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ARTÍCULO:

The genus *Ananteris* Thorell (Scorpiones, Buthidae) in the Brazilian Amazonia

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THE GENUS *ANANTERIS* THORELL (SCORPIONES, BUTHIDAE) IN THE BRAZILIAN AMAZONIA

Wilson R. Lourenço

Abstract:
Two new contributions are added to the knowledge of the genus *Ananteris* Thorell in Brazilian Amazonia. The male of *Ananteris pydanieli* Lourenço, 1982 is described for the first time, and a new species, *Ananteris nairae* sp. n., is described on the basis of a single male specimen, collected in the region of Coari, Rio Urucu, Amazonas state. With the description of the new species, the number *Ananteris* species is raised to 26, ten of which are present in the Brazilian scorpion fauna.
Key words: Scorpiones, Buthidae, *Ananteris*, Brazilian Amazonia.
Taxonomy: *Ananteris nairae* sp. n.

El género *Ananteris* Thorell (Scorpiones, Buthidae) en la Amazonia brasileña

Resumen:
Se presentan dos nuevas contribuciones al conocimiento del género *Ananteris* Thorell en la Amazonia brasileña. Se describe por primera vez el macho de *Ananteris pydanieli* Lourenço, 1982 y la nueva especie *Ananteris nairae* sp. n., en base a un único macho colectado en la región de Coari, Río Urucu, estado de Amazonas. Con la nueva descripción, el número de especies de *Ananteris* alcanza las 26, de las que 10 están presentes en la fauna brasileña.
Palabras clave: Scorpiones, Buthidae, *Ananteris*, Amazonia brasileña.
Taxonomía: *Ananteris nairae* sp. n.

Introduction

Since the genus *Ananteris* Thorell, 1891 was last revised (Lourenço, 1982), the number of species described in it has increased continuously. At present it contains 25 known species (see Lourenço, 2001, 2003). In most cases, however, the species have remained rare. During a revision of the genus (Lourenço, 1982), two new species, *Ananteris dekeyseri* Lourenço, and *Ananteris pydanieli*, were described from Brazilian Amazonia. Just two years after the revision of the genus, a third new species, *Ananteris luciae* Lourenço, was described (Lourenço, 1984). These three species were subsequently confirmed as members of the fauna of Brazilian Amazonia (Lourenço, 1986, 2002). Subsequently, another new species, *Ananteris maranhensis* Lourenço, 1987 was described from the transitional zone between the Amazon forest and the Brazilian savannas (Lourenço, 1987). The examination of a single specimen of *Ananteris*, collected in rain forest in the region of Coari, Rio Urucu, State of Amazonas, shows it to be a new species, related to *Ananteris pydanieli*. The new species distribution is the most occidental of all of Brazilian species in the genus. The new species is described here, together with the male of *Ananteris pydanieli* Lourenço, 1982 which has been unknown until now. Recent collections of *Ananteris pydanieli* with pitfall traps, tend to show that this species is more common than was originally suspected.

Taxonomic treatment

Ananteris pydanieli Lourenço, 1982 (Fig. 1-2)

Ananteris pydanieli Lourenço, 1982: Bull. Mus. Natn. Hist. Nat., Paris: 133.
Ananteris pydanieli Lourenço, 2002: Scorpions of Brazil: 84.

Description of the male, based on four specimens (Measurements in Table I).

MATERIAL: Brazil, Manaus, Reserve Ducke, (no date) (Höffer & Gasnier coll.), 1 male; 24/VIII/1993 (Platô coll.), 2 males; 6-11/III/1998 (S. Golovatch coll.), 1 male. Deposited in the "Instituto Nacional de Pesquisas da Amazônia" (INPA)

Coloration. Basically brownish-yellow (as is the female), symmetrically marbled with dark blackish brown producing an overall spotted appearance. Prosoma:

carapace dark yellow, almost totally covered with blackish spots; eyes surrounded by black pigment. Mesosoma: yellowish-brown to yellowish-black with confluent blackish-brown stripes and two diffused longitudinal yellowish stripes. Metasoma: segments I to IV reddish-yellow, with brown spots; segment V reddish-brown, with dark almost black spots. Vesicle reddish-yellow without spots. Venter yellowish; sternite VII with some brown spots. Chelicerae pale yellow without any spots over their entire surface; fingers dark-brown to blackish. Pedipalps: yellowish, intensely covered with dark brown to blackish spots; fingers brownish with the rows of granules slightly reddish-yellow. Legs yellowish with dark brown spots.

