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Description of *Neoholothele* gen. nov. (Araneae, Theraphosidae, Schismatothelinae)

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The new genus *Neoholothele* is herein described based on the results of a recent phylogenetic analysis. This phylogeny, which included representatives of all Theraphosidae subfamilies, showed that the genus *Holothele*, as hitherto defined, does not comprise a monophyletic group. *Neoholothele* gen. nov. is diagnosed by the following features: males and females with dark carapace and golden cephalic region; females with striped color pattern on the abdomen dorsum and long and slender spermathecae receptacula; males with retrolateral branch of male tibial spur with apical end wider than proximal end (synapomorphy), with two apical spines. It comprises two species: *N. incei* (F. O. Pickard-Cambridge, 1898) comb. nov. and *N. fasciaaurinigra* sp. nov., both from northern South America.

Keywords: *Holothele*; spider taxonomy; northern South America; tarantula

Introduction

The genus *Holothele* Karsch 1879 can be considered a major taxonomic mess amongst the New World Theraphosidae. Because of the lack of a precise diagnosis, several species have been improperly included in the genus, resulting in an apparently speciose group. The genus was described based on a female from Caracas, Venezuela, which Karsch (1879) named *H. recta*. Interestingly, *H. recta* was the only species originally included in *Holothele*, and the inclusion of such great number of species is due to subsequent transfers and descriptions. Raven (1985) considered *Holothele* senior synonym of *Schismatothele* Karsch 1879, *Euthycaelus* Simon 1889, *Hemiercus* Simon 1903, *Scopelobates* Simon 1903 and *Dryptopelmides* Strand 1907. The result of those taxonomic rearrangements resulted in 12 species in the genus.

Until Rudloff's revision in 1997, the type species was only known by the female holotype, making it difficult to define diagnostic features. Rudloff (1997) synonymized *Stichoplatus ravidus* Simon, 1889 (male and female described from San Esteban, Venezuela) with *H. recta*. He also rejected Raven's synonyms with *Hemiercus* and *Schismatothele* and proposed other synonyms at species level. Although Rudloff did not provide satisfactory genus diagnosis, his study made important improvements towards a proper knowledge of *Holothele* diversity, and should be regarded as the starting point of a comprehensive revision of the genus.

Raven (1980) removed the genus *Holothele* from the family Dipluridae, where it was previously placed prior

to Raven's study. Raven (1985) later included it in Theraphosinae subfamily, from where it was finally transferred to Ischnocolinae by Pérez-Miles et al. (1996). Recently, Guadanucci (2014) proposed a phylogenetic relationship for theraphosids, focused on genera included in the former subfamily Ischnocolinae. The main outcomes of his phylogeny were: (1) the confirmation of "Ischnocolinae" as paraphyletic, proposing the use of the name Ischnocolinae *sensu stricto*, comprising the species *Acanthopelma rufescens*, *Trichopelma nitidum*, *Reichlingia annae*, *Ischnocolus* spp., *Holothele rondoni*, and *H. culebrae*; (2) the establishment of the subfamily Schismatothelinae, comprising *Sickius longibulbi*, *Guyruita* spp., *Schismatothele* spp., *Euthycaelus* spp., and *Holothele incei* and *H. aff incei*; (3) the genus *Holothele*, as currently composed, is a paraphyletic group. *Holothele* currently comprises 12 species from northern South America, southern Central America and the West Indies. Some species, such as *H. recta*, are amongst the largest representatives of Ischnocolinae *sensu stricto* (JPLG pers. obs.).

Although the type species of the genus *Holothele* was not formally included in the phylogeny of Theraphosidae (Guadanucci 2014), it shares the synapomorphic characters (interchelicerall tumescence, maxillary heel, tarsal pseudosegmentation on all legs, tibial thickened trichobothria) that support the group Ischnocolinae *sensu stricto*. Therefore, we describe here the new genus *Neoholothele* to accommodate the former *Holothele* species that have fallen into the subfamily Schismatothelinae.

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Materials and methods

Specimens from the following institutions were examined. Abbreviations, cities, countries and curator are as follows: NHM – Natural History Museum, London, UK (J. Beccaloni); MZSP – Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil (R. Pinto-da-Rocha); AMNH – American Museum of Natural History, New York, USA (L. Prendini); MCZ – Museum of Comparative Zoology, Harvard University, Cambridge, USA (G. Giribet); MLS – Museo de La Salle, Bogota, Colombia (J. E. E. Barrera); MACN-Ar – Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina (C. Scioscia); SMF – Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt, Germany (P. Jäger).

