



Description of three more new species of the genus *Ananteris* Thorell, 1891 (Scorpiones, Buthidae) from Brazil

WILSON R. LOURENÇO¹, ALESSANDRO P.L. GIUPPONI^{2,3} and ELISE-ANNE LEGUIN⁴

¹Muséum national d'Histoire naturelle, Département Systématique et Evolution,
UMR7205, CP 053, 57 rue Cuvier, 75005 Paris, France

²Laboratório de Aracnologia, Dept. Invertebrados, Museu Nacional,
Universidade Federal do Rio de Janeiro, Quinta da Boa Vista, 20940-040 Rio de Janeiro, RJ, Brasil

³Laboratório de Referência Nacional em Vetores das Riquetsioses,
LIRN-IOC/FIOCRUZ, Manguinhos, 21040-360 Rio de Janeiro, RJ, Brasil

⁴Muséum national d'Histoire naturelle, Direction des Collections, CP 053, 57 rue Cuvier, 75005 Paris, France

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ABSTRACT

Three new species of the genus *Ananteris* Thorell have been discovered in Brazil. *Ananteris desiderio* sp. n., *Ananteris camacã* sp. n. and *Ananteris infuscata* sp. n. are respectively described from specimens collected in the regions of São Desidério, Camacã, Rebio UNA and Jequié in the state of Bahia, and Grão Mogol and Novo Horizonte in the state of Minas Gerais, Brazil. New records are also proposed for *Ananteris luciae* Lourenço, *Ananteris mauryi* Lourenço and *Ananteris franckei* Lourenço. The number of known *Ananteris* species known in the scorpion fauna of Brazil is now raised to 24.

Key Words: biodiversity, neotropical fauna, taxonomy, scorpions, Bahia, Minas Gerais.

INTRODUCTION

As mentioned in previous papers, the genus *Ananteris* Thorell 1891, was originally created for *Ananteris balzanii* Thorell, 1891, a species described from the state of Mato Grosso, Brazil (Thorell 1891, Lourenço 1982, 2012, Giupponi et al. 2009). Subsequently a second species *Ananteris festae* Borelli, 1899 was described from the forests of the 'Rio Peripá' in Ecuador, followed by a third species *Ananteris cussinii* Borelli 1910, from Cagua in Venezuela. In a note about South American scorpions, Mello-Leitão (1932) suggested that, since the ranges of distribution of the three known

Ananteris species in South America were very disjunct, it would be expected that many new species would be discovered in the intermediate zones ['*O unico gênero de Buthinas da América do Sul (Ananteris), tem uma espécie do Equador, uma do Paraguai, Mato Grosso e Paraná e a terceira da Venezuela, o que lhe da uma area de dispersão quasi igual à Tityus, fazendo prever, entre esses pontos extremos, a descoberta de muitas outras formas novas*']. The number of *Ananteris* species remained stable, however, until the early 1970s when a fourth new species *Ananteris venezuelensis* González-Sponga 1972, was described from Venezuela. Starting in the 1980s particularly after the revision by Lourenço (1982), the number

Correspondence to: Alessandro Ponce de Leão Giupponi
E-mail: agiupponi@gmail.com

of new species described in the genus began to increase continuously. The pace of description of new species was even accelerated in recent years, mainly from the faunas of Venezuela and Colombia (e.g. Rojas-Runjaic 2005, Gonzalez-Sponga 2006, Rojas-Runjaic and Sousa 2007, Botero-Trujillo and Flórez 2011).

For the Brazilian fauna, a number of new species was also described in recent years. Although the geographical Brazilian surface is much larger than those of the nearby countries, the pace of these descriptions was much less intense. Nevertheless, each Brazilian species of *Ananteris* has been clearly associated with the precise types of vegetation present in the country. This leads to a better understanding of the biogeographical patterns of distribution of the species of *Ananteris* in Brazil (Lourenço, 1982, 1984, 1987, 1997, 2004a, b, 2005, 2012, Lourenço et al. 2006, 2009, Lourenço and Duhem 2010, Giupponi et al. 2009).

In the Brazilian states of Bahia and Minas Gerais only four species of *Ananteris* have been recorded: *Ananteris evellynae* Lourenço 2004, and *A. kuryi* Giupponi, Vasconcelos & Lourenço 2009, from the state of Bahia and *A. balzanii* Thorell 1891, and *A. chagasi* Giupponi, Vasconcelos & Lourenço 2009, from the state of Minas Gerais (Lourenço 1982, 2004b, Giupponi et al. 2009).

