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ARTÍCULO:

The genus *Ananteris* Thorell (Scorpiones, Buthidae) in French Guyana

Wilson R. Lourenço
Département de Systématique et Evolution, Section Arthropodes (Arachnologie), Muséum National d'Histoire Naturelle,
61 rue de Buffon
75005 Paris, France
arachne@mnhn.fr

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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: A. Melic

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THE GENUS *ANANTERIS* THORELL (SCORPIONES, BUTHIDAE) IN FRENCH GUYANA

Wilson R. Lourenço

Abstract

Two new contributions are added to the knowledge of the genus *Ananteris* Thorell in French Guyana. The male of *Ananteris sabineae* Lourenço, 2001 is described for the first time, and a new species, *Ananteris elisabethae* sp. n., is described on the basis of a single male specimen, collected in the region of Kourou and previously identified as *Ananteris balzanii* Thorell. Some morphological structures of these species of *Ananteris* are illustrated for the first time, based mainly on the study of the pectines by scanning electron microscopy.

Key words: Scorpiones, Buthidae, *Ananteris*, sp. n., French Guyana
Taxonomy: *Ananteris elisabethae* sp. n.

El género *Ananteris* Thorell (Scorpiones, Buthidae) en la Guayana Francesa

Abstract

Se hacen dos aportaciones al conocimiento del género *Ananteris* Thorell en la Guayana Francesa. Se describe por primera vez el macho de *Ananteris sabineae* Lourenço, 2001, y se describe una nueva especie, *Ananteris elisabethae* sp. n., sobre la base de un único ejemplar macho, recogido en la región de Kourou y previamente identificado como *Ananteris balzanii* Thorell. Se ilustran por primera vez algunas estructuras morfológicas de estas especies de *Ananteris*, principalmente mediante imágenes de los peines obtenidas con microscopio electrónico de barrido.

Key words: Scorpiones, Buthidae, *Ananteris*, sp. n., Guayana Francesa
Taxonomía: *Ananteris elisabethae* 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 24 known species (see Lourenço, 2001). In most cases, however, the species have remained rare. During a revision of the genus (Lourenço, 1982), one new species, *Ananteris coineaui* Lourenço, was described from French Guyana, and *Ananteris balzanii* Thorell was recorded from the region of Kourou. These two species were subsequently confirmed as members of the fauna of French Guyana (Lourenço, 1983). More recently (Lourenço, 2001; Lourenço & Monod ,1999), two new species have been described from French Guyana. The specimen of *Ananteris*, collected in the dry forest of the region of Kourou on the coastal zone of French Guyana, was not examined during the revision by Lourenço (1982). Reinvestigation shows it to be a new species, not even related to *Ananteris balzanii*. The latter species is distributed over the savannah areas of Central Brazil, Paraguay and the North of Argentina. The new species is described herewith, together with the male of *Ananteris sabineae* Lourenço, 2001 which was unknown until now.

Taxonomic treatment

***Ananteris sabineae* Lourenço, 2001**
Figs. 1-10.
Ananteris sabineae Lourenço, 2001: Zoosystema, 23: 690.

Description of the male (Measurements in Table I).

Material: 1 male: French Guyana, Mitaraka Sud (Lisière SR), 15/09/2001, 640 m (J.M. Betsch leg.). Deposited in the Muséum national d'Histoire naturelle, Paris

Coloration. Basically brownish-yellow (darker than the female), symmetrically marbled with dark blackish brown producing an overall spotted appearence. Prosoma: carapace dark yellow, almost totally covered with blackish spots; eyes surrounded by black pigment. Mesosoma: yellowish-brown to yellowish-black with