All measurements are in mm and were taken with an ocular lens. The length of leg segments was measured between the joints in dorsal view. The length and width of carapace, eye tubercle, labium and sternum are the maximum values obtained. The total body length includes the chelicera and opisthosoma but not the spinnerets. The number and disposition of spines follows the terminology of Petrunkevitch (1925). Illustrations were made on a camera lucida attached to a stereomicroscope (Leica M80, Wetzlar, Germany). The spermathecae were cleared with clove oil and illustrated in dorsal and ventral view. Palpal bulbs were removed from the cymbium and illustrated in prolateral and retrolateral views. Setae of the male tibia I were removed in order to illustrate the tibial spur better.

Results

Family **Theraphosidae** Thorell 1869

Subfamily **Schismatothelinae** Guadanucci 2014

Genus *Neoholothele* gen. nov.

Diagnosis

Representatives of *Neoholothele* gen. nov. can be distinguished by the following features: males and females with dark carapace and golden cephalic region; females with striped color pattern on the abdomen dorsum and long and slender spermathecae receptacula; males with retrolateral branch of male tibial spur with apical end wider than proximal end (synapomorphy), with two apical spines. Additionally, they can be recognized by the combination of the following features: tarsus IV pseudosegmented (cracked), tarsal claws with a median row of teeth, numerous labial cuspules (approximately 200), sternal sigillae nearly one diameter from margin.

Note: The characters listed above are in addition to those used by Rudloff (1997) to diagnose the genus, some of which are listed and commented below:

- sternal sigilla nearly one diameter from margin – distinguishes representatives of *Neoholothele* from *Oligoxystre* and *Catumiri*.
- spermathecae formed by two receptacula – distinguishes representatives of *Neoholothele* from *Schismatothele* and *Euthycaelus*, which present a strongly sclerotized, three-dimensional spermathecae.
- long and tapering embolus – although the morphology of the palpal bulb is very important in Theraphosidae taxonomy, such description does not warrant recognition of representatives of *Neoholothele*.
- double tibial apophysis – the vast majority of Theraphosidae have double tibial apophysis, which should be, in fact, interpreted as being formed by two branches. It is only useful to distinguish theraphosids from some barychelids and a few theraphosids that lack apophysis. However, the detailed morphology of such structures is very useful to diagnose genera amongst Theraphosidae.

Etymology

The prefix ‘neo’ (from the Greek word for young, new) was added to refer to the new taxon, which comprises two species, one of them was removed from the genus *Holothele*.

Type species

Hapalopus incei F. O. Pickard-Cambridge 1898, by present designation.

Description

Chelicerae without rastellum. Cephalic region slightly raised. Eye tubercle weakly raised, wider than long. Anterior eye row procurved, posterior recurved. Thoracic fovea slightly recurved or straight. Labium subquadrate, with several (more than 150) cuspules on raised area. Maxilla with produced anterior lobe, several cuspules on the inner angle (more than 80). Labium-sternal sigilla well marked, mounds raised. Posterior sternal sigilla nearly one diameter from margin. Tarsal scopula IV divided by a band of thick setae. Tarsus IV pseudosegmented (cracked). Retrolateral scopula on femur IV absent. Stridulatory setae absent. Superior tarsal claws with

a median row of teeth, inferior tarsal claws absent, claw tufts well developed. Urticating hairs absent. Cymbium longer than wide, bilobed. Palpal bulb with long embolus, without keels. Male tibial apophysis present, formed by two branches, metatarsus I bends laterally to the retrolateral branch. Spermathecae of females formed by two long receptacles.

Distribution

Northeastern Venezuela, Trinidad and Tobago and Central Colombia (eastern side of Eastern Mountain Range) (Figure 13).

Neoholothele incei (F. O. Pickard-Cambridge 1898) comb. nov.
(Figures 1–4, 9, 10, 13)

Hapalopus incei F. O. Pickard-Cambridge 1898: 894, pl. 54, f. 8, 10, 12 (description of male and female).

Holothele incei; Rudloff 1997: 9, f. 20 (transfer from *Hapalopus*).

Chaetorrhombus longipes Schiapelli & Gerschman 1945: 178, pl. VII, f. a-b (description of female). New synonym.