The three new species described here are new records for these two Brazilian states. They also have been collected in different vegetation formations within these states. With this new taxon, the number of known *Ananteris* species described from Brazil now raised to 24.

MATERIALS AND METHODS

Illustrations and measurements were made with the aid of a Wild M5 stereo-microscope with an attached drawing tube (camera lucida) and an ocular micrometer. Measurements follow Stahnke (1970) and are given in mm. Trichobothrial notations

are those of Vachon (1974) and morphological terminology mostly follows Vachon (1952) and Hjelle (1990).

CHECKLIST OF THE KNOWN *Ananteris* SPECIES IN BRAZIL

1. *Ananteris balzanii* Thorell, 1891 (Paraná, São Paulo, Minas Gerais, Mata Grosso, Mato Grosso do Sul Goiás and Pará)
2. *Ananteris desiderio* sp. n. (Bahia)
3. *Ananteris camacã* sp. n. (Bahia)
4. *Ananteris bernabei* Giupponi, Vasconcelos & Lourenço, 2009 (Espírito Santo)
5. *Ananteris bianchini* Lourenço, Aguiar-Neto & Limeira-de-Oliveira, 2009 (Maranhão)
6. *Ananteris bonito* Lourenço, 2012 (Mato Grosso do Sul)
7. *Ananteris chagasi* Giupponi, Vasconcelos & Lourenço, 2009 (Minas Gerais)
8. *Ananteris cachimboensis* Lourenço, Motta & Silva, 2006 (Pará)
9. *Ananteris cryptozoicus* Lourenço, 2005 (Amazonas)
10. *Ananteris dekeyseri* Lourenço, 1982 (Amazonas)
11. *Ananteris deniseae* Lourenço, 1997 (Paraná)
12. *Ananteris evellynae* Lourenço, 2004 (Bahia)
13. *Ananteris franckei* Lourenço, 1982 Pernambuco and Ceará-new record)
14. *Ananteris infuscata* sp. n. (Minas Gerais)
15. *Ananteris kuryi* Giupponi, Vasconcelos & Lourenço, 2009 (Bahia)
16. *Ananteris luciae* Lourenço, 1984 (Pará)
17. *Ananteris madeirensis* Lourenço & Duhem, 2010 (Amazonas)
18. *Ananteris maranhensis* Lourenço, 1987 (Maranhão)
19. *Ananteris mariaterezae* Lourenço, 1982 (Tocantins and Minas Gerais)
20. *Ananteris mauryi* Lourenço, 1982

(Pernambuco, Rio Grande do Norte, Bahia and Sergipe-new record)

21. *Ananteris nairae* Lourenço, 2004 (Amazonas)
22. *Ananteris palmari* Botero-Trujillo & Noriega, 2011 (Amazonas)
23. *Ananteris pydanieli* Lourenço, 1982 (Amazonas)
24. *Ananteris roraima* Lourenço & Duhem, 2010 (Roraima)

BIOGEOGRAPHICAL COMMENTS

Although most of the Brazilian surface in Bahia and Minas Gerais are covered by formations of open vegetation as the savannah-Cerrados or the drier and arid formations such as the Caatingas, remnants of other more humid formations may also be present. These are represented mainly by the Coastal Atlantic forest, the transition zone between wet forests and Cerrados, called Agreste and gallery forests within the Cerrados.

The species of *Ananteris* so far known in these two Brazilian states have been found in several of these formations. *A. evellynae* is known from typical Cerrado formation in the southwest region of the state of Bahia; *A. kuryi* is a typical element of the Atlantic forest; *A. balzanii* has only been found in the core region of Cerrados in the 'Triângulo Mineiro' in Minas Gerais; *A. chagasi* is an element of the transition zones between Caatingas and Cerrados (Lourenço 1982, Lourenço 2004b, Giupponi et al. 2009).

The three new species described here are from transitional zones between the western Cerrados and Caatingas and eastern Agreste and Atlantic forests in the state of Bahia and also from transition zones between Cerrados and Caatingas in the state of Minas Gerais.

TAXONOMIC TREATMENT

Family Buthidae C. L. Koch, 1837
Genus *Ananteris* Thorell, 1891

NEW RECORDS

Ananteris mauryi Lourenço, 1982
Brazil, state of Sergipe, Capela, Refugio de vida silvestre, XI/2008 (A. Giupponi), 1 female.

Ananteris franckei Lourenço, 1982
Brazil, state of Ceará, Crato, 21/V/2003 (D. C. Granjeiro), 1 male. 8/V/2003 (N. M. Serra), 1 female.