Morphology. Carapace moderately to intensely granular; anterior margin with a very slight median concavity, almost straight. Anterior median superciliary and posterior median keels weak. All furrows moderate to weak. Median ocular tubercle distinctly anterior to the center of carapace; median eyes separated by approximately 0.70 of ocular diameter. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites moderately to intensely granular. Median carina moderate in all tergites. Tergite VII pentacarinate. Venter: genital operculum divided longitudinally, each plate having a more or less triangular shape. Pectines: much larger in males; pectinal tooth count 19-19 (variation 18 to 19); basal middle lamellae of the pectines not dilated; fulcra absent. Sternites smooth with moderately elongated stigmata and some setae; VII weakly granulated with vestigial carinae. Metasoma: segment I with 10 carinae, crenulate. Segments II to IV with 8 carinae, crenulate. Intercarinal spaces moderately to weakly granular. Segment V with 5 carinae. Telson weakly granular with one ventral carina and with a moderately long and weakly curved aculeus; subaculear tooth strong and spinoid. Cheliceral dentition characteristic of the family Buthidae (Vachon, 1963); fixed finger with two moderate basal teeth; movable finger with two very weak basal teeth; ventral aspect of both finger and manus with dense, long setae. Pedipalps: slender in males; femur pentacarinate; patella and chela with a few vestigial carinae; internal face of patella with 5-6 spinoid granules; all faces weakly granular, nearly smooth. Movable fingers with 6 almost linear rows of granules; two accessory granules present at the base of each row; extremity of movable fingers with 3 accessory granules. Trichobothriotaxy; orthobothriotaxy A-β (Vachon, 1974, 1975). Legs: tarsus with very numerous fine median setae ventrally. Tibial spurs strongly developed on legs III and IV.

Ananteris nairae sp. n. (Fig. 3-10)

DIAGNOSIS: A small species when compared with the average size of the other species of the genus (17.8 mm in total length; see Table I). It can be readily distinguished from all the other known species of the genus from Brazilian Amazonia by a unique generally brown pattern of pigmentation of the body and appendages. It differs in particular from *A. pydanieli* by the presence of 10 carinae on metasomal segment II, whereas in *A. pydanieli* there are only 8 carinae on segment II. This is the fourth species of *Ananteris* described from Brazilian Amazonia, and is possibly an endemic element of the wet forests of the upper Rio Solimões (Amazonas) region.

Table I. Morphometric values (in mm) of a male specimen of *Ananteris pydanieli* and of the male holotype of *Ananteris nairae* sp. n.

	Ananteris pydanieli	*Ananteris nairae* sp. n.
Total length	22.1	17.8
Carapace:		
- length	2.9	2.4
- anterior width	1.8	1.5
- posterior width	2.6	2.3
Metasomal segment I:		
- length	1.7	1.4
- width	1.7	1.3
Metasomal segment V:		
- length	4.3	3.8
- width	1.5	1.1
- depth	1.5	1.2
Vesicle:		
- width	0.8	0.6
- depth	0.8	0.6
Pedipalp:		
- Femur length	2.9	2.2
- Femur width	0.8	0.6
- Patella length	3.5	2.8
- Patella width	0.9	0.8
- Chela length	3.8	3.4
- Chela width	0.6	0.5
- Chela depth	0.5	0.4
Movable finger:		
- length	3.0	2.6

TYPE MATERIAL: Male holotype. Brazil, State of Amazonas, Coarí, Rio Urucu (RUC-36), 4° 55' 53" S – 65° 18' 13" W, 24/II-10/III/1995 (P. Buhrheim, N.O. Aguiar *et al*., col.). Deposited in the Entomological Collection of the University of Amazonas, Manaus, Brazil.

ETYMOLOGY: Patronym is in honor of Dr. Nair O. Aguiar of the University of Amazonas, Manaus, Brazil.

DESCRIPTION based on male holotype (Morphometric measurements in Table I).