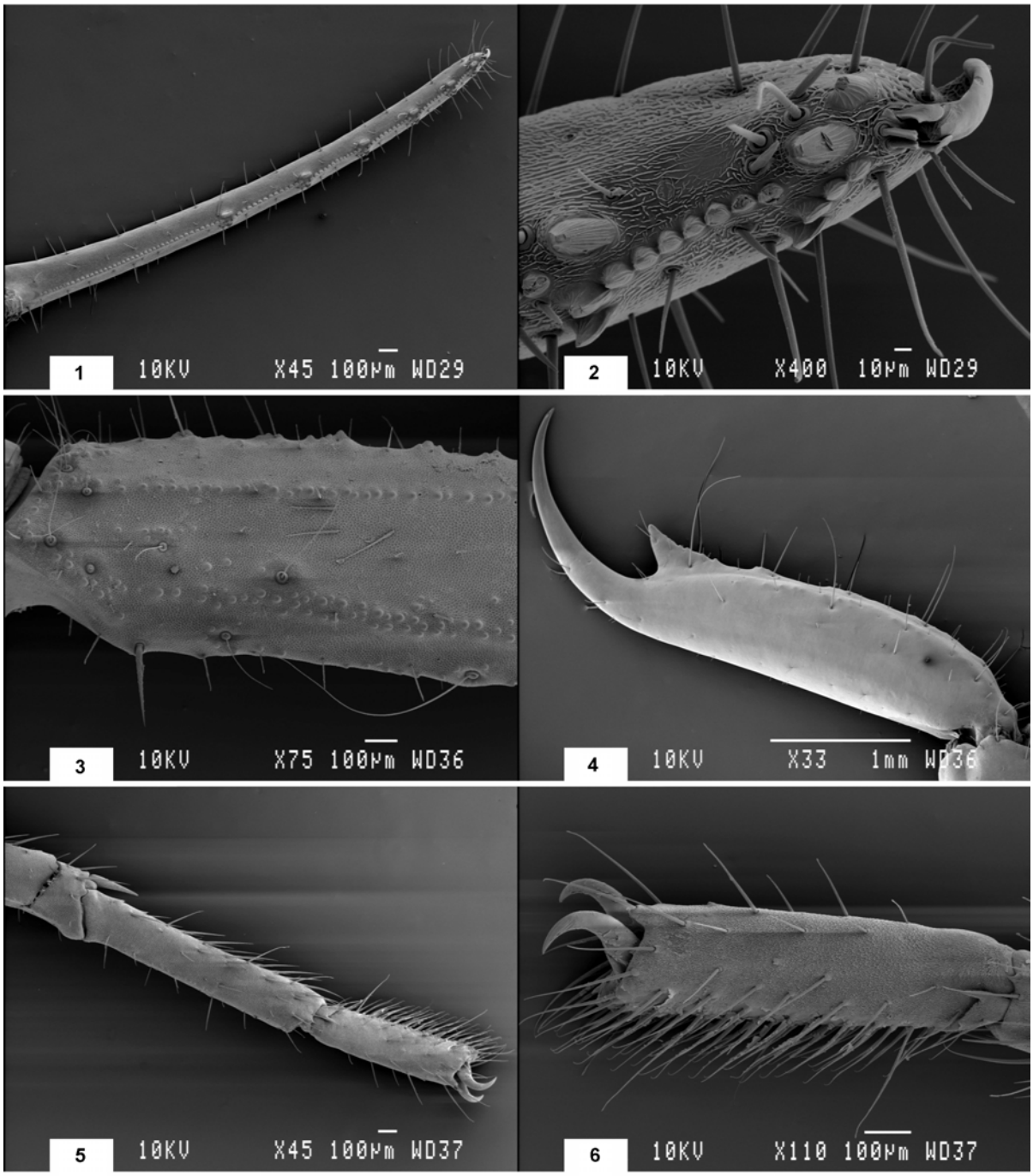


Fig. 1-6. *Ananteris sabineae* (male). **1:** Movable finger of pedipalp chela. **2:** Detail of distal extremity of the same. **3:** Femur of pedipalp in dorsal aspect, showing trichobothrial pattern. **4:** Telson, lateral aspect. **5:** Extremity of leg IV, showing pedal and tibial spurs. **6:** Tarsus of leg IV, showing numerous long setae on ventral aspect.

