



ARTÍCULO:

Comparison of the Recent and Miocene Hispaniolan Spider Faunas

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Revista Ibérica de Aracnología
ISSN: 1576 - 9518.
Dep. Legal: Z-2656-2000.
Vol. 6, 31-XII-2002
Sección: Artículos y Notas.
Pp: 203–223.

Edita:
Grupo Ibérico de Aracnología (GIA)
Grupo de trabajo en Aracnología
de la Sociedad Entomológica
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COMPARISON OF THE RECENT AND MIOCENE HISPANIOLAN SPIDER FAUNAS

David Penney & Daniel E. Pérez-Gelabert

Abstract

Hispaniolan (=Dominican Republic and Haiti) araneology is reviewed and a checklist of fossil (Miocene Dominican Republic amber) and Recent spiders is provided, with type data and recorder details for endemic taxa. The fossil fauna consists of 145 described species in 35 families and the Recent fauna, 296 species in 40 families. Twenty-nine families and 28 genera are shared, representing similarity values of 63.0% and 13.0% respectively. If the records for additional families (9) and genera (9) without formal species described are added, then these values become 68.0% and 15.5% respectively. No strictly fossil families are known, 25 genera are exclusively fossil and all species from the amber are extinct. The diversity (Shannon index) and evenness of species within families is not significantly different between the faunas. Distinct similarities are observed between the fossil and Recent faunas in genus and species numbers for the families Pholcidae, Theridiidae and Corinnidae; dissimilarities are observed in Tetragnathidae, Araneidae and Salticidae. We consider the Recent fauna to be poorly known and worthy of further investigation, particularly because of its potential, when compared with the fossil fauna, to address palaeoecological problems.

Key words: Araneae, Taxonomy, Amber, Palaeontology, Hispaniola, Dominican Republic, Haiti.

Taxonomy:

Elaver nutua (Wunderlich, 1988) **comb. nov.**

Comparación de las faunas de arañas actuales y del Mioceno de la Hispaniola

Resumen

Se revisa la araneología de la Hispaniola (=República Dominicana y Haití) y se provee una lista anotada de arañas fósiles y actuales, con datos sobre tipos y otros detalles de registro para los taxones endémicos. La fauna fósil consiste en 145 especies descritas en 35 familias y la fauna reciente 296 especies en 40 familias. Veintinueve familias y 28 géneros son compartidos, representando valores de similaridad de 63,0% y 13,0% respectivamente. Si se añaden los registros de otras familias (9) y géneros (9) sin especies formalmente descritas, entonces estos valores se hacen 68,0% y 15,5% respectivamente. No se conocen familias estrictamente fósiles, 25 géneros son exclusivamente fósiles y todas las especies del ámbar están extintas. La diversidad (Índice de Shannon) e igualdad de especies dentro de las familias no son significativamente distintas entre las faunas. Se observan similitudes distintivas entre las faunas fósil y Reciente en número de géneros y especies para las familias Pholcidae, Theridiidae y Corinnidae; se observan disimilaridades en Tetragnathidae, Araneidae y Salticidae. Consideramos la fauna Reciente de la Hispaniola como pobremente conocida y merecedora de mayor investigación, particularmente por su potencial cuando se compara con la fauna fósil para abordar problemas paleoecológicos.

Palabras clave: Araneae, Taxonomía, Ambar, Paleontología, Hispaniola, República Dominicana, Haití.

Taxonomía:

Elaver nutua (Wunderlich, 1988) **nueva combinación**

Introduction

Hispaniola is unique in terms of its known spider fauna, in that more families are recorded from fossils in Miocene Dominican Republic amber, than are recorded from extant species (Penney, 1999). It is also the region of the world where the amber fauna is most similar to the Recent fauna. Petrunkevitch (1928) considered the Greater Antillean spider fauna to represent an eastern outgrowth of the Central American fauna by way of a presumed earlier land connection and subsequent continent–island vicariance. However, such a land connection appears never to have existed (Ross & Scotese, 1988; Iturralde-Vinent & MacPhee, 1999). During the Eocene–Oligocene transition, the developing northern Greater Antilles and northwestern South America were briefly (33–35 Ma) connected by a landspan (a subaerial connection between a continent and one or more off-shelf islands) centered on the emergent Aves Ridge, but the massive uplift that apparently permitted these connections was finished by 32 Ma (Iturralde-Vinent & MacPhee, 1999). The Greater Antilles in their current guise are relatively young geographical

features, probably no older than the middle Miocene (Iturralde-Vinent & MacPhee, 1999), rather than having evolved from the Proto-Greater Antillean and subsequently the Greater Antillean landmass formed on the west of the Proto-Caribbean region during the late Lower Cretaceous as proposed by Ross & Scotese (1988). Therefore, all on-island lineages forming the Recent fauna must be younger than Middle Eocene (Iturralde-Vinent & MacPhee, 1999). During the period of amber-forming resin secretion (15–20 million years ago; Iturralde-Vinent & MacPhee, 1996) Hispaniola was a distinct island; for a discussion of alternative ages for this amber deposit see Poinar & Poinar (1999). There may have been connection to Puerto Rico via a narrow neck of land, however this is not certain (Iturralde-Vinent & MacPhee, 1999). Since then, Hispaniola has moved slowly eastwards to reach its current position. The amber was formed in a tropical climate similar to that in the region today (e.g. Poinar & Poinar, 1999), therefore the fossil and Recent faunas are directly comparable ecologically (Penney, 1999).

Combined fossil and Recent Hispaniolan faunal checklists exist for a number of invertebrate groups, e.g. Trichoptera (Flint & Pérez-Gelabert, 1999), Neuroptera (Pérez-Gelabert & Flint, 2000), cockroaches (Gutiérrez & Pérez-Gelabert, 2000), Diplopoda (Pérez-Asso & Pérez-Gelabert, 2001) and Orthoptera (Pérez-Gelabert, 2001). However, none of these works compared critically the fossil and Recent faunas. The high frequency with which spiders occur as Dominican Republic amber inclusions and their similarity to the Recent fauna makes this a potentially valuable data set for qualitative (e.g. Penney, 1999) and quantitative (e.g. Penney, 2002) palaeoecological investigations. This paper provides a brief review of Hispaniolan araneology, a taxonomic checklist derived from the existing literature, of all known Recent and fossil Hispaniolan spider species and comparisons of these faunas.

Hispaniolan araneology

Prior to the twentieth century, only a small number of large, common spiders had been described from Hispaniola. The first important contribution to the knowledge of Hispaniola's spider fauna was a short paper by Nathan Banks in 1903, based on specimens collected by R. J. Crew. He recorded 63 species mainly from the vicinity of Port-au-Prince, Haiti. Notable collectors of Hispaniolan spiders include: P. R. Uhler, 1873; W. M. Mann, 1902, 1912–1913 (winter); Bates & Darlington, 1934; P. J. Darlington, 1934, 1938; A. Audant and D. Hurst. Uhler's primary interest was insects, although he also collected a number of spiders during his visit to the western part of Haiti, some of which were described over the years by Keyserling. Some of the material collected from Haiti by Mann in 1902 was described by the Peckhams. Bates & Darlington collected a few spiders along with their entomology collections during their visit to Haiti in 1934 and Darlington returned to Hispaniola for more intensive arachnological collecting

later that year and also in 1938, visiting eastern and central parts of the island, including some of the highest altitudes in the Caribbean. Elizabeth Bryant described most known Recent spiders from Hispaniola (Bryant, 1943 [Salticidae], 1945 [Argiopidae = Araneidae, Tetragnathidae, Theridiosomatidae], 1948 [numerous families]), the majority of which are held in the Museum of Comparative Zoology, Harvard University. In her final publication on Hispaniolan Araneae, Bryant (1948) considered the total described spider fauna to consist of 224 species, but recognized that this was probably a gross underestimate of the true total. In more recent years Alayón-García (1992, 1995, 2002) has described four new species from the island.

It is only two decades since Ono (1981) described the first spider preserved in Miocene amber from the Dominican Republic. Subsequently, Dominican Republic amber spiders have been described by Schawaller (1981a, 1982, 1984), Wunderlich (1981, 1982, 1986, 1987, 1988), Reiskind (1989), Wolff (1990) and Penney (2000a, 2000b, 2001). The spiders described as *Mysmena dominicana* Wunderlich, 1998 (Mysmenidae) and *Grammonota deformans* Wunderlich, 1998 (Linyphiidae) by Wunderlich (1998) and the specimen reported as Archaeidae (Wunderlich, 1999) from Dominican Republic amber are all actually subfossils preserved in Madagascan copal (Wunderlich, pers. comm. 2000). The undescribed specimen identified as Amaurobiidae in Dominican amber by Schawaller (1981b) is actually preserved in Baltic amber (Wunderlich 1988). Other spider taxa reported, but not described and which are otherwise unrecorded in Dominican amber include: Symphytognathidae *sensu lato* (Schawaller, 1981b), Agelenidae, Philodromidae (Schawaller, 1981b; Wunderlich, 1988), Liocranidae, Microstigmatidae, Pisauridae, Palpimanidae: *Otiotrops* sp. (Wunderlich, 1988), Hahniidae (Penney, 1999, possibly a misidentification and not included in this paper), Lycosidae (Penney, 2001), Uloboridae: *Miagrammopes* sp. (Schawaller, 1982; Wunderlich, 1988; Penney, 2001). Genera recorded but not identified to species, from families otherwise described from Dominican amber include: Dipluridae: *Ischnothele?*; Oonopidae: *Heteroonops?*, *Opopaea?*; Tetragnathidae: *Leucauge*; Theridiidae: *Craspedisia*; Salticidae: *Descanso* (Wunderlich, 1988) and Salticidae: *Nebidia* (Cutler, 1984). The spider described as *Anelosimus clypeatus* Wunderlich, 1988 was removed from that genus by Penney (2001) and currently remains unassigned.

