua, Matagalpa, Carazo).

Hospederos : Arecaceae.

Euphorbiaceae : *Ricinus*.

Rubiaceae : *Coffea*.

Sterculiaceae : *Theobroma*.

Cryptocarenus laevigatus (BLANDFORD) 1904.

= *Hypothenemus laevigatus* BLANDFORD 1904.

= *Stephanoderes laevigatus*.

Distribución : Nicaragua, Panamá.

Cryptocarenus lepidus WOOD 1971.

Distribución : México, Guatemala, Nicaragua (Zelaya), Panamá, Colombia.

Hospederos : Fabaceae.

Rubiaceae : *Coffea*.

Sapindaceae : *Serjania*.

Pityophthorus annectens LECONTE 1879.

= *Pityophthorus cirtus* BLACKMAN 1928.

Distribución : USA, Honduras, Nicaragua (Esteli, Nueva Segovia).

Hospederos : Pinaceae : *Pinus*.

Pityophthorus confusus BLANDFORD 1904.

= *Pityophthorus bellus* BLACKMAN 1928.

Distribución : USA, México, Guatemala, Nicaragua (Nueva Segovia).

Hospederos : Pinaceae : *Pinus*.

Pityophthorus miniatus BRIGHT 1981.

Distribución : México, Guatemala, Honduras, Nicaragua (Esteli).

Hospederos : Pinaceae : *Pinus*.

Pityophthorus sp.

Distribución : Nicaragua (Esteli, Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.

Gnatholeptus subcibratus (SCHEDL) 1937.

= *Pityophthorus subcibratus* SCHEDL 1937.
= *Pityophthorus zeteki* BLACKMAN 1942.
= *Gnatholeptus subcibratus* BRIGHT 1977.

Distribución : Nicaragua, Costa Rica, Panamá.

Gnathotrichus perniciosus WOOD 1967.

Distribución : México, Honduras, Nicaragua (Esteli, Nueva Segovia).
Hospederos : Pinaceae : *Pinus*.

Amphicranus belti BLANDFORD 1905.

Distribución : Nicaragua (Chontales), Costa Rica.

Amphicranus elegans EICHHOFF 1869.

Distribución : México, Nicaragua (Chontales).
Fitófago : Sterculiaceae : *Theobroma*.

Monarthrum robustum SCHEDL 1966.

Distribución : Nicaragua (Zelaya), Costa Rica.
Hospederos : Anacardiaceae : *Spondias*.

Coccotrypes sp.

= *Paecilips* sp.
Distribución : Nicaragua (Zelaya).
Fitófago : Sterculiaceae : *Theobroma*.

II. Familia PLATYPODIDAE.

Hentzschostus putzeysi (CHAPUIS) 1865.

= *Platypus putzeysi* CHAPUIS 1865.
Distribución : México, Guatemala, Nicaragua.

Tesserocerus belti SHARP 1880.

Distribución : Nicaragua (Chontales), Costa Rica.
Fitófago : Burseraceae : *Bursera*.
Moraceae : *Ficus*.

Tesserocerus dewalquei CHAPUIS 1865.

= *Tesserocerus aubei* CHAPUIS 1865.
= *Tesserocerus dejani* CHAPUIS 1865.
Distribución : México, Guatemala, Nicaragua (Chontales), Costa Rica, Panamá, Colombia, Brasil, Perú, Paraguay, Bolivia.

Tesserocerus spinax BLANDFORD 1896.

Distribución : Nicaragua (Chontales), Costa Rica, Panamá, Guiana Inglesa.

Platypus compositus SAY 1824.

- = *Platypus perforessus* CHAPUIS 1865.
- = *Platypus rudifrons* CHAPUIS 1865.
- = *Platypus rugosus* CHAPUIS 1865.
- = *Platypus subcavifrons* CHAPUIS 1865.
- = *Platypus tremiferus* CHAPUIS 1865.
- = *Platypus diegensis* SCHAUFUSS 1897.
- = *Platypus foraminosus* SCHEDL 1933.

Distribución : USA, Puerto Rico, México, Guatemala, Nicaragua (Zelaya), Costa Rica, Venezuela, Guyana, Brasil, Argentina.

Platypus enixus SCHEDL 1936.

Distribución : México, Nicaragua (Zelaya), Guiana inglesa, Brasil.

Fitofago : Caesalpiniaceae : *Dialium*.

Platypus latreillei CHAPUIS 1865.

Distribución : México, Guatemala, Nicaragua (Chontales), Costa Rica.

Hospederos : Sterculiaceae : *Theobroma*.

Platypus liratus BLANDFORD 1896.

Distribución : Nicaragua (Chontales).

Platypus parallelus (FABRICIUS) 1801.