Holothele vellardi; Rudloff 1997: 12 (Transfer from *Cyclosternum*; replacement name for *H. longipes*).

Type material

Lectotype male of *Hapalopus incei* (NHM 98.4.2.56.63) from Trinidad, Dr. W. Ince leg., 1898, examined. Holotype female of *Chaetorrhombus*

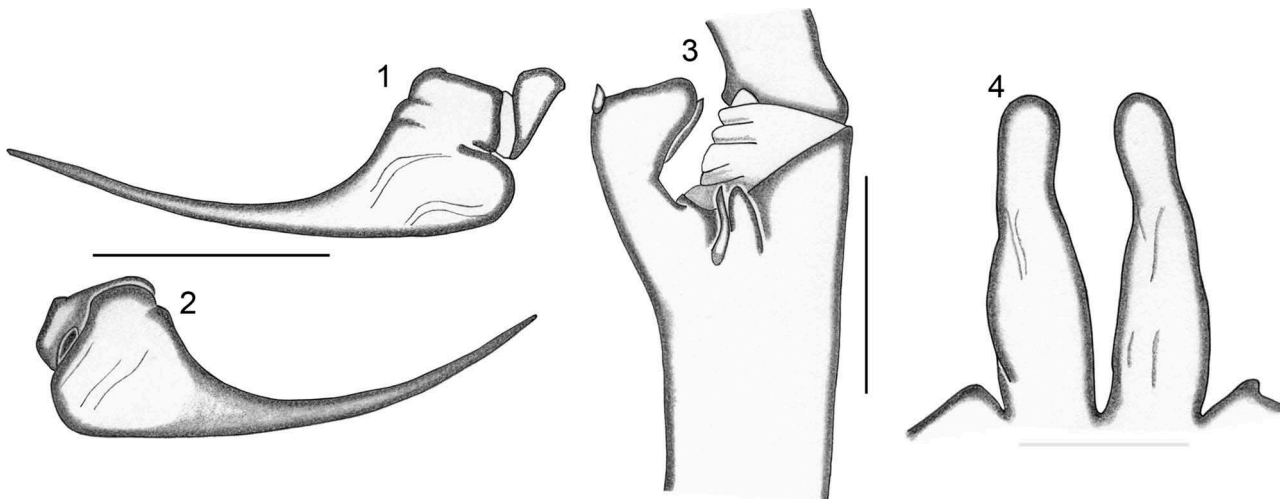
longipes (MACN-Ar 853) from Bosque de Chacaito, Caracas, Venezuela, J. Vellard leg., March 1936, examined.

Note (1): F. O. Pickard-Cambridge (1898) mentioned the existence of four males and several females, which apparently were not included in the type series. The type series, examined, deposited in the British Museum of Natural History comprises five specimens, stored in two different vials. One of these vials contains the male, designated here as lectotype, which is redescribed and considered a valid *Neoholothele* species. The other vial contains four female specimens, henceforth representing the paralectotype. These females are, in fact, representatives of the theraphosine genus *Ami* Pérez-Miles et al. 2008 and further details are given on misplaced species.

Note (2): the examination of the holotype of *Chaetorrhombus longipes* (= *H. vellardi*) revealed the recurved aspect of the thoracic fovea, which was also observed by Rudloff (1997), who used the shape of such structure to differ it from *N. incei*. Despite the fact that the specimens examined here that we include in *N. incei* have the fovea straight or slightly recurved, we proposed the synonym above, as we consider the shape of the fovea too variable to warrant species status. *Chaetorrhombus longipes* and *N. incei* share the striped pattern of the abdomen, the shape of labium, and the morphology of genitalia (spermathecae, palpal bulb and tibial apophysis).

Diagnosis

Males are distinguished by the palpal bulb (Figures 1, 2) with a curved, long and thin embolus and by the tibial apophysis (Figure 3) formed by two branches, retrolateral wider at the apical portion bearing a spine on



Figures 1–4. *Neoholothele incei*. 1–3, Male lectotype. 1, Palpal bulb, prolateral view. 2, Palpal bulb, retrolateral view. 3, Tibial apophysis, ventral-prolateral view. 4, Female (MZSP 28405), spermathecae, dorsal view. Scales = 1 mm.

each side. Females can be distinguished from the other species by the aspect of spermathecae, with each receptacle with a small bulge at the base on the outer side (Figure 4), and by the abdominal striped pattern (Figure 10), which is less sharp than *N. fasciaaurinigra* (Figure 12).