Checklist of Hispaniolan spiders

Families are listed in systematic order after Platnick (2002). Only full species are included in the list, with holotype data for endemic species; the type specimens for the species described by Bryant, that have subsequently been synonymised with other species, are held in MCZ. Species from Navassa, a very small island (5.2 km²) 64 km west of Hispaniola are not included; a list of the 58 known spider species was provided by

Alayón-García (2001). In numerous old arachnological works the dates printed on the journals do not actually represent the correct publication year. All publication dates for the Recent fauna and generic placements follow Platnick (2002). Each species is followed by the author who described it (with the date) and then, in parentheses, by the author who cited as present on Hispaniola, in SMALL CAPITALS (with the date) and the name(s) of the species and their authorship as cited, if different. To reduce the size of the manuscript, synonyms are not included; this taxonomic history can be easily traced for the Recent fauna using the catalogues of Bonnet (1945, 1955, 1956, 1957, 1958, 1959), Roewer (1942, 1954a, 1954b), Brignoli (1983), and Platnick (1989, 1993, 1997, 2002), and for the fossil fauna, (Penney 2000a, 2000b, 2001) and Wunderlich (1986, 1988). Names in square brackets are nomina dubia; * = fossil genus; † = fossil species; [†] = subfossil species. Nomina dubia and subfossils are excluded

from all analyses. Summary figures for the checklist are presented in the discussion (Table I).

Repository abbreviations: AMNH, American Museum of Natural History, New York, New York; GPIMH, Geological-Palaeontological Institute and Museum, University of Hamburg, Germany; IES, Instituto de Ecología y Sistemática, La Habana, Cuba; MNHNP, Muséum National d'histoire Naturelle, Paris; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA; MNSD, Museo Nacional de Historia Natural, Santo Domingo, Dominican Republic; NHM, Natural History Museum, London, England; PCHM, Personal Collection of H. Müllenmeister, Germany; PCJW, Personal Collection of J. Wunderlich, Germany; PRC, Poinar Research Collection, Oregon State University, USA; SMF, Senckenberg Museum, Frankfurt-am-Main, Germany; SMNS, Staatliches Museum für Naturkunde, Stuttgart, Germany.

Order A R A N E A E

Suborder OPISTHOTHELAE

Infraorder Mygalomorphae

Family DIPLURIDAE

Ischnothele jeremie Coyle, 1995 (COYLE, 1995). Holotype male, from Haiti; sinkhole at 1,220 m near Jérémie, just north of the Massif de la Hotte, Feb. 1984, (J. Franz), [AMNH]. Hispaniolan endemic.

Ichnothele garcia Coyle, 1995 (COYLE, 1995). Holotype female, from Dominican Republic; Sierra Martín García, Barahona Prov., Aug. 8, 1958, (A. Archer), [AMNH]. Hispaniolan endemic.

*†*Microsteria sexoculata* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38131]. Hispaniolan endemic.

Family CYRTAUCHENIIDAE

†*Bolostromus destructus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype, male, fossil in Miocene Dominican Republic amber, repository unknown to the authors; reported as GPIMH by WUNDERLICH (1988) but was not located in their collection, and is presumed still to be in the possession of Wunderlich (W. Weitschat pers. comm. 1997). Hispaniolan endemic.

Family BARYCHELIDAE

Psalistops fulvus Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; Diquini, November 1912, (Mann), [MCZ]. Hispaniolan endemic.

†*Psalistops hispaniolensis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38123]. Hispaniolan endemic.

Psalistops maculosus Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; Milot, January 1913, (Mann), [MCZ]. Hispaniolan endemic.

Trichopelma nitidum Simon, 1888 (SIMON, 1888)

Family THERAPHOSIDAE

Citharacanthus spinicrus (Latreille, 1819) (SMITH, 1986)

Cyrtopholis agilis Pocock, 1903 (BRYANT, 1948). Holotype, male from San Domingo; [NHM]. Hispaniolan endemic.

Cyrtopholis cursor (Ausserer, 1875) (AUSSERER, 1875). Holotype(s), females? from San Domingo; [NHM]. Hispaniolan endemic.

Holothele sericea (Simon, 1903) (SIMON, 1903 as *Scopelobates sericeus* Simon, 1903). Holotype female, from Puerto-Plata, [MNHNP?]. Hispaniolan endemic.

*†*Ischnocolinopsis acutus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [PCJW]. Hispaniolan endemic.

Phormictopus cancerides (Latreille, 1806) (BRYANT, 1948)

Infraorder Araneomorphae

Family FILISTATIDAE

Kukulcania hibernalis (Hentz, 1842) (BRYANT, 1948 as *Filistata hibernalis* Hentz, 1842)

Family SICARIIDAE

Loxosceles caribbaea Gertsch, 1958 (GERSTCH, 1958)

Loxosceles cubana Gerstch, 1958 (GERSTCH, 1958; GERSTCH & ENNIK, 1983)

†*Loxosceles defecta* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38241]. Hispaniolan endemic.

†*Loxosceles deformis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38239]. Hispaniolan endemic.

Loxosceles taino Gerstch & Ennik, 1983 (GERSTCH & ENNIK, 1983)

Family SCYTODIDAE

Scytodes fusca Walckenaer, 1837 (BRYANT, 1948 as *S. fusca* and *S. hebraica* Simon, 1891)

Scytodes longipes Lucas, 1844 (BRYANT, 1948)

†*Scytodes piliformis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38236]. Hispaniolan endemic.

†*Scytodes planithorax* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38232]. Hispaniolan endemic.

†*Scytodes stridulans* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38222]. Hispaniolan endemic.

Family DRYMUSIDAE

Drymusa simoni Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; La Hotte, 5,000–7,800 feet, 16–17 October 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Family OCHYRO CERATIDAE

*†*Arachnolithulus pygmaeus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38220]. Hispaniolan endemic.

Family PHOLCIDAE

Artema atlanta Walckenaer, 1837 (BRYANT, 1948)

Leptopholcus hispaniola Huber, 2000 (HUBER, 2000). Holotype male, from Dominican Republic; Parque Nacional Bermúdez, La Ciénaga, La Vega Prov., 1100 m elev., tropical evergreen forest, malaise, 19 July–2 Aug. 1995, S. and J. Peck, [AMNH]. Hispaniolan endemic.

Modisimus femoratus Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Sánchez, July 1938, (Darlington), [MCZ]. Hispaniolan endemic.

†*Modisimus calcar* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38216]. Hispaniolan endemic.

†*Modisimus calcaroides* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38218]. Hispaniolan endemic.

†*Modisimus crassifemoralis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38228]. Hispaniolan endemic.

Modisimus fuscus Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; Kenscoff, 4,500 feet, 12 November 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Modisimus glaucus Simon, 1893a (BRYANT, 1948)

†*Modisimus oculatus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38213]. Hispaniolan endemic.

†*Modisimus tuberosus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH]. Hispaniolan endemic.

Modisimus vittatus Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; Port-au-Prince, 1–5 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

†*Pholcophora brevipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38219]. Hispaniolan endemic.

†*Pholcophora gracilis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38211]. Hispaniolan endemic.

†*Pholcophora longicornis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38215]. Hispaniolan endemic.

Physocyclus globosus (Taczanowski, 1874) (BRYANT, 1948)

Tainonia serripes (Simon, 1893a) (BRYANT, 1948 as *Blechnoscelis serripes* Simon, 1893a)

*†*Serratochorus pygmaeus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38212]. Hispaniolan endemic.

Family CAPONIIDAE

Caponina darlingtoni Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; San José de las Matas, 1,500 feet +, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Nops blandus (Bryant, 1942) (BRYANT, 1948 as *Nops coccineus* Simon, 1891 [but not *N. c.* Simon (see CHICKERING, 1967)])

Nops gertschi Chickering, 1967 (CHICKERING, 1967). Holotype male, from Dominican Republic; Loma Cibao, La Vega Prov., Aug. 9 1956, 600–1,600 m elevation, (A. F. Archer), [AMNH]. Hispaniolan endemic.

†*Nops lobatus* Wunderlich, 1988 (WUNDERLICH, 1988 as †*Nops lobatus* Wunderlich, 1988 and †*Nops segmentatus* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38235]. Hispaniolan endemic.

Family TETRABLEMMIDAE

†*Monoblemma? spinosum* Wunderlich, 1988 (WUNDERLICH,

1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38238]. Hispaniolan endemic.

Family SEGESTRIIDAE

Ariadna multispinosa Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Loma Rucilla, Pico del Yaque, 8,000–10,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

†*Ariadna paucispinosa* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38237]. Hispaniolan endemic.

Family OONOPIIDAE

*†*Fossilopaea sulci* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38223]. Hispaniolan endemic.

Ischnothyreus peltifer (Simon, 1891) (BRYANT, 1948 as *Dysderina antillana* Bryant, 1942)

†*Oonops seldeni* Penney, 2000 (PENNEY, 2000). Holotype male, fossil in Miocene Dominican Republic amber, [NHM Pal. PI IA 20]. Hispaniolan endemic.

Oonops validus Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

†*Orchestina dominicana* Wunderlich, 1981 (WUNDERLICH, 1981). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2525]. Hispaniolan endemic.

†*Orchestina tibialis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38240]. Hispaniolan endemic.

†*Stenoonops incerta* (Wunderlich, 1988) (WUNDERLICH, 1988 as †*Gamasomorpha incerta* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38226]. Hispaniolan endemic.

Triaeris stenaspis Simon, 1891 (BRYANT, 1948)

Family MIMETIDAE

†? *Mimetus bituberculatus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38242]. Hispaniolan endemic.