- = *Bostrichus parallelus* FABRICIUS 1801.
- = *Platypus linearis* STEPHENS 1832.
- = *Platypus praeustus* DEJEAN in lit. 1837.
- = *Platypus testaceus* DEJEAN in lit. 1837.
- = *Platypus subcostatus* JACQUELIN-DUVAL 1837.
- = *Platypus compressus* CHAPUIS 1865.
- = *Platypus dejeani* CHAPUIS 1865.
- = *Platypus difficilis* CHAPUIS 1865.
- = *Platypus emarginatus* CHAPUIS 1865.
- = *Platypus erichsoni* CHAPUIS 1865.
- = *Platypus kraatzi* CHAPUIS 1865.
- = *Platypus laevicollis* CHAPUIS 1865.
- = *Platypus lebasi* CHAPUIS 1865.
- = *Platypus maeklini* CHAPUIS 1865.
- = *Platypus marseuli* CHAPUIS 1865.
- = *Platypus oblongus* CHAPUIS 1865.
- = *Platypus praevius* CHAPUIS 1865.
- = *Platypus proximus* CHAPUIS 1865.
- = *Platypus punctulatus* CHAPUIS 1865.
- = *Platypus regularis* CHAPUIS 1865.
- = *Platypus reticulatus* CHAPUIS 1865.
- = *Platypus rotundatus* CHAPUIS 1865.
- = *Platypus rugulosus* CHAPUIS 1865.
- = *Platypus subaequalis* CHAPUIS 1865.
- = *Platypus wesmaeli* CHAPUIS 1865.
- = *Platypus congoanus* DUVIVIER 1891.
- = *Platypus mattai* BRETHES 1919.
- = *Platypus triquetrus* BRETHES 1919.

= *Platypus virgatus* SCHEDL 1935.

Distribución : África, USA, Puerto Rico, México, Belize,
Guatemala, El Salvador, Nicaragua (Chinandega, León,
Managua, Rivas, Zelaya), Costa Rica, Panamá, Argentina.

Hospederos : Anacardiaceae : *Spondias*, *Mangifera*, *Astronium*.

Arecaceae : *Cocos*.

Bignoniaceae : *Tabebuia*.

Bombacaceae : *Ceiba*.

Burseraceae : *Bursera*.

Caesalpiniaceae : *Delonix*.

Combretaceae : *Acrocarpus*.

Euphorbiaceae : *Croton*.

Fabaceae : *Erythrina*.

Meliaceae : *Cedrela*, *Swietenia*.

Moraceae : *Ficus*, *Brosimum*, *Castilla*.

Nyctaginaceae : *Guapira*.

Oleaceae : *Fraxinus*.

Pinaceae : *Pinus*.

Rutaceae : *Citrus*.

Sapindaceae : *Thouinidium*.

Sapotaceae : *Pouteria*.

Sterculiaceae : *Theobroma*.

Taxodiaceae : *Taxodium*.

Tiliaceae : *Helicocarpus*.

Ulmaceae : *Celtis*.

Platypus pini HOPKINS 1905.

= *Platypus quadridens* SCHEDL 1937.

Distribución : USA, México, Guatemala, Honduras, Nicaragua
(Reporte nuevo) (Nueva Segovia).

Hospederos : Pinaceae : *Pinus*.

Platypus pulchellus CHAPUIS 1865.

Distribución : México, Belize, Guatemala, El Salvador,
Nicaragua (Zelaya), Costa Rica, Guiana inglesa, Surinam,
Brasil.

Platypus reichei CHAPUIS 1865.

Distribución : Nicaragua (Chontales), Costa Rica, Panamá,
Colombia.

Hospederos : Bombacaceae : *Ochroma*.

Meliaceae : *Cedrella*.