confluent blackish-brown stripes and two diffused longitudinal yellowish stripes. Metasoma: segments I to III reddish-yellow, with brown spots; segments IV and V reddish-brown, with dark almost black spots. Vesicle reddish-yellow without spots. Venter reddish-yellow; sternite VII reddish. Chelicerae pale yellow without any spots over their entire surface; fingers reddish-brown to blackish. Pedipalps: yellowish, intensely covered with dark brown to blackish spots; chela darker than patella; fingers blackish-brown with the rows of granules slightly reddish. Legs yellowish with dark brown spots.

Morphology. Carapace moderately granular; anterior margin with a very slight median concavity, almost straight. Anterior median superciliary and posterior median carinae weak. All furrows moderate to weak. Median ocular tubercle distinctly anterior to the center of carapace; median eyes separated by approximately 0.75 of ocular diameter. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites moderately granular. Median carina moderate in all tergites. Tergite VII pentacarinate. Venter: genital operculum divided longitudinally, each plate having a more or less triangu-

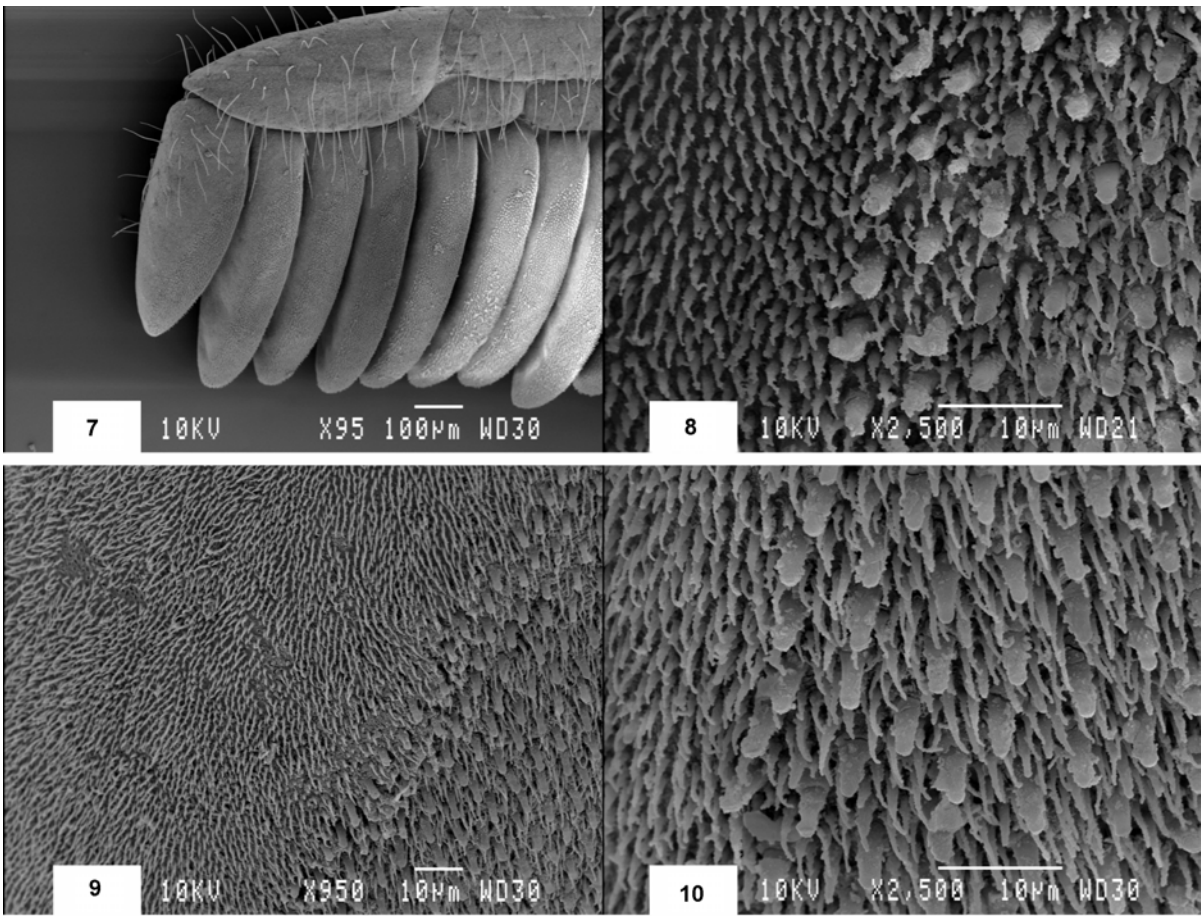


Fig. 7-10. *Ananteris sabineae* (male). **7:** Distal extremity of right pecten. **8-10:** Microstructure of peg sensilla on teeth. Notice, the characteristic seta-like structure of the tegument in the zones around the peg sensilla region (**8-9**), and between the peg sensilla (**10**).