Mimetus hispaniolae Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, rain forest near Valle Nuevo, 6,000 feet +, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Mimetus syllepsicus Hentz, 1832 (BRYANT, 1948 as *Mimetus interfactor* Hentz, 1850)

Family OECOBIIDAE

Oecobius concinnus Simon, 1893b (BRYANT, 1948 as *Oecobius audanti* Bryant, 1948)

†*Oecobius piliformis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38225]. Hispaniolan endemic.

Family HERSILIIDAE

†*Tama maior* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38230]. Hispaniolan endemic.

†*Tama media* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38298]. Hispaniolan endemic.

†*Tama minor* Wunderlich, 1987 (WUNDERLICH, 1987). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38231]. Hispaniolan endemic.

Family DEINOPIIDAE

Deinopis lamia MacLeay, 1839 (BRYANT, 1948)

Family ULOBORIDAE

Miagrammopes latens Bryant, 1936 (BRYANT, 1948)

Philoponella semiplumosa (Simon, 1893b) (OPELL, 1979)

Uloborus trilineatus Keyserling, 1883 (OPELL, 1979 as *Uloborus penicillatus* Simon, 1891)

Zosis geniculata (Oliver, 1789) (BRYANT, 1948 as *Uloborus geniculatus* (Oliver, 1789))

Family NESTICIDAE

Eidmannella pallida (Emerton, 1875) (BRYANT, 1948 as *Nesticus pallidus* Emerton, 1875)

*†*Hispanonesticus latopalpus* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38258]. Hispaniolan endemic.

Nesticus maculatus Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Vieja, south of Constanza, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family THERIDIIDAE

†*Achaeearanea extincta* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38298]. Hispaniolan endemic.

Anelosimus studiosus (Hentz, 1850) (BRYANT, 1948 as *Anelosimus fraternus* Bryant, 1948)

Argyrodes americanus (Taczanowski, 1874) (BANKS, 1903 as *Argyrodes trituberculatus* Becker, 1879)

Argyrodes caudatus (Taczanowski, 1874) (BRYANT, 1948 as *Conopistha caudata* (Taczanowski, 1874) and *Conopistha obtusa* O. P.-Cambridge, 1880)

†*Argyrodes crassipatellaris* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38301]. Hispaniolan endemic.

Argyrodes darlingtoni Exline & Levi, 1962 (EXLINE & LEVI, 1962)

Argyrodes elevatus Taczanowski, 1873 (EXLINE & LEVI, 1962)

Argyrodes furcatus (O. P.-Cambridge, 1894) (EXLINE & LEVI, 1962)

Argyrodes haitensis Exline & Levi, 1962 (EXLINE & LEVI, 1962). Holotype female, from Haiti; 32 km from Aux Cayes, 330 m elev., Aug. 28–29, 1935, (W. G. Hassler), [AMNH]. Hispaniolan endemic.

Argyrodes nephila Taczanowski, 1873 (BRYANT, 1948 as *Conopistha nephilae* Taczanowski, 1873))

- †*Argyrodes parvipatellaris* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38306]. Hispaniolan endemic.
- †*Chrosiothes biconigerus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38388]. Hispaniolan endemic.
- †*Chrosiothes curvispinosus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38362]. Hispaniolan endemic.
- †*Chrosiothes emulgatus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38387]. Hispaniolan endemic.
- †*Chrosiothes longispinosus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38381]. Hispaniolan endemic.
- †*Chrosiothes monoceros* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38409]. Hispaniolan endemic.
- †*Chrosiothes tumulus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38402]. Hispaniolan endemic.
- †*Chrosiothes unicornis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38395]. Hispaniolan endemic.
- Chrysso albomaculata* O. P.-Cambridge, 1882 (BRYANT, 1948).
- †*Chrysso? conspicua* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38330]. Hispaniolan endemic.
- †*Chrysso? dubia* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38282]. Hispaniolan endemic.
- Chrysso pulcherrima* (Mello-Leitão, 1917) (LEVI, 1962 as *Chrysso clementinae* (Petrunkevitch, 1930))
- Coleosoma floridanum* Banks, 1900 (BRYANT, 1948)
- *†*Cornutidion elongatum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38252]. Hispaniolan endemic.
- Craspedisia spatulata* Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, rain forest near Valle Nuevo, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Dipoena dominicana* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, from Dominican Republic; north of Santiago, February 1981 (Wunderlich), [SMF], Hispaniolan endemic.
- †*Dipoenata altiocolata* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38398]. Hispaniolan endemic.
- †*Dipoenata cala* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38251]. Hispaniolan endemic.
- †*Dipoenata clypeata* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38343]. Hispaniolan endemic.
- †*Dipoenata globulus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38351]. Hispaniolan endemic.
- Dipoenata morosa* (Bryant, 1948) (BRYANT, 1948 as *Dipoena morosa* Bryant, 1948)
- [†]*Dipoenata praedominicana* (Wunderlich, 1986) (WUNDERLICH, 1986). Holotype male, subfossil in Dominican Republic copal, [PCJW]. Hispaniolan endemic.
- †*Dipoenata stipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38405]. Hispaniolan endemic.
- †*Dipoenata yolande* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38131]. Hispaniolan endemic.
- [†]*Episinus antecognatus* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, subfossil in Dominican Republic copal, [PCJW]. Hispaniolan endemic.
- †*Episinus brevipalpus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38414]. Hispaniolan endemic.
- †*Episinus cornutus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38554]. Hispaniolan endemic.
- Episinus dominicus* Levi, 1955 (LEVI, 1955). Holotype female, from Dominican Republic; Valle de Polo, Aug. 1935, (H. B. Hassler), [MCZ]. Hispaniolan endemic.
- Episinus gratiosus* Bryant, 1940 (BRYANT, 1948)
- †*Episinus praecognatus* Wunderlich, 1982 (WUNDERLICH, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38361]. Hispaniolan endemic.
- †*Episinus tuberosus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38407]. Hispaniolan endemic.
- †*Lasaeola puta* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38417]. Hispaniolan endemic.
- †*Lasaeola pristina* (Wunderlich, 1988) (WUNDERLICH, 1986 as †*Dipoena pristina* Wunderlich). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38418]. Hispaniolan endemic.
- †*Lasaeola vicina* (Wunderlich, 1982) (WUNDERLICH, 1982 as †*Dipoena vicina* Wunderlich, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38347]. Hispaniolan endemic.
- †*Lasaeola vicinoides* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2535]. Hispaniolan endemic.
- Latrodectus geometricus* C. L. Koch, 1841 (BRYANT, 1948)
- Latrodectus mactans* (Fabricius, 1775) (BRYANT, 1948)
- Nesticodes rufipes* Lucas, 1846 (LEVI, 1963a)
- Spintharus flavidus* Hentz, 1850 (LEVI, 1963a)
- †*Spintharus longisoma* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38380]. Hispaniolan endemic.
- Steatoda erigoniformis* (O.P.-Cambridge, 1872) (BRYANT, 1948 as *Lithyphantes septemmaculatus* Keyserling, 1884)
- Steatoda grossa* (C. L. Koch, 1838) (BRYANT, 1948 as *Teutana modesta* Bryant, 1948)

†*Stemmops incertus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38314]. Hispaniolan endemic.

†*Stemmops prominens* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38322]. Hispaniolan endemic.

†*Styopsis pholcooides* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype female, fossil in Miocene Dominican Republic amber, [SMF 38244]. Hispaniolan endemic.

Theridion antillanum Simon, 1894 (LEVI, 1959)

Theridion atropunctatum Petrunkevitch, 1930 (LEVI, 1959)

Theridion australe Banks, 1899 (LEVI, 1959)

†*Theridion contrarium* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 1328]. Hispaniolan endemic.

Theridion dilucidum Simon, 1897a (LEVI, 1959)

†*Theridion erectoides* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38229]. Hispaniolan endemic.

†*Theridion erectum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 39005]. Hispaniolan endemic.

[*Theridion fuesslini* Simon, 1894] (BRYANT, 1948 as *Theridion fuesslyi* Simon, 1894) (Considered an unrecognizable species by LEVI (1959, p. 80)

Theridion hassleri Levi, 1963b (LEVI, 1963b)

†*Theridion inversum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38333]. Hispaniolan endemic.

Theridion positivum Chamberlin, 1924 (LEVI, 1963b)

†*Theridion variosoma* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38221]. Hispaniolan endemic.

†*Theridion wunderlichi* Penney, 2001 (WUNDERLICH, 1988 as †*Theridion ovale* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38317]. Hispaniolan endemic.

Theridula gonygaster (Simon, 1873) (BRYANT, 1948 as *Theridula opulenta* (Walckenaer, 1842))

Thymoites banksi (Bryant, 1948) (BRYANT, 1948 as *Thymoella banksi* Bryant, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Thymoites guanicae (Petrunkevitch, 1930) (LEVI, 1959 as *Sphyrotinus guanicae* Petrunkevitch, 1930)

Thymoites pallidus (Emmertson, 1913) (LEVI, 1964)

Tidarren sisypoides (Walckenaer, 1842) (LEVI, 1957)

Family THERIDIOSOMATIDAE

[*Allototua guttata* Bryant, 1945] (BRYANT, 1945). Holotype female, from Dominican Republic, Loma Vieja, Cordillera Central, south of Constanza, 6,000 feet, August 1938, (Darlington), [MCZ?]. Hispaniolan endemic. (Genus and species considered unrecognizable by CODDINGTON (1986); unique specimen lost).

Ogulnius fulvus Bryant, 1945 (BRYANT, 1945). Holotype female, from Dominican Republic; foot hills of Cordillera Central, south of Santiago, 2,000–5,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Ogulnius latus Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Cordillera Central, Loma Rucilla, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

*†*Palaeopeirotypus iuvenis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2830]. Hispaniolan endemic.

