REVISTA IBÉRICA de Aracnología

ARTÍCULO:

A new species of *Holothele* Karsch, 1879 (Theraphosidae, Ischnocolinae) from Venezuela.

Rogério Bertani

Instituto Butantan,
Laboratório de Imunoquímica,
Av. Vital Brazil 1500,
05503-900, São Paulo SP, Brazil.
rbert@butantan.gov.br

Yelinda Araújo

Instituto Nacional de Investigaciones Agricolas - INIA,
Av. Urdaneta, Edif. INIA,
Mérida, Edo. Mérida,
Venezuela.
yaraujo@inia.gov.ve

Revista Ibérica de Aracnología
ISSN: 1576 - 9518.
Dep. Legal: Z-2656-2000.
Vol. **12**, 31-XII-2005
Sección: Artículos y Notas.
Pp: 13 − 16.

Edita:
Grupo Ibérico de Aracnología (GIA)
Grupo de trabajo en Aracnología
de la Sociedad Entomológica Aragonesa (SEA)
Avda. Radio Juventud, 37
50012 Zaragoza (ESPAÑA)
Tef. 976 324415
Fax. 976 535697
C-elect.: amelic@telefonica.net

Director: Carles Ribera
C-elect.: cribera@ub.edu

Indice, resúmenes, abstracts vols. publicados:
http://entomologia.rediris.es/sea/publicaciones/ria/index.htm

Página web GIA:
http://entomologia.rediris.es/gia

Página web SEA:
http://entomologia.rediris.es/sea

A new species of *Holothele* Karsch, 1879 (Theraphosidae, Ischnocolinae) from Venezuela.

Rogério Bertani & Yelinda Araújo

Abstract:

Holothele waikoshiemi sp. n. (Theraphosidae, Ischnocolinae) is described based on two females and a juvenile from Venezuela. The new species is distinguished by leg I being the longest limb, incrassate tibia I and spermathecae shape.

Key words: Araneae, Theraphosidae, Ischnocolinae, *Holothele*, new species, Venezuela, Amazonas, Yanomami.
Taxonomy: *Holothele waikoshiemi* sp. n.

Una nueva especie de *Holothele* Karsch, 1879 (Theraphosidae, Ischnocolinae) de Venezuela.

Resumen:

Se describe *Holothele waikoshiemi* sp. n. (Theraphosidae, Ischnocolinae) en base a dos ejemplares hembras y uno juvenil de Venezuela. La nueva especie se caracteriza por presentar la pata I más larga, tibia I ensanchada y por el formato de las espermatecas.

Palabras clave: Araneae, Theraphosidae, Ischnocolinae, *Holothele*, nueva especie, Venezuela, Amazonas, Yanomami**.**
Taxonomía: *Holothele waikoshiemi* sp. n.

Introduction

The genus *Holothele* Karsch, 1879 comprises 14 species distributed from the West Indies to Northern South America and Southern Central America (Platnick, 2005). It is particularly speciose in Venezuela, where 8 species can be found, including the type species of the genus *H. recta* Karch, 1879. Most Venezuelan species were described during the 19th century: *H. colonica* (Simon, 1889), *H. incei* (F.O.P.-Cambridge, 1898), *H. longipes* (L. Koch, 1875), *H. ludwigi* (Strand, 1907), *H. sanguiniceps* (F. O. P.-Cambridge, 1898), *H. steini* (Simon, 1889), *H. vellardi* Rudloff, 1997.

The genus was characterized by Rudloff (1997) as having short eye tubercle, cephalic region indistinct, large and narrow fovea, posterior sigilla positioned one diameter from the margin, tarsal scopulae divided at least on the posterior tarsi, two long and tubular spermathecae, long and narrow embolus, paired tibial apophyses, posterior spinnerets relatively long and slender, fovea typically transverse, but occasionally recurved or procurved, with the posterior part always straight. However, none of these characters could be considered synapomorphic, and there is the possibility that *Holothele* is a paraphyletic genus. Until most of the ischnocoline genera are revised and a cladistic analysis undertaken, it is difficult to assign the limits of *Holothele*.

