

NOTES ON THE JUMPING SPIDERS (ARANEAE: SALTICIDAE) OF NICARAGUA, WITH SOME OTHER RECORDS FROM CENTRAL AMERICA.

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RESUMEN

Una colección de arañas Salticidae, principalmente de Nicaragua, se identificó y los resultados se presentan en una lista. Es la primera publicación sobre Salticidae de Nicaragua, los datos publicados anteriormente son mencionados en la introducción.

ABSTRACT

A collection of salticids, mostly from Nicaragua, was identified and an annotated list of these is presented here. This appears to be one of the first publications primarily on Nicaraguan salticid spiders and indicates a major lack of information on this large family in a country which undoubtedly has an extensive fauna.

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INTRODUCTION

The salticid spider fauna of Central America is still poorly known. Only Panama has had an extensive faunal study published (Chickering, 1946). Most of the other records in the literature are from either Honduras, Guatemala, Costa Rica or El Salvador (Peckham & Peckham, 1896; Pickard-Cambridge, 1901; Banks, 1909; Kraus, 1955). In fact, there are no records of Nicaraguan salticids in the major spider catalogs (Roewer, 1954; Brignoli, 1983; Platnick, 1989), or in Pickard-Cambridge (1901), although some records are listed with range data from a country to the north and the south of Nicaragua or from "Central America" generally. One article (Cutler, 1981) contains one record for *Paradamoetas formicina* Peckham & Peckham from Musawas, Zelaya and another (Galiano, 1982) one record for *Nycterella delecta* (Peckham & Peckham) from San Marcos, Carazo. Griswold (1987) published records for *Habronattus mexicanus* (Peckham & Peckham) and *H. banksi* (Peckham & Peckham) from Musawas, Zelaya. Two articles were published in 1989 which included Nicaraguan salticid records. These were Maes, Palacios-Vargas & Jimenez (1989) and Richman (1989). Of these, Maes, Palacios-Vargas & Jimenez listed eight salticids, only two of which were identified to species: *Hentzia fimbriata* Pickard-Cambridge and *Sarinda hentzi* (Banks). Richman published only two records for *Hentzia fimbriata*. A third article, on a new species of *Synemosyna* was published recently (Cutler, 1993). Proszynski (1990) listed only *Paradamoetas formicina* as recorded from Nicaragua. There may be other published records, but these are certainly very few in number. Because of this I felt that it might stimulate further interest if the records from material accumulated by Museo Entomológico, S.E.A., in León, Nicaragua, and identified by me over the last two years, were published. This material is mostly from Nicaragua, but also includes a few records from Costa Rica. The material is now in the León museum. I am grateful to J.-M. Maes of the Entomological Museum in León and Herbert W. Levi of the Museum of Comparative Zoology for the chance to examine the material on which this short paper is based. My identifications are based on my reference collection and a small collection of salticid specimens from Central and South America maintained by me at New Mexico State University. Several identifications are tentative and await further revisionary work by specialists.

LIST OF SALTICID SPIDERS EXAMINED.

1. *Compsodecta maxillosa* (PICKARD-CAMBRIDGE). NICARAGUA: male, Matagalpa, Selva Negra, 1-xi-1991, C. Pineda.
2. *Corythalia spiralis* (PICKARD-CAMBRIDGE). NICARAGUA: male, Isla de Ometepe, v-1990, F. Tourant.
3. "*Corythalia*" sp. NICARAGUA: male, 2 km. N. of Matagalpa, 15-vii-1989, F. Reinboldt.
Note: This is may or may not belong to *Corythalia*, but it is in the same group of genera as this genus.
4. *Eris aurantia* (LUCAS). COSTA RICA: two males, two immatures, San José, 30-viii-1989, J.M. Maes; male, two immatures, San Ramon de Tres Ríos, ix-1991, J.M. Maes; NICARAGUA: two immatures, 2 km. N. of Matagalpa, 15-vii-1989, F.Reinboldt; male, ten immatures, 5 km. N. of Matagalpa, 15-vii-1989, F. Reinboldt; three immatures, 3 km. N. of Jinotega, 15-vii-1989, F. Reinboldt; two males, 13 immatures, 5 Km. E. of Jinotega, 15-vii-1989, F. Reinboldt; female, Volcán Mombacho, dept. of Granada, 30-vii-1989, F. Reinboldt; female, Matagalpa, Selva Negra, 1-xi-1991, C. Pineda; male, Matagalpa, Santa María de Ostuma, 29-v-1992, J.M. Maes and C. Pineda.
5. *Euophrys?* sp. NICARAGUA: female, Volcán Mombacho, viii-1989, F. Reinboldt.
6. *Freya* cf. *grisea* (PICKARD-CAMBRIDGE). NICARAGUA: male, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt.
7. *Freya* n. sp.? COSTA RICA: female, Guapiles, 13-ix-1991, J.M. Maes.
Note: a large colorful species also photographed alive by G.B. Edwards (personal correspondence).
8. *Habronattus geronimo* GRISWOLD. NICARAGUA: two males, León, ii-1991 and iii-1991, B. Garcete.
Note: these two males represent a southernmost range extension for this species, which was not previously known from south of Central Mexico (Griswold, 1987).
9. *Habronattus mexicanus* (PECKHAM & PECKHAM). NICARAGUA: two immatures, León, Los Zarzales, 12-x-1988, J.M. Maes; male, Matagalpa, El Coyolar (85°50'W/13°07'N), 800 m. on sea level, on naturally growth pasture, 20-xi-1991, J.M. Maes, S. Hue and X. Palacios; female, León, Finca MIL (Manuel Ignacio Lacayo Agricultural College Station), xii-1989, J. Téllez; male, León, vi-1990, B. Garcete.