lar shape. Pectines: pectinal tooth count 20-20; basal middle lamellae of the pectines not dilated; fulcra absent. Sternites smooth with moderately elongate stigmata; 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 three ventral carinae 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: femur pentacarinate; patella and chela with a few vestigial carinae; internal aspect of patella with 8-9 spinoid granules; all aspects weakly granular, almost 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 elisabethae* sp. n.**

Figs. 11-20.

Ananteris balzani: Lourenço, 1982: 121 (misidentification); Lourenço, 1983: 772; Lourenço, 1991: 116, 122; Lourenço, 1993: 698; Lourenço & Monod, 1999: 304; Lourenço, 2001: 693.

DIAGNOSIS: Species of small size when compared with the average size of the other species of the genus (17.7 mm in total length; see Table I). It can be readily distinguished from all the other known species of the genus by a unique very pale pattern of pigmentation of the body and appendages with a total absence of any diffused spots. This is the fourth species of *Ananteris* described from French Guyana, and is possibly an endemic element of the dry forests and savannas of the coastal area of Kourou in French Guyana.

TYPE MATERIAL: Male holotype. French Guyana, Kourou-Forêt, 3-7/VIII/1975 (Mission M. Boulard & P. Pompanon leg.). Deposited in the Muséum national d'Histoire naturelle, Paris, RS-8086 [1]

[1] This specimen was identified by Vachon in 1975, who subsequently communicated this data to me during my revision of the genus (Lourenço, 1982). Only recently, was I able to locate and to examine the specimen.