*†*Palaeopeirotypus iuvenoides* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2831]. Hispaniolan endemic.

†*Theridiosoma incompletum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38247]. Hispaniolan endemic.

Wendilgarda clara Keyserling, 1886 (BRYANT, 1945 as *Wendilgarda theridionina* Simon, 1895)

Family ANAPIDAE

*†*Palaeoanapis nana* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH]. Hispaniolan endemic.

Family MYSMENIDAE

†*Mysmenopsis lissycoleyae* Penney, 2000a (PENNEY, 2000a). Holotype male, fossil in Miocene Dominican Republic amber, [PRC A-10-137]. Hispaniolan endemic.

Family LINYPHIIDAE

Ceraticelus solitarius Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Cordillera Central, Valle Nuevo, southeast of Constanza, 7,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Eperigone serrata Ivie & Barrows, 1935 (BRYANT, 1948 as *Eperigone antillana* Bryant, 1948)

Florinda coccinea (Hentz, 1850) (BRYANT, 1948 as *Frontinella coccinea* (Hentz, 1850))

Frontinella bella Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Cordillera Central, Constanza, 3,000–4,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Frontinella communis (Hentz, 1850) (BRYANT, 1948)

Grammonota calcarata Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Lomaita darlingtoni Bryant, 1948 (BRYANT, 1948) (this genus possibly belongs in the Mysmenidae (Brignoli 1983)). Holotype male, from Dominican Republic; Cordillera Central, Loma Vieja, south of Constanza, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

†*Meioneta bigibber* (Wunderlich, 1988) (WUNDERLICH, 1988 as †*Agyneta bigibber* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [PCJW]. Hispaniolan endemic.

†*Meioneta fastigata* (Wunderlich, 1988) (WUNDERLICH, 1988 as †*Agyneta fastigata* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38169]. Hispaniolan endemic.

†*Meioneta separata* (Wunderlich, 1988) (WUNDERLICH, 1988 as †*Agyneta? separata* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38250]. Hispaniolan endemic.

†*Lepthyphantes lamellatus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2540]. Hispaniolan endemic.

†*Selenyphantes flagellifera* (Wunderlich, 1986) (WUNDERLICH, 1986 as †*Palaolinyphia flagellifera* Wunderlich, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2539]. Hispaniolan endemic.

Tutaibo anglicanus (Hentz, 1850) (BRYANT, 1948 as *Ceratinopsis anglicana* (Hentz, 1850))

Family TETRAGNATHIDAE

Agriognatha argyra Bryant, 1945 (BRYANT, 1945). Holotype male, from Dominican Republic; Cordillera Central, rain forest north of Valle Nuevo, 6,000+ feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Agriognatha espanola Bryant, 1945 (BRYANT, 1945). Holotype male, from Haiti; Kenscoff, 3,000–4,000 feet, 1 May 1935, (Roys), [MCZ]. Hispaniolan endemic.

Agriognatha rucilla Bryant, 1945 (BRYANT, 1945). Holotype male, from Dominican Republic; Loma Rucilla mountains, Cordillera Central, 5,000–8,000 feet, June 1958, (Darlington), [MCZ]. Hispaniolan endemic.

Antillognatha lucida Bryant, 1945 (BRYANT, 1945)

†*Azilia hispaniolensis* Wunderlich, 1988 (WUNDERLICH, 1988 as †*Azilia hispaniolensis* Wunderlich, 1988 and †*Azilia muellenmeisteri* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38066]. Hispaniolan endemic.

Azilia montana Bryant, 1940? (BRYANT, 1945, specimen was a juvenile female).

Chrysometa bigibbosa (Keyserling, 1864) (PETRUNKEVITCH, 1911 as *Meta? bigibbosa* (Keyserling, 1864))

Chrysometa conspersa (Bryant, 1945) (BRYANT, 1945 as *Pseudometa conspersa* Bryant, 1945)

Chrysometa cornuta (Bryant, 1945) (BRYANT, 1945 as *Pseudometa cornuta* Bryant, 1945). Holotype female, from Dominican Republic; Loma Vieja Cordillera Central, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Chrysometa maculata (Bryant, 1945) (BRYANT, 1945 as *Metargyra maculata* Bryant, 1945). Holotype female, from Haiti; Ennery, 7 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Chrysometa obscura (Bryant, 1945) (BRYANT, 1945 as *Pseudometa obscura* Bryant, 1945). Holotype female, from Dominican Republic; Mt. Diego de Ocampo,

north range, 3,000–4,000 feet, July 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Chrysometa sabana Levi, 1986 (LEVI, 1986). Holotype female, from Dominican Republic; forest near Hato Mayor and Sabana de la Mar, 20 July 1995, (W. G. Hassler), [AMNH]. Hispaniolan endemic.

†*Cyrtognatha weitschati* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH]. Hispaniolan endemic.

Glenognatha mira Bryant, 1945 (BRYANT, 1945). Holotype female, from Haiti; Miragoâne, 2 November 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Hispanognatha guttata Bryant, 1945 (BRYANT, 1945). Holotype male, from Dominican Republic; Cordillera Central, Valle Nuevo, south west of Constanza, 7,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

†*Homalometa fossilis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38145]. Hispaniolan endemic.

Leucauge argyra (Walckenaer, 1842) (BRYANT, 1945 as *Plesiometa argyra* (Walckenaer, 1842))

Leucauge regnyi (Simon, 1897a) (BRYANT, 1945)

Leucauge venusta (Walckenaer, 1842) (BRYANT, 1948 as *Leucauge hortorum* (Hentz, 1847))

Leucage venustella Strand, 1916 (STRAND, 1916)

†*Nephila breviembolus* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38177]. Hispaniolan endemic.

Nephila clavipes (Linnaeus, 1767) (BRYANT, 1945)

†*Nephila dommeli* Wunderlich, 1982 (WUNDERLICH, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38161]. Hispaniolan endemic.

†*Nephila furca* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38272]. Hispaniolan endemic.

†*Nephila longembolus* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38295]. Hispaniolan endemic.

†*Nephila tenuis* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38345]. Hispaniolan endemic.

Tetragnatha elongata Walckenaer, 1842 (BRYANT, 1945)

Tetragnatha nitens Audouin, 1826 (BRYANT, 1945 as *Tetragnatha haitiensis* Bryant, 1945 and *Tetragnatha festina* Bryant, 1945)

Tetragnatha orizaba (Banks, 1898) (BRYANT, 1945)

Tetragnatha pallescens F. O. P.-Cambridge, 1903 (BRYANT, 1945)

†*Tetragnatha pristina* Schawaller, 1982 (SCHAWALLER, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [SMNS Do-3591-D-1]. Hispaniolan endemic.

Tetragnatha tenuissima O. P.-Cambridge, 1889 (BRYANT, 1945)