Coloration. Generally pale brown with a few spots or pigmented zones on the body and its appendages. Prosoma: carapace pale brown with dark spots on the anterior and lateral edges; eyes surrounded by black pigment. Mesosoma: brownish with darker zones on the posterior and lateral edges of tergites. Metasoma: all segments reddish-brown; segments IV and V darker. Vesicle reddish with the base of the aculeus yellowish. Venter reddish-yellow. Chelicerae yellowish with

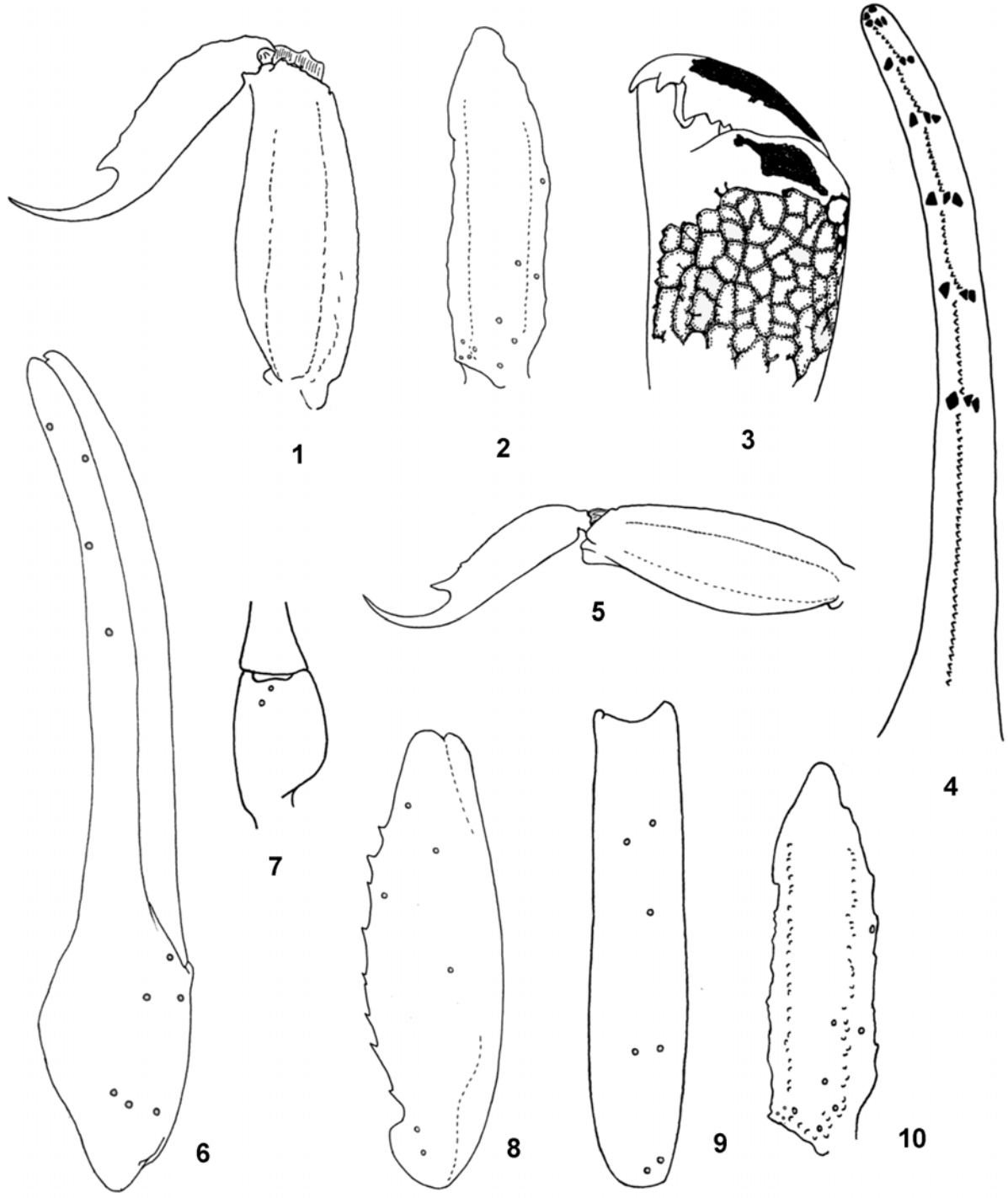

Fig. 1-2. *Ananteris pydanieli* (male). **1.** Metasomal segment V and telson, lateral aspect. **2.** Femur of pedipalp in dorsal aspect, showing trichobothrial pattern. **Fig. 3-10 .** *Ananteris nairae* sp. n. Male holotype. **3.** Chelicera, dorsal aspect. **4.** Movable finger of pedipalp chela. **5.** Metasomal segment V and telson, lateral aspect. **6-10.** Trichobothrial pattern. **6-7.** Chela, dorso-external and ventral aspects. **8-9.** Patella, dorsal and external aspects. **10.** Femur dorsal aspect.

several brown spots over the entire surface; fingers dark brown. Pedipalps: brownish-yellow; femur and patella brownish; chela hand yellowish; fingers pale brown. Legs yellowish-brown, with the three most distal segments yellowish.