Description

Male (NHM 98.4.2.56.63 – lectotype). Total length 22.9. Carapace: length 9.7; width 7.7. Eye tubercle: length 1.3; width 1.8. Labium: length 1.1; width 1.5. Sternum: length 4.5; width 3.9. Cheliceral basal article with 8 teeth, intercheliceral tumescence absent. Labium nearly as wide as long bearing more than 100 cuspules. Maxilla with more than 100 cuspules. Sternum rounded, sigilla one diameter from margin, labium–sternal suture with mounds, conspicuous bulge on sternum, near labium–sternal suture. Thoracic fovea slightly recurved. Palp: femur 5.2/ patella 3/ tibia 4.5/ cymbium 1.7/ total 14.4. Legs I: femur 8.8/ patella 5.2/ tibia 7.1/ metatarsus 5.5/ tarsus 4.1/ total 30.7. II: 7.5/ 3.9/ 5.7/ 5.3/ 4/ 26.4. III: 7.6/ 4.3/ 5.5/ 5.2/ 4/ 26.6. IV: 9/ 3.9/ 7.1/ 8.9/ 4.5/ 33.4. Spines: Tarsi without spines. Palp: femur (d) 0-0-p2, tibia (v) 0-1-0, (p) 0-2-1. Legs: I: femur (d) 0-0-p1, tibia (v) 0-1-1+ap1, metatarsus (v) 1-0-ap1. II: femur (d) 0-0-p1, tibia (v) 1-1-ap2, (p) 0-1-0, metatarsus (v) 2-0-ap1. III: femur (d) 0-0-2, patella (p) 1, tibia (v) 0-1-ap3, (p) 0-1-0, (r) 1-1-1, metatarsus (v) 1-2-ap2, (p) 1-1-1, (r) 0-1-1. IV: tibia (v) 0-1-ap2, (p) 1-1-1, (r) 1-0-1, metatarsus (v) 3-2-ap3, (p) 1-1-1, (r) 1-0-1. Palpal bulb with curved, long and thin embolus (Figures 1, 2). Tibial apophysis formed by two branches (Figure 3). Proximal branch short, with a spine besides it. Retrolateral developed, distal end very wide, bearing two spines on each side. Metatarsus I bend externally to the retrolateral branch. Scopula on metatarsi: I fully scopulate, II more than $\frac{3}{4}$ scopulate, III more than half scopulate, IV less than half scopulate. Scopula on tarsi: I–II entire, III–IV divided by a band of thick setae. Tarsal claws with a median row of small teeth, clavate trichobothria in two rows, divided by a central row of long and thin setae. Eyes: anterior row procurved, posterior recurved, clypeus absent. Coloration (live specimen) (Figure 9): carapace dark, with light brown setae on cephalic region, carapace margin and forming concentric ridges; chelicerae and abdomen covered with light brown setae; legs covered with light brown setae, femora with pale yellow setae.

Note: the type specimens cited above are not in good enough condition to be described. As an alternative, we selected an additional specimen (below) to provide species description.