During the project "Diversidad y Composición Nutricional de los Invertebrados Comestibles por las Etnias Yanomami y Yekuana, Reserva de Biosfera Alto Orinoco, Estado Amazonas" carried out by one of the authors (YA), a new species of ischnocoline was collected, which is putatively included in the genus *Holothele* and described here.

Material and Methods

Specimens are deposited at Universidad Central de Venezuela, Facultad de Agronomia, Instituto de Zoología (José Clavijo). A Nikon SMZ 1500 dissecting microscope, with a camera lucida attachment, was used for producing the illustrations. All measurements are in millimetres.

Abbreviations: AME: anterior median eye, PME: posterior median eye, ALE: anterior lateral eye, PLE: posterior lateral eye, PMS: posterior median spinneret, PLS: posterior lateral spinneret, STC: superior tarsal claw. Scheme of leg spination follows Bertani (2001).

Taxonomy

***Holothele waikoshiemi* sp. n.**
Figs 1-5.

TYPES. Female holotype from Río Mavaca, Yanomami community Motorema (N 02º 30,450´ W 65º 09,666´), Paulo Beserra & Ignacio Nimo col.; Paratypes female and juvenile from Río Mavaca, Yanomami communities Motorema and Hatakoa (N 02º 30,450' W 65º 09,666' and N 02º 30,853' W 65º 08,892' respectively), Yelinda Araujo, Paulo Beserra and Ignacio Nimo col., Reserva de Biosfera Alto Orinoco-Casiquiare, 411 km from Puerto Ayacucho, Estado Amazonas, Venezuela.

ETYMOLOGY. The specific name is a noun in apposition taken from the Yanomami language meaning a kind of spider.

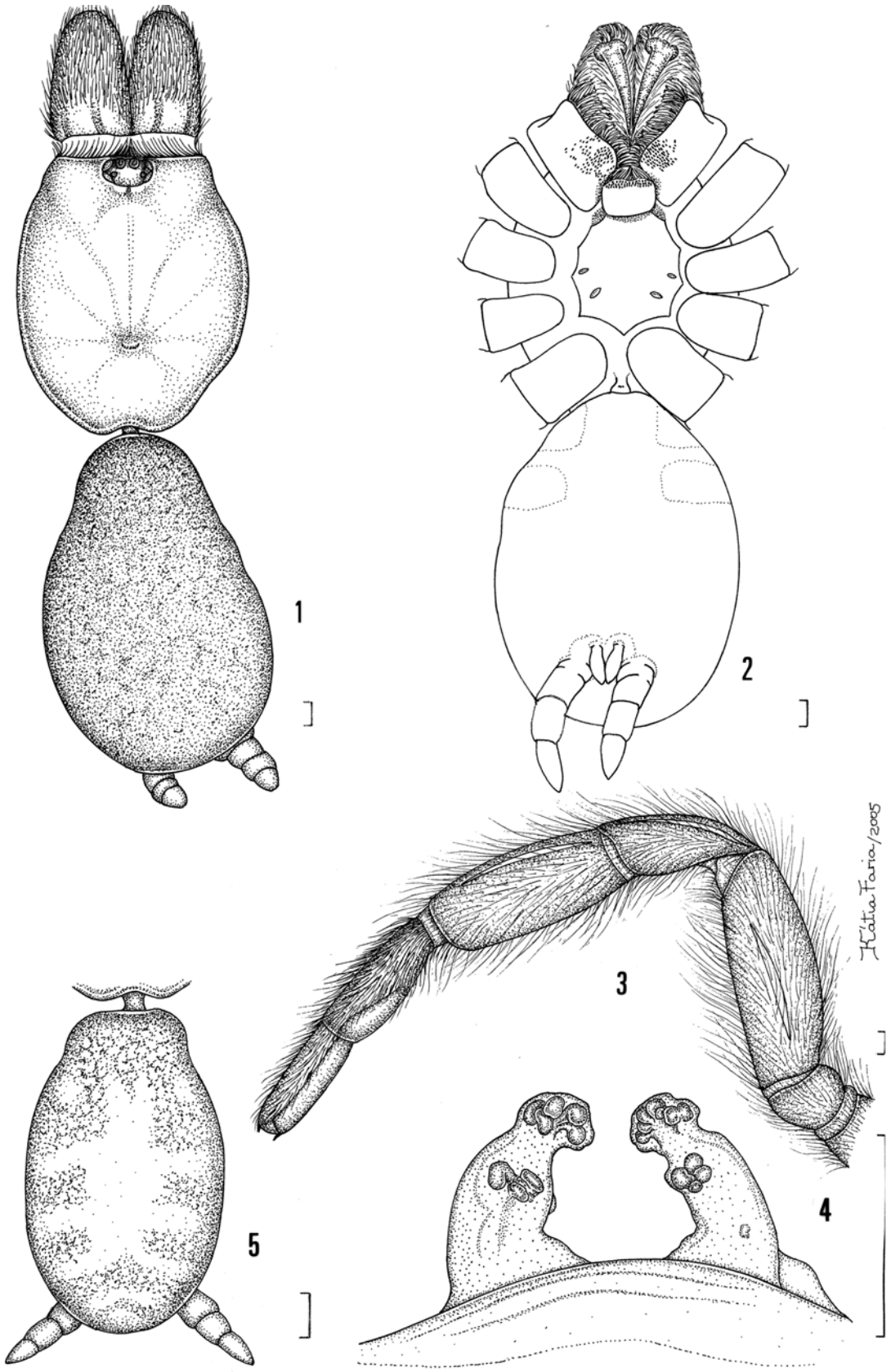
DIAGNOSIS. *Holothele waikoshiemi* sp. n. can be distinguished from all *Holothele* species by its incrassate tibia I, leg I being the longest limb and two long, weakly sclerotized spermathecae, with the apical region having more than 5 sclerotized receptacles and a subapical region with additional sclerotized receptacles. The presence of multilobular receptacles is shared with the species *H. rondoni* and *H. sanguiniceps*.