Family ARANEIDAE

- Acacesia hamata* (Hentz, 1847) (BRYANT, 1945)
- Acanthepeira stellata* (Walckenaer, 1805) (BRYANT, 1945 as *Marxia stellata* Walckenaer, 1805))
- Aculepeira busu* Levi, 1991a (LEVI, 1991a). Holotype female, from Dominican Republic; Mt. Busú, 1,000–1,300 m, Sierra Martín García, June 1983, (G. Flores, A. Gross), [MCZ]. Hispaniolan endemic.
- Aculepeira visite* Levi, 1991a (BRYANT, 1945 as *Parawixia darlingtoni* Bryant, 1945). Holotype female, from Haiti; La Visite, 1,800–2,100 m, [18°22'N, 72°12'W], 16–23 Sept. 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Alcimosphenus licinus* Simon, 1895 (BRYANT, 1945). Note: This genus probably belongs in the Tetragnathidae due to close similarities to *Leucauge* (Levi 1986).
- Alloctyclosa bifurca* (McCook, 1887) (BRYANT, 1945)
- *†*Araneometa excelsa* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38311]. Hispaniolan endemic.
- *†*Araneometa herrlingi* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2536]. Hispaniolan endemic.
- *†*Araneometa spirembolus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38279, not GPIMH as per Wunderlich (1988)]. Hispaniolan endemic.
- Araneus bryantae* Brignoli, 1983 (BRYANT, 1945 as *Neosconella parva* Bryant, 1945). Holotype female, from Dominican Republic; foothills of Cordillera Central, south of Santiago, 2,000–5,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Araneus elizabethae* Levi, 1991a (BRYANT, 1945 as *Meta? blanda* Bryant, 1945). Holotype female, from Haiti; Kenscoff, 4,300 feet, 1 May 1935, (Roys), [MCZ]. Hispaniolan endemic.
- Araneus hispaniola* (Bryant, 1945) (BRYANT, 1945 as *Ara-nea? hispaniola* Bryant, 1945). Holotype female, from Haiti; Kenscoff, 4,300 feet, 1 May 1935, (Roys), [MCZ]. Hispaniolan endemic.
- Araneus hotteiensis* (Bryant, 1945) (BRYANT, 1945 as *Meta? hotteiensis* Bryant, 1945). Holotype female, from Haiti; foot hills northeast of Massif de la Hotte, 3,000–4,000 feet, October 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- †*Araneus? nanus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38153]. Hispaniolan endemic.
- [*Araneus perplexus* (Walckenaer, 1842)] (PETRUNKEVITCH, 1911) (considered an unrecognizable species by LEVI (1991a))
- [*Araneus stellatus* (Walckenaer, 1805)] (BRYANT, 1945) (considered an unrecognizable species by LEVI (1991a))
- Argiope argentata* (Fabricius, 1775) (BRYANT, 1945)
- Argiope trifasciata* (Forskål, 1775) (BRYANT, 1945)
- Cyclosa berlandi* Levi, 1999 (LEVI, 1999)
- Cyclosa bifurcata* (Walckenaer, 1842) (LEVI, 1999)
- Cyclosa caroli* (Hentz, 1850) (LEVI, 1999)
- Cyclosa haiti* Levi, 1999 (LEVI, 1999)
- Cyclosa turbinata* (Walckenaer, 1842) (LEVI, 1977)
- Cyclosa walckenaeri* (O. P.-Cambridge, 1889) (LEVI, 1977 and BRYANT, 1945 as *Cyclosa oculata* (Walckenaer, 1802) a misidentification)
- Cyrtophora citricola* (Forskål, 1775) (ALAYÓN-GARCÍA *et al.* 2001)
- †*Enacrosoma verrucosa* (Wunderlich, 1988) (WUNDERLICH, 1988 as *Cyclosa? verrucosa* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38274]. Hispaniolan endemic.
- Eriophora ravilla* (C. L. Koch, 1844) (BANKS, 1903 as *Eriophora balaustina* (McCook, 1888) and Bryant 1945, *Eriophora minax* (O. P.-Cambridge, 1893))
- Eustala bisetosa* Bryant, 1945 (BRYANT, 1945). Holotype male, from Dominican Republic; foot hills of Cordillera Central, south of Santiago, 1,000–3,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Eustala delasmata* Bryant, 1945 (BRYANT, 1945). Holotype male, Dominican Republic; San José de las Matas, 1,500 feet, June 1939, (Darlington), [MCZ]. Hispaniolan endemic.
- Eustala devia* (Gerstch & Mulaik, 1936) (LEVI, 1977)
- Eustala fuscovittata* (Keyserling, 1864) (BRYANT, 1945)
- Eustala perdita* Bryant, 1945 (BRYANT, 1945)
- Eustala vegeta* (Keyserling, 1865) (BRYANT, 1945)
- *†*Fossilaraneus incertus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38344]. Hispaniolan endemic.
- Gasteracantha cancriformis* (Linnaeus, 1758) (BANKS, 1903 as *Gasteracantha hilaris* Thorell, 1859 and Bryant 1945, *Gasteracantha tetracantha* (Linnaeus, 1767))
- Gea heptagon* (Hentz, 1850) (BRYANT, 1945)
- Kapogea sellata* (Simon, 1895) (SIMON, 1895 as *Cyrtophora sellata* Simon, 1895)
- Larinia minor* (Bryant, 1945) (BRYANT, 1945 as *Drexelia minor* Bryant, 1945). Holotype female, from Haiti; Port-au-Prince, July 1941, (Audant), [MCZ]. Hispaniolan endemic.
- Mangora fascialata* Franganillo, 1936 (BRYANT, 1945 as *Mangora striatipes* Bryant, 1945)
- Mecynogea martiana* (Archer, 1958) (ARCHER, 1958 as *Allepeira martiana* Archer, 1958)
- Metazygia cienaga* Levi, 1995 (LEVI, 1995)
- Metazygia crewi* (Banks, 1903) (BRYANT, 1945 as *Araneus? crewi* (Banks, 1903))
- Metazygia dubia* (Keyserling, 1864) (LEVI, 1995)
- Metazygia gregalis* (O. P.-Cambridge, 1889) (BRYANT, 1945 as *Metazygia manni* Bryant, 1945)
- Metepeira datona* Chamberlin & Ivie, 1942 (BRYANT, 1945 as *Metepeira inerma* Bryant, 1945)
- Metepeira jamaicensis* Archer, 1958 (LEVI, 2001)

- Metepeira triangularis* (Franganillo, 1930) (LEVI, 2001)
Metepeira vigilax (Keyserling, 1893) (LEVI, 2001)
Micrathena forcipata (Thorell, 1859) (KEYSERLING, 1864 as *Micrathena flavomaculata* (Keyserling, 1864))
Micrathena militaris (Fabricius, 1775) (BRYANT, 1945)
Micrathena similis Bryant, 1945 (BRYANT, 1945)
Neoscona arabesca (Walckenaer, 1842) (BERMAN & LEVI, 1971)
Neoscona marcanoi Levi, 1993 (LEVI, 1993). Holotype female, from Dominican Republic; Terreno Salado, between Neiba and Duvergé, 25 Oct. 1980, (E. Marcano F.), [MNSD]. Hispaniolan endemic.
Neoscona moreli (Vinson, 1863) (BERMAN & LEVI, 1971 as *Neoscona neotheis* (Petrunkevitch, 1911))
Neoscona nautica (L. Koch, 1875) (BERMAN & LEVI, 1971)
Neoscona oaxacensis (Keyserling, 1864) (BRYANT, 1945)
Ocrepeira darlingtoni (Bryant, 1945) (BRYANT, 1945 as *Parawixia darlingtoni* Bryant, 1945)
Ocrepeira serrallesi (Bryant, 1947) (BRYANT, 1945 as *Neoscona vulgaris* (Hentz, 1847), a misidentification)
Parawixia tredecimnotata F. O. P.-Cambridge, 1904 (BRYANT, 1945 as *Parawixia cambridgei* Bryant, 1940)
*†*Pycnosinga fossilis* Wunderlich, 1988 (WUNDERLICH, 1988) Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38248]. Hispaniolan endemic.
Verrucosa arenata (Walckenaer, 1842) (BRYANT, 1945)
Wagneriana tauricornis (O. P.-Cambridge, 1889) (BRYANT, 1945)
Wagneriana undecimtuberculata (Keyserling, 1865) (PETRUNKEVITCH, 1911)
Wagneriana vegas Levi, 1991b (LEVI, 1991b)
Witica crassicaudus (Keyserling, 1865) (BRYANT, 1945 as *Edricus crassicaudus* (Keyserling, 1865))

Family LYCOSIDAE

- Agalensia bryantae* Roewer, 1951 (BRYANT, 1948 as *Lycosa festina* Bryant, 1948)
Arctosa inconspicua (Bryant, 1948) (BRYANT, 1948 as *Lycosa inconspicua*)
Hogna reducta (Bryant, 1942) (BRYANT, 1948 as *Lycosa reducta* Bryant, 1942)
Hogna tantilla (Bryant, 1948) (BRYANT, 1948 as *Arctosa tantilla* Bryant, 1948)
Pardosa hamifera F. O. P.-Cambridge, 1902 (DONDALE & REDNER, 1984)
Pardosa portoricensis Banks, 1902a (BRYANT, 1948)
Trochosa reichardtiana Strand, 1916 (STRAND, 1916)

Family PISAURIDAE

- Pisaurina dubia* (Hentz, 1847) (BRYANT, 1948 as *Uloborus americanus* Walckenaer, 1842)
Thaumasia annecta Bryant, 1948 (BRYANT, 1948). Holotype

female, from Haiti; Ennery, 10 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

- Thaumasia marginella* (C. L. Koch, 1847) (BANKS, 1903)
Tinus connexus (Bryant, 1940) (BRYANT, 1948)

Family OXYOPIIDAE

- Hamataliwa communicans* (Chamberlin, 1925) (BRYANT, 1948). Holotype female, from Haiti, (Crew), [MCZ]. Hispaniolan endemic.
Hamataliwa haytiana (Chamberlin, 1925) (BRYANT, 1948). Holotype female, from Haiti; Port-au-Prince, [Crew coll., MCZ]. Hispaniolan endemic.
Hamataliwa nigritarsa Bryant, 1948 (BRYANT, 1948 as *Hamataliwa nigritarsus* Bryant, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
Hamataliwa rana (Simon, 1897a) (BRYANT, 1948 as *Hamataliwa cubana* (Chamberlin, 1925))
Oxyopes crewi Bryant, 1948 (BRYANT, 1948)
†*Oxyopes defectus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38189]. Hispaniolan endemic.
Peucetia viridans (Hentz, 1832) (BRYANT, 1948)

Family CTENIDAE

- Ctenus avidus* Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; Petionville, November 1912, (Mann), [MCZ]. Hispaniolan endemic.
Ctenus darlingtoni Bryant, 1948 (BRYANT, 1948)
Ctenus haitiensis Strand, 1909 (STRAND, 1909)
Ctenus hiemalis Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; Diquini, November, 1912, (Mann), [MCZ]. Hispaniolan endemic.
Ctenus insulanus Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; San José de las Matas, 1,500 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
Ctenus manni Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; Jacmel, (Mann), [MCZ]. Hispaniolan endemic.
Ctenus monticola Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; Furcy, Mt. Cabaio, 7,000 feet, 26 March 1940, (Folk), [MCZ]. Hispaniolan endemic.
Cupiennius salei (Keyserling, 1877) (BRYANT, 1948)
*†*Nanoctenus longipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2542]. Hispaniolan endemic.
Trujillina hursti (Bryant, 1948) (BRYANT, 1948 as *Odo hursti* Bryant, 1948). Holotype male, from Dominican Republic; Puerto Plata, April–May 1941, (Hurst), [MCZ]. Hispaniolan endemic.
Trujillina spinipes Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family DESIDAE

Paratheuma insulana (Banks, 1902b) (BANKS, 1903 as *Eutichurus insulanus* Banks, 1902b)

Family DICTYNIDAE

*†*Hispaniolyna hirsuta* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38180]. Hispaniolan endemic.

*†*Hispaniolyna magna* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [PCHM; paratype male SMF 38172]. Hispaniolan endemic.

*†*Palaeodictyna intermedia* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38173]. Hispaniolan endemic.

*†*Palaeodictyna longispina* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38157]. Hispaniolan endemic.

*†*Palaeodictyna? singularis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype female, fossil in Miocene Dominican Republic amber, [SMF 38162]. Hispaniolan endemic.