Habronattus sp. NICARAGUA: immature, León, iii-1991, B. Garcete.

Note: could be either of the two species above or another one.

10. *Hypaeus* (= *Amycus*) cf. *benignus* (PECKHAM & PECKHAM). COSTA RICA: female, Guapiles, 13-ix-1991, J.M. Maes.
11. *Lyssomanes* cf. *bitaeniatus* PECKHAM & WHEELER. NICARAGUA: male, 2 km. N. of Matagalpa, 15-vii-1989, F. Reinboldt.
12. *Lyssomanes spiralis* PICKARD-CAMBRIDGE. NICARAGUA: male, female, Jinotega, Apanas Lake, 15-vii-1989, F. Reinboldt; male, female, 3 km. N. of Jinotega, 15-vii-1989, F. Reinboldt; male, León, Finca MIL, 8-x-1989, J. Téllez; female, León, iii-1990, B. Garcete; male, female, León, v-1990, B. Garcete; male, female, León, vi-1990, B. Garcete; male, León, Volcán Telica, vii-1990, B. Garcete; male, female, León, Parque Arlen Siu, 21-vii-1991, J. Téllez and J.M. Maes.

Lyssomanes sp. COSTA RICA: female, San José, 30-viii-1989, J.M. Maes; NICARAGUA: immature, Volcán Mombacho, viii-1989, F. Reinboldt; immature, León, xii-1989, B. Garcete; immature, Managua, ii-1990, B. Garcete; immature, León, iii-1990, B. Garcete; seven immature, León, iii-1991, B. Garcete.

13. *Metaphidippus* cf. *longipalpus* PICKARD-CAMBRIDGE. NICARAGUA: male, Isla de Ometepe, v-1990, F. Tourant.

Note: with sinuate embolus and shorter palpal tibia-patella.

14. *Metaphidippus* sp. A. NICARAGUA: male, León, Los Zarzales, 12-x-1988, J.M. Maes; three males León, Los Zarzales, 23-xii-1988, J.M. Maes; female, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt; three males, Isla de Ometepe, vii-1989, F. Reinboldt; female, León, Los Lechecuagos, 31-x-1991, J.M. Maes and C. Pineda.

15. *Metaphidippus* sp. B. NICARAGUA: male, Matagalpa, Selva Negra, 1-xi-1991, C. Pineda.

Note: Embolus of male "hooked", not straight up like in sp. A.

16. *Myrmarachne parallela* (FABRICIUS). COSTA RICA: two male, Guapiles, 13-ix-1991, J.M. Maes.

17. *Nyckerella delecta* (PECKHAM & PECKHAM) (equals *Phiale delecta*). NICARAGUA: female, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt; male, Matagalpa, El Coyolar (85°50'W/13°07'N), 800 m., on weeds in coffee plantation, 20-xi-1991, J.M. Maes, S. Hue and X. Palacios.