DESCRIPTION. - FEMALE - holotype - Total length with chelicerae: 32.91. Carapace: length 12.16, width 10.83. Eye tubercle: length 1.22, width 2.17. AME: 0.42, PME: 0.22, ALE: 0.45, PLE: 0.35. Labium: length 1.67, width 2.05. Sternum: length 5.83, width: 5,67. Cephalic region slightly raised. Thoracic striae hardly distinguishable. Fovea short, deep, procurved. Chelicerae without rastellum, basal segments with 10 left, 11 right teeth. Clypeus absent. Anterior eye row slightly procurved, posterior slightly recurved. Labium damaged, with 26 cuspules on its left side (see remarks). Maxilla subrectangular, anterior lobe distinctly produced into conical process, inner angle bearing numerous cuspules (almost 100). Sigilla on the sternum/labium edge present. Second pair very small, more than one diameter from margin. Third pair slightly larger than the second, more than one diameter from margin. Fourth pair twice the diameter of third pair, one diameter from margin. PMS with single segment, 1.8 long; PLS: basal segment 2.24, median 1.52, distal 1.60 long. Claw tufts present; STC without teeth. Tarsi I-IV scopulated, II with a line of sparse setae; III divided by row of 3 setae; IV divided by row of 5 setae; metatarsi I-II scopulated 3/4 their length, III 1/2; IV 1/4. Metatarsal scopula IV divided by 2 setae. Femur IV without retrolateral scopula. Stridulatory setae absent. Series of short, black, spiniform setae above and below prolateral suture of maxillae and coxae I-IV. Similar setae on retrolateral surface of the maxillae. Some shorter setae on retrolateral prodorsal areas of maxillae and coxae I. Palp: trochanter: 2.06 / femur 6.29 / patella 3.70 / tibia 4.40 / tarsus 3.99 / total 20.44; Legs I: trochanter 2.56 / femur 9.92 / patella 6.44 / tibia 7.75 / metatarsus 6.32 / tarsus 4.14 / total 37.13 / II: 2.02 / 7.95 / 4.84 / 5.25 / 5.32 / 4.02 / 29.40 / III: 1.79 / 6.68 / 4.25 / 3.53 / 5.03 / 3.38 / 24.66 / IV: 2.21 / 9.01 / 4.88 / 6.95 / 7.36 / 4.04 / 34.45. Leg I the longest. Spines: tarsi lacking spines. Palpal femur p0-0-1, patella 0, tibia v0-0-3ap; legs I femur p0-0-1, patella 0, tibia v0-0-2ap, metatarsus 0; II femur 0, patella 0, tibia v0-0-2ap, metatarsus v1-0-2ap; III femur 0, patella p1; tibia v0-0-2ap, r0-1-0, metatarsus v0-1-3ap, p0-1-1, r0-1-1; IV femur 0, patella 0, tibia v0-0-2ap, r0-0-1, metatarsus v6(3ap), p0-1-1, r0-1-1. Tibia I thickened (Fig. 3). Paired spermathecae weakly sclerotized, with the apical region having more than 5 sclerotized receptacles and a subapical region with additional sclerotized receptacles (Fig. 4). Urticating hairs absent. General coloration dark-brown. Carapace margin with a light border; patellae, tibiae, metatarsi and tarsi lighter than femora; sternum, maxillae, labium, coxae and abdomen ventrally lighter than dorsum. Leg rings and longitudinal stripes on the patellae and tibiae indistinct.