*†*Palaeodictyna spiculum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38204]. Hispaniolan endemic.

*†*Palaeodictyna termitophila* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 3838140]. Hispaniolan endemic.

*†*Palaeodictyna unispina* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38196]. Hispaniolan endemic.

*†*Palaeolathys? circumductus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38132]. Hispaniolan endemic.

*[†]*Palaeolathys copalis* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, subfossil in Dominican Republic copal, location unknown, [PCJW]. Hispaniolan endemic.

*†*Palaeolathys quadruplex* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38165]. Hispaniolan endemic.

*†*Palaeolathys similis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38181]. Hispaniolan endemic.

*†*Palaeolathys spinosa* Wunderlich, 1986 (WUNDERLICH, 1986). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2544]. Hispaniolan endemic.

Phantyna guanica (Gertsch, 1946) (BRYANT, 1948 as *Dictyna guanica* Gertsch, 1946)

*†*Succinya longembolus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38149]. Hispaniolan endemic.

*†*Succinya pulcher* Wunderlich, 1988 (WUNDERLICH, 1988).

Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38133]. Hispaniolan endemic.

*†*Succinya spinipalpus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38141]. Hispaniolan endemic.

Family AMAUROBIIDAE

Neowadotes casabito Alayón-García, 1995 (ALAYÓN-GARCÍA, 1995). Holotype male, from Dominican Republic; 11 km de Entronque de Abanico, Casabito, Monseñor Nouel Prov. [MNSD]. Hispaniolan endemic.

Tugana crassa (Bryant, 1948) (BRYANT, 1948 as *Alauximus crassus* Bryant, 1948). Holotype female, from Dominican Republic; North Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Tugana infumata (Bryant, 1948) (BRYANT, 1948 as *Alauximus infumatus* Bryant, 1948)

Retiro gratus (Bryant, 1948) (BRYANT, 1948 as *Auximus gratus* Bryant, 1948)

Family MITURGIDAE

Cheiracanthium inclusum (Hentz, 1847) (BRYANT, 1948)

†*Strotarchus heidti* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [GPIMH 2541]. Hispaniolan endemic.

Teminius hirsutus (Petrunkevitch, 1925) (PLATNICK & SHADAB, 1989)

Teminius insularis (Lucas, 1857) (BRYANT, 1948 as *Teminius insularis* Keyserling, 1887)

Teminius monticola Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family ANYPHAENIDAE

Anyphaena dominicana Roewer, 1951 (BRYANT, 1948 as *Anyphaena lauta* Bryant, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Anyphaena modesta Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; foot hills north east of Massif de la Hotte, 3,000–4,000 feet, October 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Anyphaena pusilla Bryant, 1948 (BRYANT, 1948)

†*Anyphaenoides bulla* (Wunderlich, 1988) (WUNDERLICH, 1988 as *Aysha bulla* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38160]. Hispaniolan endemic.

Hibana tenuis (L. Koch, 1866) (BRYANT, 1948 as *Aysha ferox* Simon, 1897b and *Aysha tenuis* (L. Koch, 1866))

Hibana velox (Becker, 1879) (BRYANT, 1948 as *Aysha velox* (Becker, 1879))

Lupettiana levii Brescovit, 1999 (BRESCOVIT, 1999). Holotype male, from Dominican Republic; Jardín Botánico Nacional, Santo Domingo, 18–22.iii.1984, (H. and L. Levi), [MCZ]. Hispaniolan endemic.

†*Lupettiana ligula* (Wunderlich, 1988) (WUNDERLICH, 1988 as *Teudis ligula* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38152]. Hispaniolan endemic.

Lupettiana parvula (Banks, 1903) (BRYANT, 1948 as *Temnida parvula* (Banks, 1903))

Lupettiana spinosa (Bryant, 1948) (BRYANT, 1948 as *Temnida spinosa* Bryant, 1948)

Thaloe ennery Brescovit, 1993 (BRESCOVIT, 1993)

Thaloe remotus (Bryant, 1948) (BRYANT, 1948 as *Anyphaena remota* Bryant, 1948)

Wulfila fasciculus (Bryant, 1948) (BRYANT, 1948 as *Anyphaenella fascicula* Bryant, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Vieja, south of Constanza, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Wulfila fragilis (Bryant, 1948) (BRYANT, 1948 as *Anyphaenella fragilis* Bryant, 1948). Holotype female, from Haiti; foot hills, northeast of Massif de la Hotte, 3,000–4,000 feet, October 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Wulfila gracilipes (Banks, 1903) (BRYANT, 1948 as *Anyphaenella gracilipes* (Banks, 1903)). Holotype female, from Haiti; Port-au-Prince, (Crew), [Banks coll., MCZ]. Hispaniolan endemic.

†*Wulfila spinipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38136]. Hispaniolan endemic.

Family LIOCRANIDAE

Phrurolithus spinosus Bryant, 1948 (BRYANT, 1948). Holotype female, from Haiti; Etang La Chaux, 27 October 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Liocranidae incerta sedis

Lausius pulchellus Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; rain forest, north of Valle Nuevo, Cordillera Central, 6,000 feet +, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family CLUBIONIDAE

Elaver implicata (Gertsch, 1941) (GERTSCH, 1941 as *Clubiona implicata* Gertsch, 1941)

†*Elaver nutua* (Wunderlich, 1988) **comb. nov.** (WUNDERLICH, 1988 as *Clubionoides nutua* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38199]. Hispaniolan endemic.

Family CORINNIDAE

†*Castianeira tenebricosa* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38183]. Hispaniolan endemic.

*†*Chemmisomma dubia* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38151]. Hispaniolan endemic.

†*Corinna flageliformis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38175]. Hispaniolan endemic.

Corinna parvula Bryant, 1940 (BRYANT, 1948)

Corinna toussainti Bryant, 1948 (BRYANT, 1948). Holotype male, from Haiti; La Visite, La Selle Range, 6,000–7,000 feet, 16–23 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Creugas gulosus Thorell, 1878 (BRYANT, 1948 as *Corinna gracilipes* (Keyserling, 1887))

†*Megalostrata grandis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38167]. Hispaniolan endemic.

Trachelas bicolor Keyserling, 1887 (BRYANT, 1948). Holotype female, from Haiti; no specific locality, [MCZ]. Hispaniolan endemic.

Trachelas dilatus Platnick & Shadab, 1974 (PLATNICK & SHADAB, 1974). Holotype female, from Dominican Republic; San José de las Matas, elevation 1,500 feet, June 4, 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Trachelas erectus Platnick & Shadab, 1974 (PLATNICK & SHADAB, 1974). Holotype female, from Haiti; La Visite, elevation 6000–7000 feet, September 16–23, 1934, (Darlington), [MCZ]. Hispaniolan endemic.

†*Trachelas poinari* Penney, 2001 (PENNEY, 2001). Holotype male, fossil in Miocene Dominican Republic amber, [PRC A-10-136]. Hispaniolan endemic.

Trachelas tomaculus Platnick & Shadab, 1974 (PLATNICK & SHADAB, 1974)

*†*Veterator angustus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38174]. Hispaniolan endemic.

*†*Veterator ascutum* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38119]. Hispaniolan endemic.

*†*Veterator incompletus* Wunderlich, 1982 (WUNDERLICH, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38142]. Hispaniolan endemic.

*†*Veterator longipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38198]. Hispaniolan endemic.

*†*Veterator loricatus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38172]. Hispaniolan endemic.

*†*Veterator porrectus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38158]. Hispaniolan endemic.

*†*Veterator viduus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype female, fossil in Miocene Dominican Republic amber, [SMF 38206]. Hispaniolan endemic.

Xeropigo tridentiger (O. P.-Cambridge, 1869) (BRYANT, 1948 as *Corinna humilis* (Keyserling, 1887))

Family GNAPHOSIDAE

Cesonia nadleri Platnick & Shadab, 1980 (PLATNICK & SHADAB, 1980). Holotype female, from Dominican Republic; Boca Chica, National District, March 5–7, 1955, (A. M. Nadler), [AMNH]. Hispaniolan endemic.

*†*Drassylinus aliter* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38134]. Hispaniolan endemic.

Gnaphosa sericata (L. Koch, 1866) (BRYANT, 1948 as *Poecilochroa inconspicua* Bryant, 1948)

Sergiolus magnus (Bryant, 1948) (BRYANT, 1948 as *Cari-drassus magnus* Bryant, 1948). Holotype male, from Haiti; Miragoâne, 2 November 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Family ZORIDAE

Odo abudi Alayón-García, 1992 (ALAYÓN-GARCÍA, 1992)

Family SELENOPIIDAE

Selenops bani Alayón-García, 1992 (ALAYÓN-GARCÍA, 1992). Holotype female, from Dominican Republic, La Laguna, Peravia Prov., September 10, 1987, (de Armas and Lantigua), [IES]. Hispaniolan endemic.

†*Selenops beynai* Schawaller, 1984 (SCHAWALLER, 1984). Holotype male, fossil in Miocene Dominican Republic amber, [SMNS Do-3940-B-1]. Hispaniolan endemic.

Selenops insularis Keyserling, 1881 (BRYANT, 1948)

Selenops marcanoi Alayón-García, 1992 (ALAYÓN-GARCÍA, 1992)

Selenops pensilis Muma, 1953 (MUMA, 1953). Holotype female, from Haiti, Grand Anse, (Uhler), [MCZ]. Hispaniolan endemic.