Female (MZSP 28405). Total length 29.9. Carapace: length 10.3; width 9. Eye tubercle: length 1.4; width 2.1. Labium: length 1.4; width 2. Sternum: length 4.6; width 4.4. Cheliceral basal article with 8–9 teeth, intercheliceral intumescence absent. Labium nearly as wide as long, bearing more than 100 cuspules. Maxilla with more than 100 cuspules. Sternum rounded, sigilla one diameter from margin, labium–sternal suture with mounds, conspicuous bulge on sternum, near labium–sternal suture. Thoracic fovea straight. Palp: femur 5.9/ patella 3.3/ tibia 3.9/ tarsus 4.2/ total 17.3. Legs I: femur 7.6/ patella 5/ tibia 6.6/ metatarsus 4.4/ tarsus 3.2/ total 26.8. II: 7/ 4.2/ 4.7/ 4.3/ 3.1/ 23.3. III: 6.9/ 3.5/ 3.9/ 4.7/ 3.1/ 22.1. IV: 8/ 4.3/ 6.2/ 7.5/ 3.5/ 29.5. Spines: Tarsi without spines. Palp: femur (d) 0-0-p1, tibia (p) 0-1-0, (v) 0-2-ap3. Legs: I: femur (d) 0-0-p1, tibia (v) ap3, metatarsus (v) 1-0-1. II: femur (d) 0-0-p1, tibia (v) ap3, (p) 0-0-1, metatarsus (v) 1-0-1. III: femur (d) 0-0-r1, patella (p) 1, tibia (v) 0-2-ap3, (p) 0-1-0, (r) 1-0-1, metatarsus (v) 0-2-ap3, (p) 1-1-1, (r) 0-1-1. IV: tibia (v) 0-2-ap3, (r) 1-0-1, metatarsus (v) 3-3-ap3, (p) 1-1-1, (r) 1-0-1. Spermathecae composed of two long and slender receptacles, with rounded apex; each receptacle has a small bulge at the base on the outer side (Figure 4). Scopula on metatarsi: I and II fully scopulate, III half scopulate, IV less than half scopulate. Scopula on tarsi: I–III entire, IV divided by a band of thick setae. Tarsal claws with a median row of small teeth, clavate trichobothria in two rows, divided by a central row of long and thin setae. Eyes: anterior row procurved, posterior recurved, clypeus absent. Coloration (live specimen) (Figure 10): carapace dark, with golden setae on cephalic region, carapace margin and forming concentric ridges; chelicerae covered with light brown setae; abdomen with yellow and dark stripes; legs covered with light brown setae, femora with pale yellow setae.

Additional material examined

TRINIDAD AND TOBAGO: 1 male, MZSP 28396, 1 female, MZSP 28397, Crown Point, Tobago, 09°018'N, 60°50.707'W, 17–19 February 2003; 1 male and 1 female, MLS, 11°09.01'N, 60°50.707'W, Crown Point, Tobago, 17 February 2003, D. Weinmann *leg.*; 1 male, MZSP 28398, 1 female, MZSP 28399, Northern Range, Trinidad, 11 February 2003, D. Weinmann *leg.*; 1 male, NHM 98.4.2.56-63, Dr. W. Ince *leg.*; 1 male, NHM 1899.3.18.1-2, J. Potter *leg.*; 1 male and 1 female, MCZ, Milford Bay, Tobago, March–April 1916, H.L. Clark *leg.*; 1 female, AMNH, Bucco Bay, Tobago, 15 August 1965, E.N. Kjellesvig-Waering *leg.*; 1 female, AMNH, Soldado Rock, Gulf of Paria, 18 June 1961, T. H.G. Aitken *leg.*; 1 female, AMNH, Soldado Rock, Gulf of Paria, 20 April 1968, R. Wearing, J.B.R. Jamison, E.K. Wearing *leg.*; 1 female, 18 March 1964,

T.H.G. Aitken *leg.*; 1 male, AMNH, Navy Base, Southwest Trinidad. January 1945, R. Ingle *leg.*; 1 female, AMNH, 18.XI.1964, Erik N. Kjellesvig-Waering *leg.* Arima, Trinidad: 1 female, AMNH, 14 July 1979, R. Mendez *leg.*; 1j, AMNH, Verdant Vale, Trinidad, 26 April 1967. Fyzabad, Trinidad: 1 female, AMNH, 27 April 1966. Port-of-Spain, Trinidad: 1 female, MCZ, 1913; 1 female, AMNH, Gooward Park, Trinidad, 6 February 1966, Erik N. Kjellesvig-Waering *leg.*; 1 male, AMNH, Bayshore, Trinidad, 20 April 1964, E.N. Kjellesvig-Waering *leg.*; 1 male, AMNH, 28 May 1968, E.N. Kjellesvig-Waering *leg.* Runnemede, Tobago: 1 male, MZSP 28400, 1 female, MZSP 28401, 11°15.351'N, 60°42.465'W, 16 February 2003, D. Weinmann *leg.* Siparia: 1j, AMNH, 7 August 1966. Speyside, Tobago: 1 male, MZSP 28402, 1 female, MZSP 28403, 11°18.228'N, 60° 31.990'W, 15 February 2003, D. Weinmann *leg.* VENEZUELA: Caripito: 1 female, AMNH, 15–31 March 1942, NY Zool. Soc. *leg.* Ciudad Guyana: 1 male, MZSP 28404, 1 female, MZSP 28405, July 2001, M. Weinmann *leg.* Isla Margarita: 1 male, MZSP 67292, and 1 female, MZSP 67293. Maracay: 1 female, AMNH, Rancho Grande, 25–28 July 1946, W. Beebe et al. *leg.*

Neoholothele fasciaaurinigra sp. nov.
(Figures 5–8, 11–13)

Type material

Holotype male (MZSP 28406) from Villavicencio, Meta, Colombia. *Paratypes*: male and female (MZSP 28407); female (MZSP 28408); male (MZSP

28409); male and female (MLS); 3 males and 2 females (SMF) from type locality.