REMARKS: Female paratype has more than 200 labial cuspules. Juvenile has a dorsal abdominal pattern of whitish stripes (Fig. 5).

MALE. Unknown.

HABITAT NOTES. Specimens of *Holothele waikoshiemi* sp. n. live in burrows in the forest floor. Yanomami Indians collect the specimens in the forest bordering to their communities, digging the soil where they observe small holes surrounded internally with threads. To lure out the animal from their burrows, they are helped with a branch piece or stick, while they emit sounds to get the attention of the animal.



Figs. 1-5. *Holothele waikoshiemi* sp. n. Female holotype (**1-4**). **1**. Dorsal view; **2**. Ventral view; **3**. Left leg I, retrolateral view; **4**. Spermathecae, dorsal view. Juvenile paratype (**5**). Abdomen, dorsal view. Scale bars: 1 mm.

Acknowledgements

We thank Dr. José Clavijo, Universidad Central de Venzuela, for providing a depository for the type specimens. Support for RB: FAPESP proc. 03/12587-4. Figures were done by Katia de M. Faria. Financial support has been provided by Instituto Nacional de Investigaciones Agrícolas (INIA) and the Fondo Nacional de Ciencia, Tecnología e Innovación (FONACIT) by the project No. PI-2001000497 "Biodiversity and Nutritional Composition of the invertebrates consumed by Yanomami of Motorema and Yekuana Amerindians of the Alto Orinoco, Amazonas State", which provided travel funds for Dr. Maurizio Paoletti. The second author gratefully acknowledges the MARN-Amazonas, Vicariato Apostólico of Puerto Ayacucho and Mavaca, villagers of Motorema and Hatakoa, especially Miguelito Nimo, Ignacio Nimo, Jacinto Terio and Casimiro for facilitating the field work. Thanks also are due to Richard Gallon and an anonymous reviewer for the revision of this work.

References

BERTANI, R. 2001. Revision, cladistic analysis, and zoogeography of *Vitalius*, *Nhandu*, and *Proshapalopus*; with notes on other theraphosine genera (Araneae, Theraphosidae). Arquivos de Zoologia, **36**(3):265-356.

PLATNICK, N.I. 2005. The world spider catalog, version 6.0. American Museum of Natural History, online at http://research.amnh.org/entomoogy/spiders/catalog/index.html (accessed 23 August 2005).

RUDLOFF, J.-P. 1997. Revision der Gattung *Holothele* Karsch, 1879 nebst Aufstellung einer neuen Gattung *Stichoplastoris* gen. nov. (Araneae, Theraphosidae) und Wiedereinsetzung einiger weiterer Gattungen der Mygalomorphae. Arachnologisches Magazin **5**(2):1-19.