Selenops phaselus Muma, 1953 (MUMA, 1953). Holotype male, from Haiti; Kenscoff, 4500–5500 feet elevation, September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Family SPARASSIDAE

Heteropoda venatoria (Linnaeus, 1767) (BRYANT, 1948)

Olios antiguanensis (Keyserling, 1880) (BRYANT, 1948)

†*Pseudosparianthis pfeifferi* (Wunderlich, 1988) (WUNDERLICH, 1988 as †*Tentabun*[d]a? [sic] *pfeifferi* Wunderlich, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38200]. Hispaniolan endemic.

Stasina saetosa Bryant, 1948 (BRYANT, 1948). Holotype female, from Dominican Republic; Mt. Diego de Ocampo, north range, 3,000–4,000 feet, July 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family PHILODROMIDAE

Apollophanes punctatus (Bryant, 1948) (BRYANT, 1948 as *Gephyrina punctata* Bryant, 1948). Holotype female, from Dominican Republic; Cordillera Central, Valle Nuevo, south east of Constanza, 7,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Family THOMISIDAE

*†*Heterotmarus altus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38168]. Hispaniolan endemic.

Isaloides toussainti Banks, 1903 (BRYANT, 1948)

*†*Komisumena rosae* Ono, 1981 (ONO, 1981). Holotype male, fossil in Miocene Dominican Republic amber, [SMNS Do-2528-B-1]. Hispaniolan endemic.

Misumenops asperatus (Hentz, 1847) (PETRUNKEVITCH, 1911)

Misumenops bellulus (Banks, 1896) (BRYANT, 1948)

Misumenops celer (Hentz, 1847) (BRYANT, 1948 as *Misumena celer* (Hentz, 1847)

Onocolus venustus Bryant, 1948 (BRYANT, 1948). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Tobias taczanowskii Roewer, 1951 (PETRUNKEVITCH, 1911 as *Tobias rugosus* (Taczanowski, 1873))

Family SALTICIDAE

Agobardus anormalis Keyserling, 1885 (BRYANT, 1943)

Agobardus anormalis montanus Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; foot hills northeast of La Hotte, 3,000–4,000 feet, October 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Agobardus brevitarsus Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; La Visite, 6,000–7,000 feet, 16–23 September, 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Agobardus obscurus Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; swamp north of Dessalines, 11 August 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Agobardus perpilosus Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Loma Rucilla, Pico del Yaque, 8,000–10,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Antillattus gracilis Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; Dame Marie, 1941, (Audant), [MCZ]. Hispaniolan endemic.

Antillattus placidus Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; Ennery, 7 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Bythocrotus cephalotes (Simon, 1888) (BRYANT, 1943). Holotype female, from Haiti, [Frazer coll., MNHNP]. Hispaniolan endemic.

Cobanus cambridgei (Bryant, 1943) (BRYANT, 1943 as *Amycus cambridgei* Bryant, 1943). Holotype male, from Dominican Republic; Cordillera Central, Constanza, 3,000–4,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Commoris modesta Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Cordillera Central, Valle Nuevo, southeast of Constanza, 7,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.

Compsodecta haytiensis (Banks, 1903) (BRYANT, 1943). Syntypes, male and female, from Haiti; Port-au-Prince, (Drew), [Banks coll., MCZ]. Hispaniolan endemic.

Compsodecta peckhami Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; foot hills northeast of Massif de la Hotte, 3,000–4,000 feet, October 1934, (Bates), [MCZ]. Hispaniolan endemic.

Corythalia banksi Roewer, 1951 (EDWARDS & WOLFF, 1995)

Corythalia elegantissima (Simon, 1888) (BRYANT, 1943).

- Holotype female, from San Domingo [Frazer coll., MNHNP]. Hispaniolan endemic.
- Corythalia locuples* (Simon, 1888) (BRYANT, 1943). Holotype female, from San Domingo [MNHNP]. Hispaniolan endemic.
- †*Corythalia ocululiter* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [PCJW]. Hispaniolan endemic.
- †*Corythalia pilosa* Wunderlich, 1982 (WUNDERLICH, 1982). Holotype male, fossil in Miocene Dominican Republic amber, [PCJW]. Hispaniolan endemic.
- †*Corythalia scissa* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [PCJW]. Hispaniolan endemic.
- *†*Descangeles pygmaeus* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38185]. Hispaniolan endemic.
- Descanso formosus* Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; Trou Caiman, 4 September, 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Descanso magnus* Bryant, 1943 (BRYANT, 1943). Holotype female, from Dominican Republic; Jarabacoa, 2 August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Descanso montanus* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Cordillera Central, Constanza to Jarabacoa, 2,000–4,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Dinattus erebus* Bryant, 1943 (BRYANT, 1943). Holotype female, from Haiti; La Visite, 6,000–7,000 feet, 16–23 September 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Dinattus heros* Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; foot hills northeast of La Hotte, 4,000 feet, 30 October 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Dinattus minor* Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; foothills northeast of Massif de la Hotte, 3,000–4,000 feet, October 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Eris aurantia* (Lucas, 1833) (BRYANT, 1948 as *Parnaeus chrysis* (Walckenaer, 1837))
- Eris flava* (Peckham & Peckham, 1888) (MADDISON, 1986)
- Habronattus brunneus* (Peckham & Peckham, 1901a) (BRYANT, 1943 as *H. brunneus* var. *insignis* Bryant, 1942)
- Hasarius adansoni* (Audouin, 1826) (PETRUNKEVITCH, 1911)
- Hentzia antillana* Bryant, 1940 (BRYANT, 1943)
- Hentzia mandibularis* (Bryant, 1943) (BRYANT, 1943 as *Parahentzia mandibularis* Bryant, 1943). Holotype male, from Dominican Republic; foot hills of Cordillera Central, south of Santiago, 1,000–3,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Hentzia vittata* (Keyserling, 1885) (BRYANT, 1943 as *H. peckhami* (Cockerell, 1893))
- Hentzia zombia* Richman, 1989 (RICHMAN, 1989)
- Icius separatus* Banks, 1903 (BANKS, 1903)
- Jollas armatus* (Bryant, 1943) (BRYANT, 1943 as *Oningis armatus* Bryant, 1943). Holotype male, from Dominican Republic; Loma Rucilla mountains, Cordillera Central, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Jollas crassus* (Bryant, 1943) (BRYANT, 1943 as *Oningis crassus* Bryant, 1943). Holotype male, from Dominican Republic; Sánchez, July 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Lyssomanes antillanus* Peckham, Peckham & Wheeler, 1888 (BRYANT, 1943)
- †*Lyssomanes pristinus* Wunderlich, 1986 (WUNDERLICH, 1986; REISKIND, 1989 as †*Lyssomanes galianoae* Reiskind, 1989). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38178]. Hispaniolan endemic.
- †*Lyssomanes pulcher* Wunderlich, 1988 (WUNDERLICH, 1988) Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38170]. Hispaniolan endemic.
- Lyssomanes viridis* (Walckenaer, 1837)? (EDWARDS & WOLFF, 1995)
- Menemerus bivittatus* (Dufour, 1831) (BRYANT, 1943)
- Metacyrba pictipes* Banks, 1903 (BRYANT, 1943). Holotype male, from Haiti; Port-au-Prince, (Crew), [MCZ, Banks coll.]. Hispaniolan endemic.
- Metacyrba taeniola* (Hentz, 1846) (BRYANT, 1943)
- Myrmarachne parallela* (Fabricius, 1794) (PETRUNKEVITCH, 1911 as *Myrmarachne parallelus* Petrunkevitch, 1911)
- Nebridia manni* Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; foothills of La Hotte, 3,000–4,000 feet, 13 October 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Nebridia mendica* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; rain forest near Valle Nuevo, Cordillera Central, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Parathiodina compta* Bryant, 1943 (BRYANT, 1943). Holotype male, Haiti; Camp Perrin, 9 October 1934, (Darlington), [MCZ]. Hispaniolan endemic.
- Pelegrina proxima* (Peckham & Peckham, 1901b) (BRYANT, 1943 as *Metaphidippus prudens* (Peckham & Peckham, 1901b))
- Pellenes paratus* (Peckham & Peckham, 1896) (EDWARDS & WOLFF, 1995)
- Pensacola darlingtoni* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Loma Rucilla mountains, Cordillera Central, 5,000–8,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Pensacola electa* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Valle Nuevo, southeast of Constanza, Cordillera Central, 7,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Pensacola maxillosa* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Cordillera Central, Loma Vieja, south of Constanza, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- Pensacola montana* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic, Loma Rucilla, Pico del Yaque, 3,000–10,000 feet, June 1938, (Darlington), [MCZ]. Hispaniolan endemic.

- Pensacola peckhami* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; Cordillera Central, Loma Rucilla mountains, 5,000–8,000 feet, June 1938, (Darlington). [MCZ]. Hispaniolan endemic.
- *†*Pensacolatus coxalis* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38209]. Hispaniolan endemic.
- *†*Pensacolatus spinipes* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38201]. Hispaniolan endemic.
- Phidippus regius* C. L. Koch, 1846 (BRYANT, 1943)
- *†*Phleggrata pala* Wunderlich, 1988 (WUNDERLICH, 1988). Holotype male, fossil in Miocene Dominican Republic amber, [SMF 38193]. Hispaniolan endemic.
- Plexippus paykulli* (Audouin, 1826) (BRYANT, 1943)
- Siloca electa* Bryant, 1943 (BRYANT, 1943). Holotype male, from Dominican Republic; rain forest near Valle Nuevo, Cordillera Central, 6,000 feet, August 1938, (Darlington), [MCZ]. Hispaniolan endemic.
- †*Thiodina beugelorum* Wolff, 1990 (WOLFF, 1990). Holotype male, fossil in Miocene Dominican Republic amber, in the personal collection of Dr R.J. Wolff, to be deposited in the Field Museum of Natural History, Chicago. Hispaniolan endemic.
- Wallaba decora* Bryant, 1943 (BRYANT, 1943). Holotype male, from Haiti; Kenscoff, 5,000–7,000 feet, September 1934, (Darlington), [MCZ]. Hispaniolan endemic.