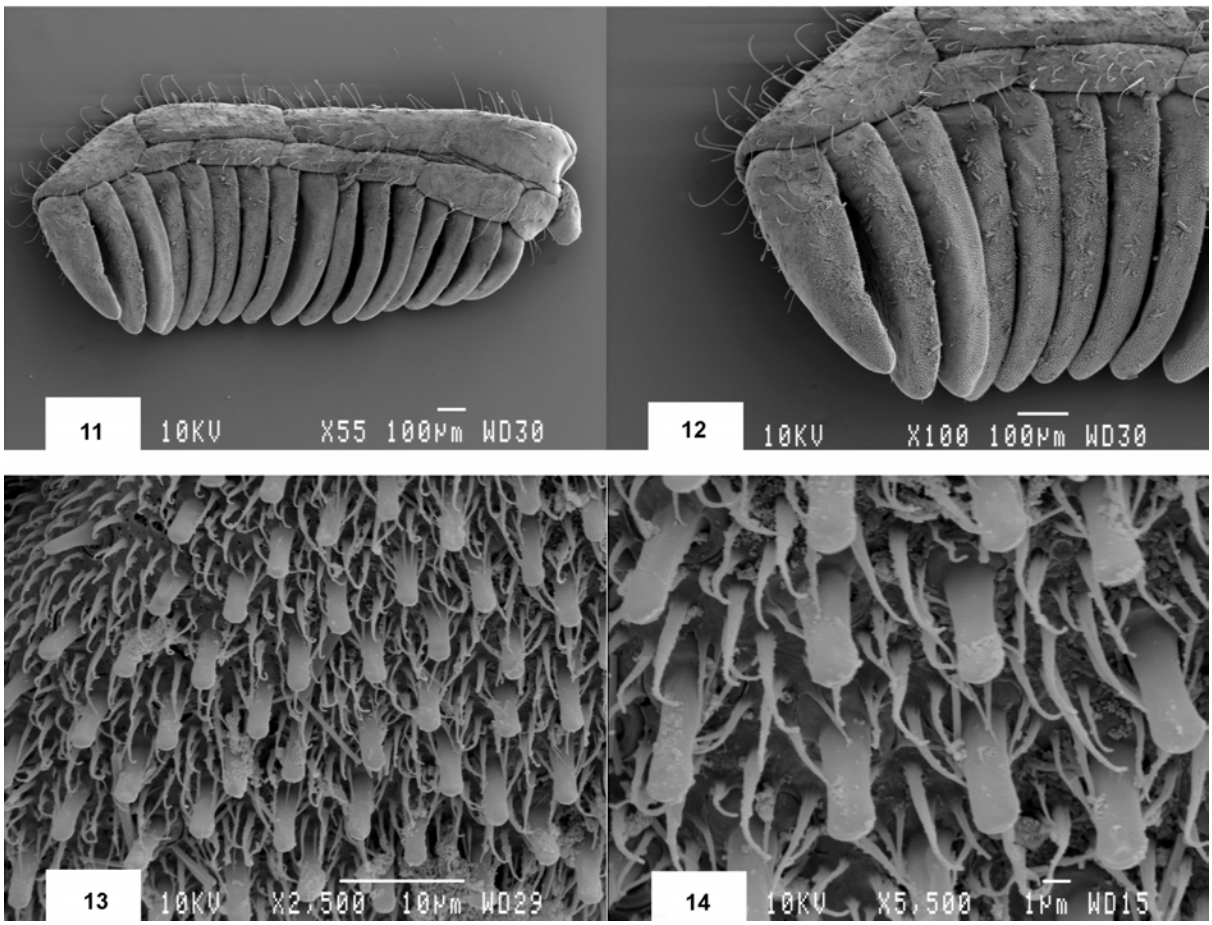


Fig. 11-14. *Ananteris elisabethae* (male holotype). **11:** Right pecten. **12:** Distal extremity of the same. **13-14:** Microstructure of peg sensilla on teeth. Notice, the characteristic seta-like structure of the tegument, between the peg sensilla.

ETYMOLOGY: Patronym is in honor of Dr. Elisabeth Nogueira Ferroni Schwartz of the University of Brasília, Brazil, for her contribution to the study of scorpion toxins.

DESCRIPTION BASED ON MALE HOLOTYPE.
Morphometric measurements in Table I.

Coloration. Generally pale yellow without any spots or pigmented zones on the body and its appendages. Prosoma: carapace yellowish; only the eyes surrounded by black pigment.
Mesosoma: yellowish with some pale reddish zones on the posterior edges of tergites. Metasoma: all segments yellowish; segment V slightly darker. Vesicle yellowish and aculeus yellowish. Venter pale yellow. Chelicerae and teeth globally yellowish. Pedipalps: yellowish overall, including the rows of granules on the dentate margins of the fingers. Legs yellowish.