18. *Phiale bilobata* (PICKARD-CAMBRIDGE). NICARAGUA: two males, five females, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt.
19. *Phiale* sp. NICARAGUA: male, León, ix-1989, B. Garcete; male, León, Volcán Telica, ix-1990, B. Garcete.
20. *Platycryptus californicus* (PECKHAM & PECKHAM) (= *Marpissa minor* PICKARD-CAMBRIDGE). NICARAGUA: male, Managua, ii-1990, B. Garcete.
21. *Plexippus fannae* (PECKHAM & PECKHAM). NICARAGUA: two males, León, Los Zarzales, 23-xii-1988, J.M. Maes; three females, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt; female, Zelaya, Bluffields, ix-1989, F. Reinboldt; immature male, female, Corn Island, ix-1989, F. Reinboldt; immature, León, vi-1990, B. Garcete; male, León, Volcán Telica, vii-1990, B. Garcete; female, León, ix-1990, B. Garcete.
22. *Plexippus paykulli* (AUDOIN). NICARAGUA: four males, 10 females, León, Los Zarzales, 23-xii-1988, J.M. Maes; three females, Archipiélago de Solentiname, 30-vii-1989, F. Reinboldt; female, Zelaya, Bluffields, ix-1989, F. Reinboldt; immature male, female, Corn Island, ix-1989, F. Reinboldt; male, two females, Managua, ii-1990, B. Garcete; immature, León, vi-1990, B. Garcete; male, León, Volcán Telica, vii-1990, B. Garcete.
23. "*Rhene*" sp. NICARAGUA: female, León, Volcán Telica, vii-1990, B. Garcete.
24. *Sarinda nigra* (PECKHAM & PECKHAM). NICARAGUA: male, San Juan River, El Castillo, 30-vii-1989, F. Reinboldt.
Note: this specimen represents the northernmost record for this species, which has been recorded from Argentina, Brazil and Guyana (Galiano, 1965).
25. *Synemosyna americana* PECKHAM & PECKHAM. NICARAGUA: male, Matagalpa, El Coyolar (85°50'W/13°07'N), 800 m., on weeds in coffee plantation, 20-xi-1991, J.M. Maes, S. Hue and X. Palacios.
26. *Synemosyna nicaraguaensis* CUTLER. NICARAGUA: holotype female, San Juan River, El Castillo, 30-vii-1989, F. Reinboldt.
27. *Thiodina sylvana* (HENTZ). NICARAGUA: Male, León, El Pochote, i-1990, B. Garcete; male, León, iii-1991,

B. Garcete.

28. *Thiodina* sp. NICARAGUA: immature, León, UV-light, 12-ii-1989, J.M. Maes; male, San Juan River, El Castillo, 30-vii-1989, F. Reinboldt; immature, León, ix-1989, B. Garcete; three immatures, León, xii-1989, B. Garcete; male, female, two immatures, León, Los Zarzales, 23-xii-1988, J.M. Maes; two immatures, Managua, ii-1990, B. Garcete; three immatures, León, iii-1990, B. Garcete; female, León, vi-1990, B. Garcete; female, León, viii-1990, B. Garcete; immature, ix-1990, B. Garcete; female, 20 km. E. León, Asososca Lake, 2-i-1992, J.M. Maes and C. Pineda.

29. "*Tylogonus*" cf. *denticheles* (PICKARD-CAMBRIDGE). NICARAGUA: male, 3 km. N. of Jinotega, 15-vii-1989, F. Reinboldt.

30. "*Tylogonus*" sp. (probably undescribed). NICARAGUA: male, 5 km. E. of Jinotega, 15-vii-1989, F. Reinboldt; female, 2 km. N. of Matagalpa, 15-vii-1989, F. Reinboldt.

31. *Zygoballus* cf. *optatus* CHICKERING. NICARAGUA: female, immature, Archipielago de Solentiname, 30-vii-1989, F. Reinboldt.

32. *Zygoballus* cf. *rufipes* PECKHAM & PECKHAM. NICARAGUA: male, León, xii-1989, B. Garcete; male, Managua, 8-xi-1991, C. Pineda.

33. *Zygoballus* sp. NICARAGUA: female, León, Finca MIL, on beans, xii-1989, J. Téllez; immature, León, iii-1990, B. Garcete; female, immature, Managua, iv-1990, B. Garcete; immature, León, ix-1990, B. Garcete; female, Matagalpa, Selva Negra, xi-1991, C. Pineda.

Note: the taxonomy of *Zygoballus* is currently in a state of confusion. I am thus not absolutely sure of any of these determinations, except to say that there are apparently at least two and maybe three species involved.

34-35. Unknown genera. NICARAGUA: female, León, ix-1989, B. Garcete; female, León, iii-1990, B. Garcete; female, León, vi-1990, B. Garcete.

There are also 62 immature salticids that could not be identified to genus in the collection. These records, as was noted earlier, are a poor reflection of the undoubtedly complex salticid fauna of Central America in general and Nicaragua in particular. I hope that the fauna of the Central American region will be more adequately examined in the near future, as time may be running out for many habitats and numerous species will be lost before we are aware that they existed in the first place. Nicaragua and Belize seem to be

the least known of Central American political units, but only Panama has had really extensive work done. Such organizations as INBio in Costa Rica are starting to address the issue, but the fauna is vast and there are relatively few workers. It is my hope that this paper may stimulate further work along this line.

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