Etymology

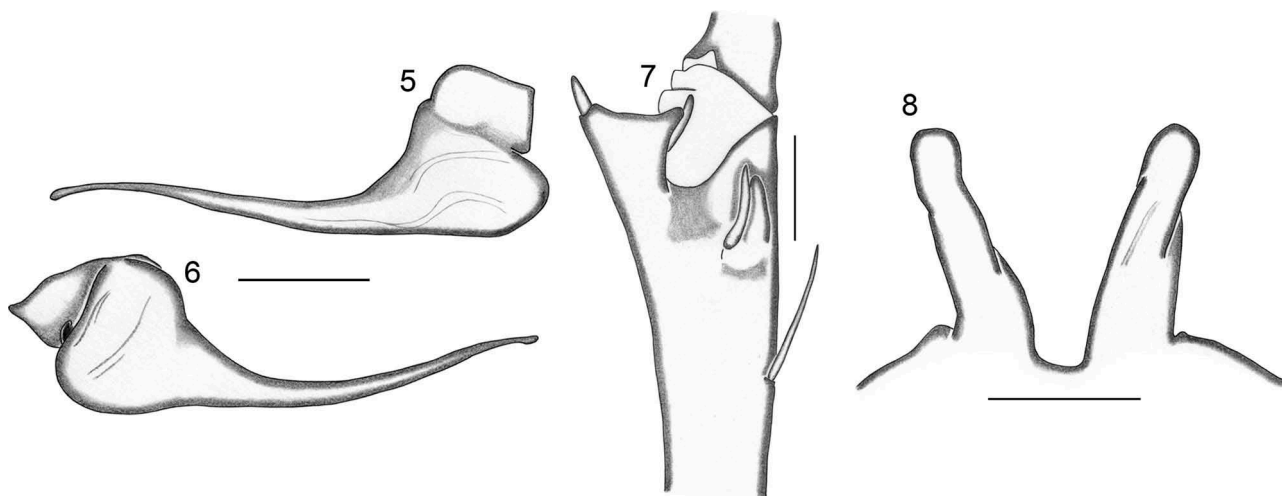
The specific epithet is the combination of the words 'fascia' (from Latin 'band' or 'stripe'), 'auri' (from Latin 'golden') and 'nigra' (from the Latin 'black'), referring to the striped black and golden pattern of the abdomen.

Diagnosis

Males can be distinguished by the shape of the palpal bulb (Figures 5, 6) with a slight sinuous, long and thin embolus with a slight swelling at apex, and by the tibial apophysis (Figure 3) formed by two branches, retrolateral with a wide at the apical portion bearing a spine on each side. Female representatives can be distinguished from the other species by the aspect of spermathecae, that lacks a small bulge at the base of each receptacle on the outer side (Figure 8), and by the abdominal striped pattern (Figure 12), which is more distinct than *N. incei* (Figure 10).

Description

Male (holotype). Total length 22.9. Carapace: length 9.6; width 7.7. Eye tubercle: length 1.1; width 1.7. Labium: length 1.1; width 1.6. Sternum: length 4.4; width 3.9. Cheliceral basal article with 8–9 teeth, intercheliceral tumescence absent. Labium nearly as wide as long, bearing more than 100 cuspules. Maxilla with approximately 100 cuspules. Sternum rounded, sigilla



Figures 5–8. *Neoholothele fasciaaurinigra* sp. nov. 5–7, Male holotype. 5, Palpal bulb, prolateral view. 6, Palpal bulb, retrolateral view. 7, Tibial apophysis, ventral-prolateral view. 8, Female paratype (MZSP 28408), spermathecae, dorsal view. Scales = 1 mm.