Morphology. Carapace moderately to weakly granular; anterior margin weakly emarginate. Anterior median superciliary and posterior median carinae weak. All furrows moderate to weak. Median ocular tubercle distinctly anterior to the center of carapace; median eyes separated by approximately 0.8 of one ocular diameter. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites moderate to weakly granular. Median carina moderate to weak in all tergites. Tergite VII pentacarinate. Venter: genital operculum divided longitudinally, each plate having a more or less subtriangular shape. Pectines: pectinal tooth count 16-16; basal middle lamellae of the pectines not dilated; fulcra absent. Sternites weakly granular with moderately elongate stigmata; VII with vestigial carinae. Metasoma: segment I with 10 carinae, crenulate. Segments II to IV with 8 carinae, crenulate. Intercarinal spaces weakly granular. Segment V rounded with 5 carinae. Telson elongated and weakly granular with three ventral carinae; the latero-ventral vestigial; aculeus short and moderately 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 aspect of patella with 7-8 spinoid granules; all aspects weakly granular, almost smooth. Fixed and movable

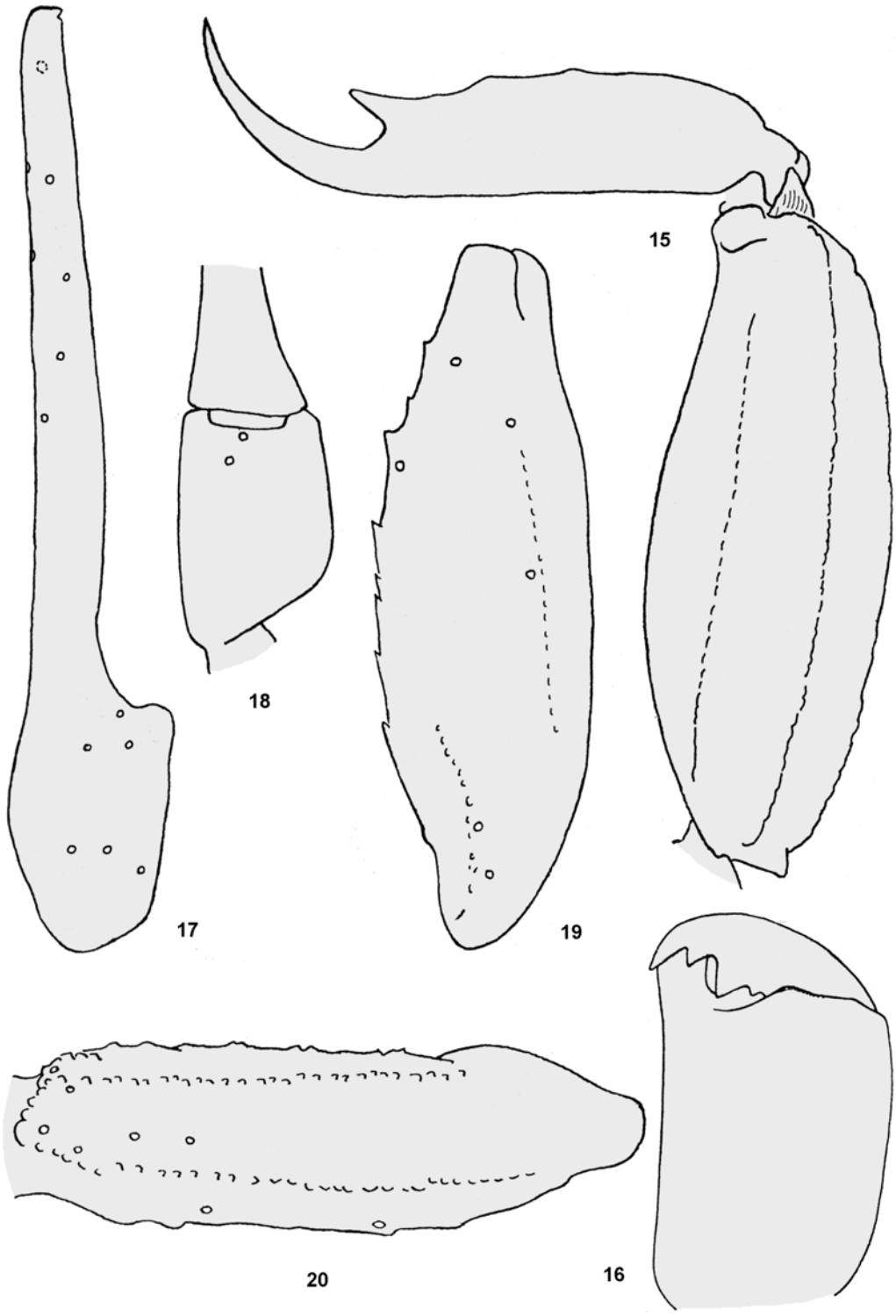