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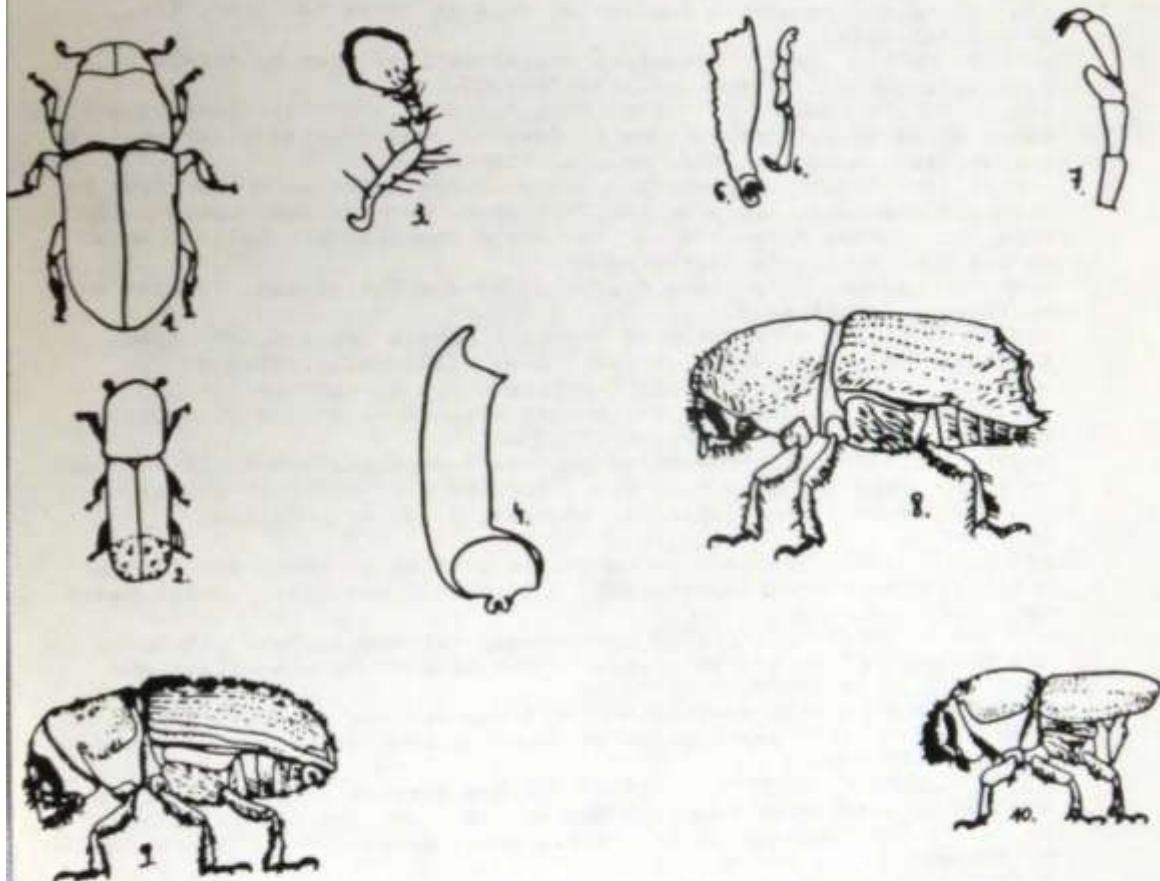
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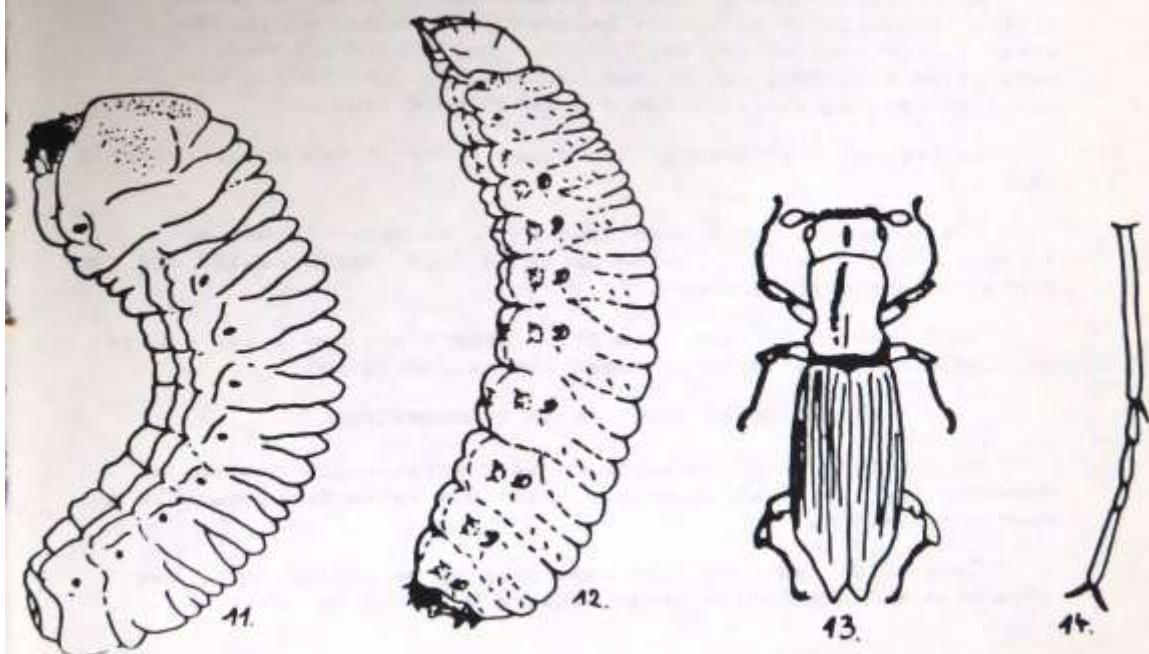
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EXPLICACIONES DE LA LAMINA.

- Fig. 1. : Dendroctonus sp.
Fig. 2. : Xyleborus sp.
Fig. 3. : Ips sp. (antena).
Fig. 4. : Camptocerus sp. (tibia anterior).
Fig. 5. : Ips sp. (tibia anterior).
Fig. 6. : Ips sp. (tarso).
Fig. 7. : Scolytus sp. (tarso).
Fig. 8. : Ips sp.
Fig. 9. : Dendroctonus sp.
Fig. 10. : Scolytus sp.
Fig. 11. : Scolytus sp. (larva).
Fig. 12. : Dendroctonus sp. (larva).
Fig. 13. : Platypus sp.
Fig. 14. : Platypus sp. (tarso).

Figs. 1 hasta 10 y Figs. 14 y 15 según BORROR (1981) y figs 11 y 12 según PETERSON (1960).



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