Figures 9–12. 9–10, *Neoholothele incei*, dorsal habitus. 9, Male, from Northern Range, Trinidad. 10, Female, from Northern Range, Trinidad. 11–12, *Neoholothele fasciaaurinigra*, dorsal habitus. 11, Male, from Villavicencio, Meta, Colombia. 12, Female, from Villavicencio, Meta, Colombia.

one diameter from margin, labium–sternal suture with mounds, conspicuous bulge on sternum, near labium–sternal suture. Thoracic fovea short and straight. Palp: femur 5.5/ patella 2.8/ tibia 4.8/ cymbium 1.8/ total 14.9. Legs I: femur 10.2/ patella 4.3/ tibia 8.7/ metatarsus 7.4/ tarsus 5.7/ total 36.3. II: 9.3/ 4.3/ 7.6/ 7.1/ 5.2/ 33.5. III: 8.1/ 3.6/ 6/ 7.6/ 4.7/ 30. IV: 10.5/ 3.5/ 9/ 11.1/ 5.2/ 39.3. Spines: Tarsi without spines. Palp: femur (d) 0-0-p1, tibia (p) 0-2-1. Legs: I: femur (d) 0-0-p1, tibia (p) 0-0-1, (v) 0-1-1, metatarsus (v) 0-1-1. II: femur (d) 0-0-p2, tibia (v) 0-1-ap3, (p) 0-0-1, metatarsus (p) 0-1-0, (v) 0-1-ap1. III: femur (d) 0-2-3, patella (p) 1, tibia (v) 0-2-ap3, (p) 0-1-0, (r) 1-1-0, metatarsus (v) 0-2-ap3, (p) 1-1-1, (r) 0-1-1. IV: femur (d) 0-0-r1, tibia (v) 0-2-ap3, (r) 0-1-1, metatarsus (v) 2-2-ap3, (p) 1-1-1, (r) 0-1-1. Palpal bulb with curved, long and thin embolus, slight swelling at apex (Figures 5, 6). Tibial apophysis formed by two branches (Figure 7). Prolateral branch short, with a spine besides it. Retrolateral developed, distal

end very wide, bearing two spines on each side, much wider at apex than at the base. Metatarsus I sinuous bends externally to the retrolateral branch. Scopula on metatarsi: I and II 3/4 scopulate, III more than half scopulate, IV half scopulate. Scopula on tarsi: I–II entire, III entire with a band of thin setae, IV divided by a band of thick setae. Tarsal claws with a median row of small teeth, clavate trichobothria in two rows, divided by a central row of long and thin setae. Eyes: anterior row procurved, posterior recurved, clypeus absent. Coloration (live specimen) (Figure 11): carapace dark, with yellow setae on cephalic region, carapace margin and forming concentric ridges; chelicerae covered with light brown setae; abdomen dark, covered with long light setae, with hardly noticeable stripes; legs dark.

Female (paratype MZSP 28408). Total length 29.7. Carapace: length 11.3; width 9.1. Eye tubercle: length 1.5; width 2.1. Labium: length 1.6; width 2.3. Sternum:

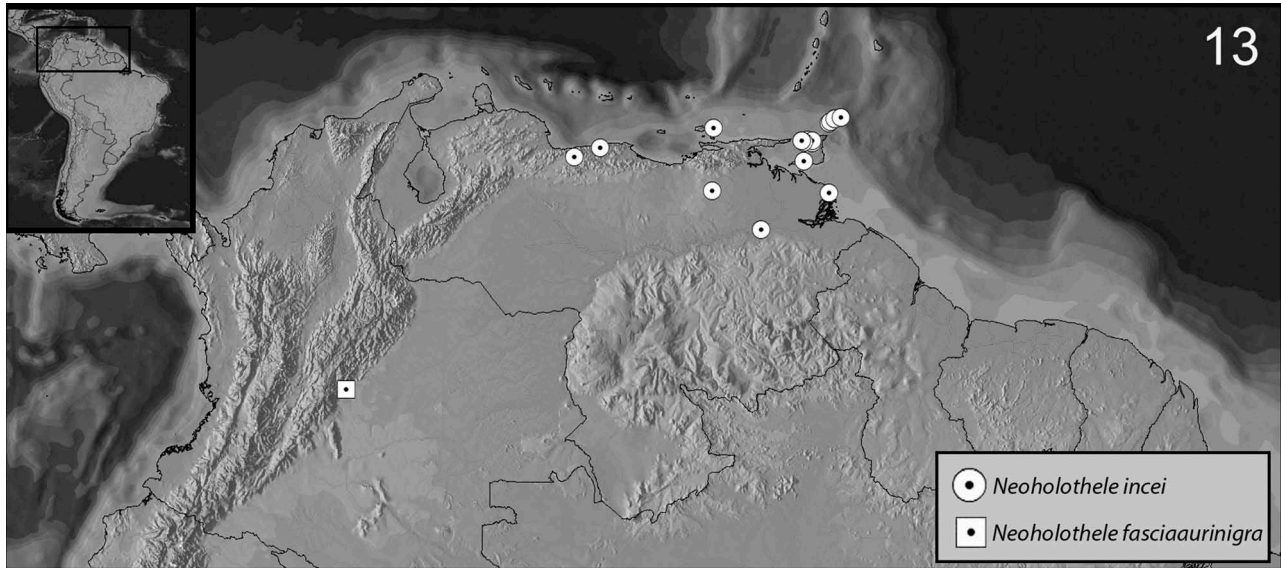


Figure 13. Distribution map of *Neoholothele incei* and *Neoholothele fasciaaurinigra* sp. nov. Upper left showing South America with detail (rectangle) depicted in the map.

length 5.2; width 4.9. Cheliceral basal article with 9 teeth, intercheliceral intumescence absent. Labium nearly as wide as long bearing more than 100 cuspules. Maxilla with more than 100 cuspules. Sternum rounded, sigilla one diameter from margin, labium–sternal suture with mounds, conspicuous bulge on sternum, near labium–sternal suture. Thoracic fovea straight. Palp: femur 6.7/ patella 3.8/ tibia 4.2/ tarsus 4.6/ total 19.3. Legs I: femur 9.6/ patella 5.2/ tibia 7.2/ metatarsus 5.6/ tarsus 4.3/ total 31.9. II: 8.4/ 4.7/ 6.1/ 5.2/ 4/ 28.4. III: 7.5/ 4/ 4.8/ 5.6/ 3.7/ 25.6. IV: 9.7/ 4.5/ 7.5/ 8.2/ 4.3/ 34.2. Spines: Tarsi without spines. Palp: femur (d) 0-0-p1, tibia (p) 0-1-0, (v) 0-1-ap3. Legs: I: femur (d) 0-0-p1, tibia (v) ap3, metatarsus (v) 1-0-ap1. II: femur (d) 0-0-p1, tibia (v) 0-1-ap3, (p) 0-1-0, metatarsus (v) 1-0-ap1. III: femur (d) 0-0-r1, tibia (v) 0-1-ap3, (p) 0-1-1, (r) 1-1-0, metatarsus (v) 0-1-ap3, (p) 1-1-1, (r) 0-1-1. IV: tibia (v) 0-2-ap3, (r) 1-0-1, metatarsus (v) 2-2-ap3, (p) 1-1-1, (r) 0-1-1. Spermathecae composed of two long and slender receptacula, with rounded apex (Figure 8). Scopula on metatarsi: I and II fully scopulate, III and IV half scopulate. Scopula on tarsi: I–III entire, IV divided by a band of thick setae. Tarsal claws with a median row of small teeth, clavate trichobothria in two rows, divided by a central row of long and thin setae. Eyes: anterior row procurved, posterior recurved, clypeus absent. Coloration (live specimen) (Figure 12): carapace dark, with golden setae on cephalic region, carapace margin and forming concentric ridges; chelicerae covered with light brown setae; abdomen with well-marked golden and dark stripes; legs covered with light brown setae, femora with golden setae.

Misplaced species

Family **Theraphosidae** Thorell 1869

Subfamily **Theraphosinae** Thorell 1870

Ami incei (F. O. Pickard-Cambridge 1898) comb. nov.
Hapalopus incei F. O. Pickard-Cambridge 1898: 894,
 pl. 54, f. 8, 10, 12 (Description of male and female).
Holothele incei: Rudloff 1997: 9, f. 20 (Transfer from
Hapalopus).

Type material

Paralectotypes females of *Hapalopus incei* (NHM 98.4.2.56.63) from Trinidad, Dr. W. Ince leg., 1898, examined.

Note: The females, included in the original description, are in fact representatives of the Theraphosinae genus *Ami* Pérez-Miles et al. 2008, with which it shares the morphology of the highly characteristic spermathecae with paired ventral receptacles attached to an almost discrete, semicircular, sclerotized back-plate.

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Disclosure statement

No potential conflict of interest was reported by the authors.

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