Table I

Summary figures obtained from the checklist, excluding nomina dubia, for the Miocene and Recent Hispaniolan spider faunas. Numbers in parentheses represent the addition of specimens reported or described, that have been assigned to families or genera but have not been assigned to diagnosable species (see Hispaniolan araneology).

	Families	Genera	Species
Miocene	35 (44)	78 (87)	145
Recent	40 (40)	166 (166)	296 + 1 subspecies
Shared taxa	29 (34)	28 (34)	0
Totals	46 (50)	216 (219)	441+3 subfossils & 1 subspecies

Discussion

A summary of the checklist is given in Table I. There are currently 46 spider families with formal species described from Hispaniola when both Miocene and Recent faunas are considered together. If the families listed without formal species (see Hispaniolan araneology) are included, this value rises to 50, with 29 and 34 shared families respectively. This equates to similarity values for the Miocene and Recent Hispaniolan spider families of 63.0% for families with described species and 68.0% with the inclusion of those without described species. The similarity values for genera are considerably lower at 13.0% for those with described species and 15.5% when those without described species are included; 25 genera are strictly fossil. The similarity at species level is 0% because all described Dominican amber fossil and sub-fossil spiders are considered extinct. It is interesting to note that there are a similar number of families recorded from both the Miocene and Recent faunas and also that the ratio of genera to species for both faunas are practically identical at 1:1.9 and 1:1.8 respectively.

It is not necessarily possible to predict the presence of undiscovered fossil spiders from families currently unknown from the amber fauna, based on what we observe in the Recent fauna. However, we can hypothesise their existence on Hispaniola during the time of

resin secretion during the Miocene and that they evaded capture because of their habitat preference or ecological niche (Penney, 1999). On the other hand, families present in the amber fauna but unrecorded from the Recent fauna, which include: Cyrtacheniidae, Ochyroceratidae, Tetrablemmidae, Hersiliidae, Anapidae and Mysmenidae (but see under *Lomaita darlingtoni* currently placed in the Linyphiidae) can be predicted to have extant representatives on Hispaniola (Penney, 1999).

For families recorded from 15 or more species there are interesting similarities and dissimilarities between the Miocene and Recent faunas (Table II). The numerical distribution of genera and species is similar between the Miocene amber and Recent faunas for the Pholcidae, Theridiidae and Corinnidae, they are distinctly dissimilar for the Tetragnathidae, Araneidae and Salticidae and are also slightly dissimilar for the Anyphaenidae. These similarities may be an indication that these families were as diverse in the Miocene as they are today and the dissimilarities may reflect the opposite. However, some of the dissimilarities may be purely the result of taphonomic biases associated with the amber fauna, i.e. there may be some mechanism related either directly to the resin formation or the ecology of these spider families that reduced their chances of

Table II
Distribution of taxa among the Hispaniolan spider fauna known from families with 15+ described fossil and/or Recent species.

Family	GENERA				SPECIES	
	Amber	Recent	Shared	Extinct?	Amber	Recent
Pholcidae	3	5	1	1	9	8
Theridiidae	12	16	6	1	37	33
Tetragnathidae	5	9	3	0	9	23
Araneidae	5	26	1	3	7	56
Dictynidae	4	1	0	4	15	1
Anyphaenidae	3	5	2	0	3	13
Corinnidae	6	4	2	2	12	8
Salticidae	6	28	2	3	10	51

getting caught and preserved as amber inclusions. In this case, it may be argued that these families may also have been as diverse on Hispaniola in the Miocene as they are today, but that they are under-represented as amber inclusions. The ratio of genera to species for the families Tetragnathidae (Miocene = 1:1.8, Recent = 1:2.6), Araneidae (Miocene = 1:1.4, Recent = 1:2.2) and Salticidae (Miocene = 1:1.7, Recent = 1:1.8) supports this hypothesis. In fact, these values are almost identical to the overall genera:species ratios given earlier. Araneidae and Tetragnathidae are usually relatively large, conspicuous, aerial web-spinning spiders. Therefore, they are often common in collections of Recent spiders because they are easily seen by collectors. Their large size may facilitate their escape from the sticky resin trap, preventing them occurring frequently as amber inclusions. The Salticidae is the largest extant spider family with more than 4,800 species in 531 genera (Platnick, 2002) and has a worldwide distribution. However, no salticids have been described from strata older than Tertiary, amber or otherwise (the specimen listed as a salticid in New Jersey amber by Grimaldi *et al.* [2002] is a misidentification, DP pers. obs. and the specimen figured as Salticidae by Néraudeau *et al.* [2002] from Cretaceous amber of France has not yet been described and does not clearly show the diagnostic features of the family), yet it is evident that many extant spider families have a long geological history (Selden & Penney, 2001). The active predatory behavior of salticids predisposes them to entrapment in resin (Penney, 2002), so it may be that the Salticidae are a recently evolved family (e.g. García-Villafuerte & Penney, in press). This may explain why there are considerably more species known from the Recent fauna. Alternatively, the Salticidae are a notoriously difficult family from a taxonomic perspective and it may well be that fossil amber salticids exist, that await description. In recent years, new Cretaceous material has become available which is currently being studied and will hopefully shed some light on this problem.

The only obvious case that does not fit the above scenarios is the family Dictynidae. According to our data, these appear to have been considerably more

diverse on Hispaniola in the Miocene than they are at present (Miocene = 1:3.8, Recent = 1:1.0), with 15 known fossil species and only one Recent example. We assume that all the fossil dictynids are valid species because Wunderlich (1988) based his diagnoses on distinct differences in male pedipalp morphology, except for *P. singularis*, which is known only from one female. All known Dictynidae amber fossils belong to strictly fossil genera, so it may be the case that they were more diverse in the past, at least on Hispaniola. However, we feel that the Recent Hispaniolan spider fauna is not known well enough to support this conclusion and that future collections of extant spiders may reveal more species of Dictynidae and maybe also examples of these genera currently known only from fossils. Further evidence for the poorly known nature of the Recent fauna is the lack of a notable difference in the diversity (H') and evenness (J') of the species within families when both faunas are compared using the Shannon index (Miocene $H' = 2.82$, $J' = 0.79$; Recent $H' = 2.91$, $J' = 0.79$). In the amber forest, resin secretion was restricted to a single species of tree and would therefore be selective in the organisms it trapped, maybe temporally (e.g. seasonal) as well as spatially. Amber inclusions represent only a subsample of the total fauna present at the time. If the Recent fauna was well known, we would expect it to be significantly more diverse than the fossil fauna.

We accept that making quantitative comparisons of inventories of hyperdiverse taxa, such as spiders, from different regions (including through geological time) can be problematic because of undersampling bias. Even intensive inventories of spiders from poorly studied regions are typically composed of a large number of singletons (species represented by only one specimen). Extrapolative estimates of total species richness from such data typically indicate that a large number of species have been missed and comparing overlap between two such inventories can multiply these difficulties, because of uncertainty over whether taxa absent from one site were present and not sampled, or were truly absent (J. Miller pers. comm. 2002). These difficulties are further compounded in a study

such as this because of the taxonomic subequality of amber-preserved spiders compared to the Recent fauna. Palaeontologists are at a disadvantage compared to neontologists because they often have fewer specimens to work with and it is not usually possible to manipulate or dissect their specimens with the same degree of freedom. In addition, important taxonomic characters may not have been preserved or may have become obscured or distorted during the fossilisation process. Then of course there is the esoteric debate over the species concept with respect to fossils in general. However, the aforementioned difficulties should not deter such comparative analyses as they can provide useful baseline information for future research, as we hope is the case here. Fortunately, the Dominican Republic amber is usually clear and translucent and the inclusions are preserved with an amazing life-like fidelity; and we feel the above comparisons are reasonable and justified.

The last major synopsis of the Recent Hispaniolan spider fauna was that of Bryant (1948) who listed 224 species for the island. Since then barely any work has focused on this fauna. Bryant (1948) listed Cuba as having 280 Recent spider species, however, recorded species now total 567 (Alayón-García, 2000), more than twice that amount. We suspect that the list presented above, which lists 296 Recent species (116 of which are currently considered endemic) is probably a gross under-representation of the true total. We accept that Hispaniola is smaller than Cuba (76,071 km² c.f.

114,525 km²) but it has a considerably greater altitudinal variation with a maximum of 3,174 m c.f. 1,999 m for Cuba (Flint & Pérez-Gelabert, 1999) providing a broad range of habitat variation. We feel that both fossil and Recent faunas are worthy of further investigation, particularly because of their similarity, which means they can be used as directly comparable, complementary data sets to address various questions of palaeoecology, such as amber-related bias (e.g. Penney, 2002), island colonization over time (e.g. Penney, 1999), phylogeny and biogeography (e.g. Reiskind, 1989), etc. The larger the datasets in such analyses the more reliable the conclusions.

Acknowledgements

We thank Mr Richard Gallon (UK), Dr Peter Jäger (SMF), Dr Dmitri Logunov (Manchester Museum), Dr Jason Dunlop (Museum für Naturkunde der Humboldt-Universität zu Berlin), Ms Janet Beccaloni (NHM) for type information; Dr Jeremy Miller (Smithsonian Institution), Dr Jason Dunlop and Dr Paul Selden (University of Manchester) for their comments on the manuscript. D. Penney thanks the SMF and particularly Dr Manfred Graßhoff and Ms Uli Schreiber for their hospitality and for access to the collections; he acknowledges a Leverhulme Trust grant. D. E. Pérez-Gelabert acknowledges National Science Foundation grant DEB-0103042.

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