Fig. 15-20. *Ananteris elisabethae* (male holotype). **15:** Metasomal segment V and telson, lateral aspect. **16:** Chelicera, dorsal aspect. **17-20:** Trichobothrial pattern. **17-18:** Chela, dorso-external and ventral aspects. **19:** Patella, dorsal aspect. **20:** Femur dorsal aspect.

fingers with 6 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 legs III and IV.

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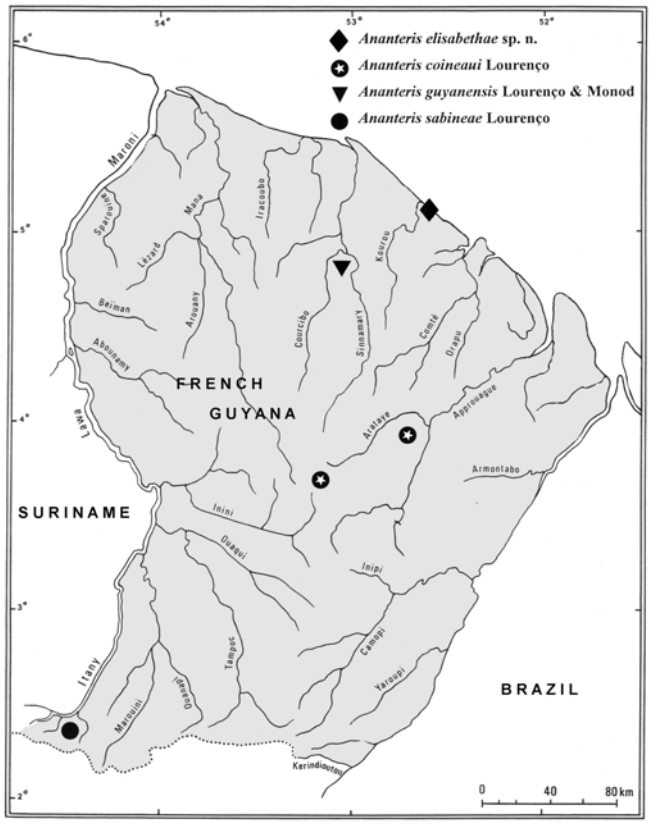


Fig. 21. Map showing the known distribution of *Ananteris* species in French Guyana.

Table I

Morphometric values (in mm) of the male specimen of *Ananteris sabineae* and of the male holotype of *Ananteris elisabethae* sp. n.

	Ananteris	
	sabineae	***elisabethae* sp. n.**
Total length	23.8	17.7
Carapace:		
length	2.9	2.5
anterior width	1.8	1.6
posterior width	2.7	2.3
Metasomal segment I:		
length	1.6	1.2
width	1.6	1.4
Metasomal segment V:		
length	4.7	3.7
width	1.6	1.2
depth	1.7	1.3
Vesicle:		
width	0.9	0.7
depth	0.9	0.7
Pedipalp:		
Femur length	2.8	2.2
Femur width	0.7	0.8
Patella length	3.4	2.9
Patella width	0.8	0.9
Chela length	4.1	3.6
Chela width	0.6	0.6
Chela depth	0.6	0.6
Movable finger:		
length	3.2	2.7

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