Morphology. Carapace with thin but intense granulation; anterior margin weakly emarginated, almost straight. Anterior median superciliary and posterior median carinae weak. All furrows moderate to weak. Median ocular tubercle distinctly anterior to the center

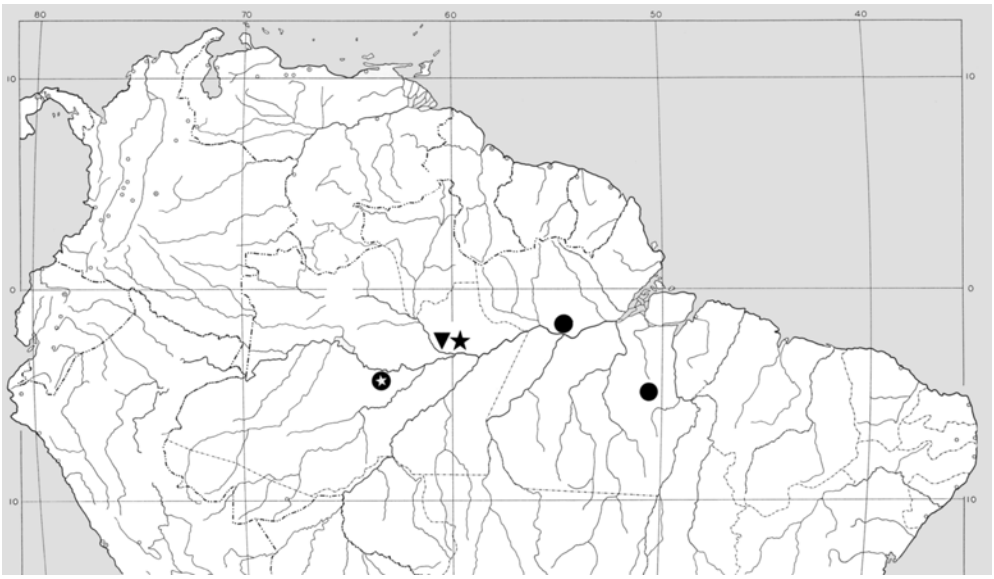

Fig. 11. Map showing the known distribution of *Ananteris* species in Brazilian Amazonia.
A. dekeyseri, i
A. pydanieli, –
A. luciae,
A. nairae sp. n., k

of carapace; median eyes separated by approximately 0.80 of one ocular diameter. Three pairs of lateral eyes. Sternum subpentagonal. Mesosoma: tergites with thin but intense granulation. Median carina moderate to weak in all tergites. Tergite VII pentacarinate. Venter: genital operculum divided longitudinally, each plate more or less suboval in shape. Pectines: pectinal tooth count 17-18; basal middle lamellae of the pectines not dilated; fulcra absent. Sternites weakly to moderately granular with moderately elongate stigmata and several setae; VII with vestigial carinae. Metasoma: segments I and II with 10 carinae, crenulate. Segments III and IV with eight carinae, crenulate. Intercarinal spaces weakly granular. Segment V rounded with five carinae. Telson elongated and weakly granular with one vestigial ventral carina; aculeus moderately short and weakly curved; subaculear tooth strong and spinoid. Cheliceral dentition characteristic of the family Buthidae (Vachon, 1963); fixed finger with two moderate basal teeth; movable finger with two very weak basal teeth; ventral aspect of both finger and manus with dense, long setae. Pedipalps: femur pentacarinate; patella and chela with a few vestigial carinae; internal face of patella with nine spinoid granules; all faces weakly granular, almost smooth. Fixed and movable fingers with six almost linear rows of granules; two small accessory granules present at the base of each row. Trichobothriotaxy; orthobothriotaxy A-β (Vachon, 1974, 1975). Legs: tarsus with very numerous fine median setae ventrally. Tibial spurs strongly developed on leg IV; moderate on leg III.

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