Ananteris luciae Lourenço, 1984
Brazil, state of Pará, Altamira 9-14/IV/2009 (A. Giupponi), 3 males, 2 females.

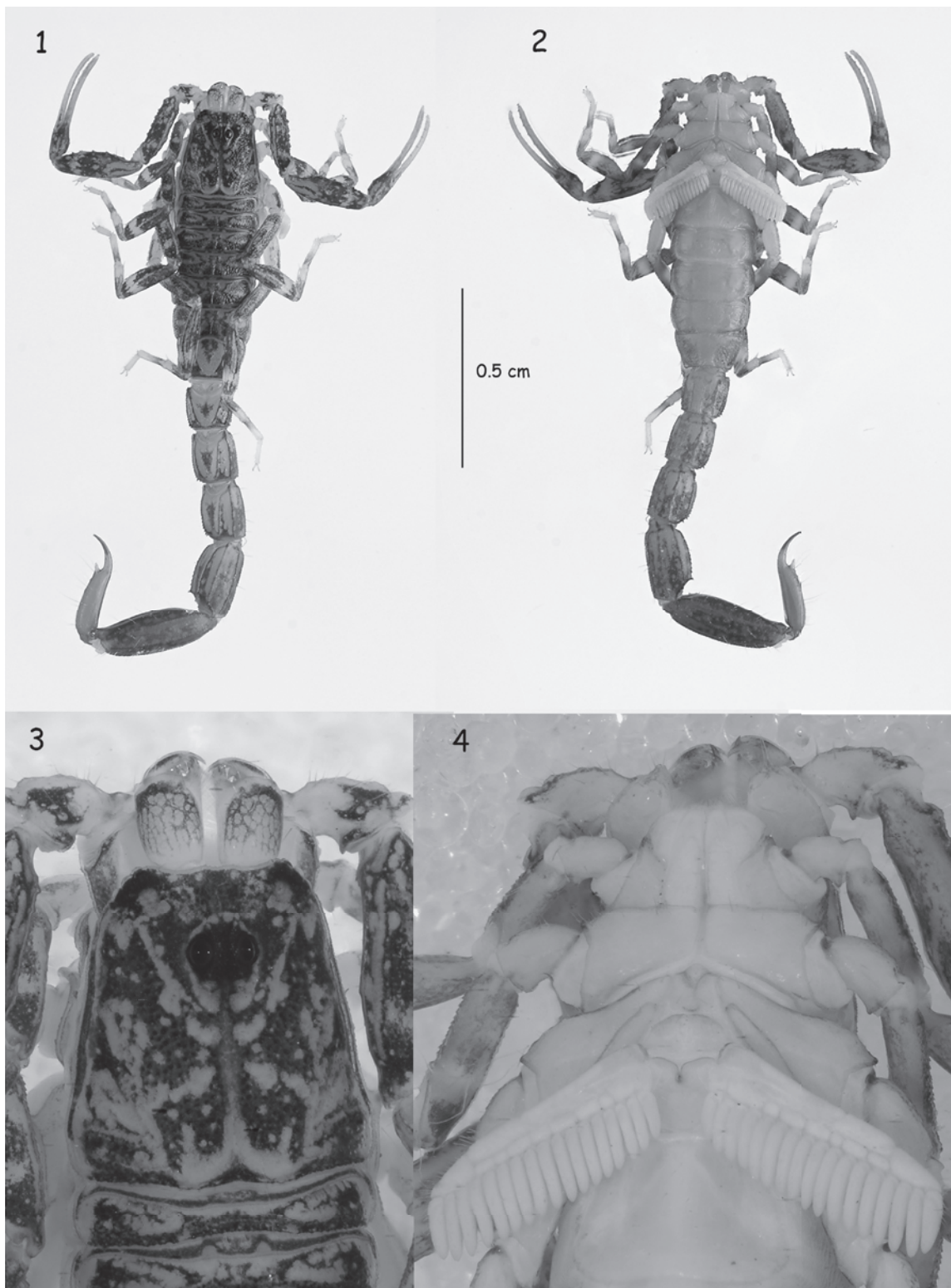
Ananteris desiderio sp. n. (Figs. 1-9)

Brazil, state of Bahia, São Desidério, coleta fora das cavernas [collected outside caves], Caatinga formation, 3-11/XI/2008 (Bichuette et al. leg.), male holotype; deposited in the Museu Nacional, Rio de Janeiro.

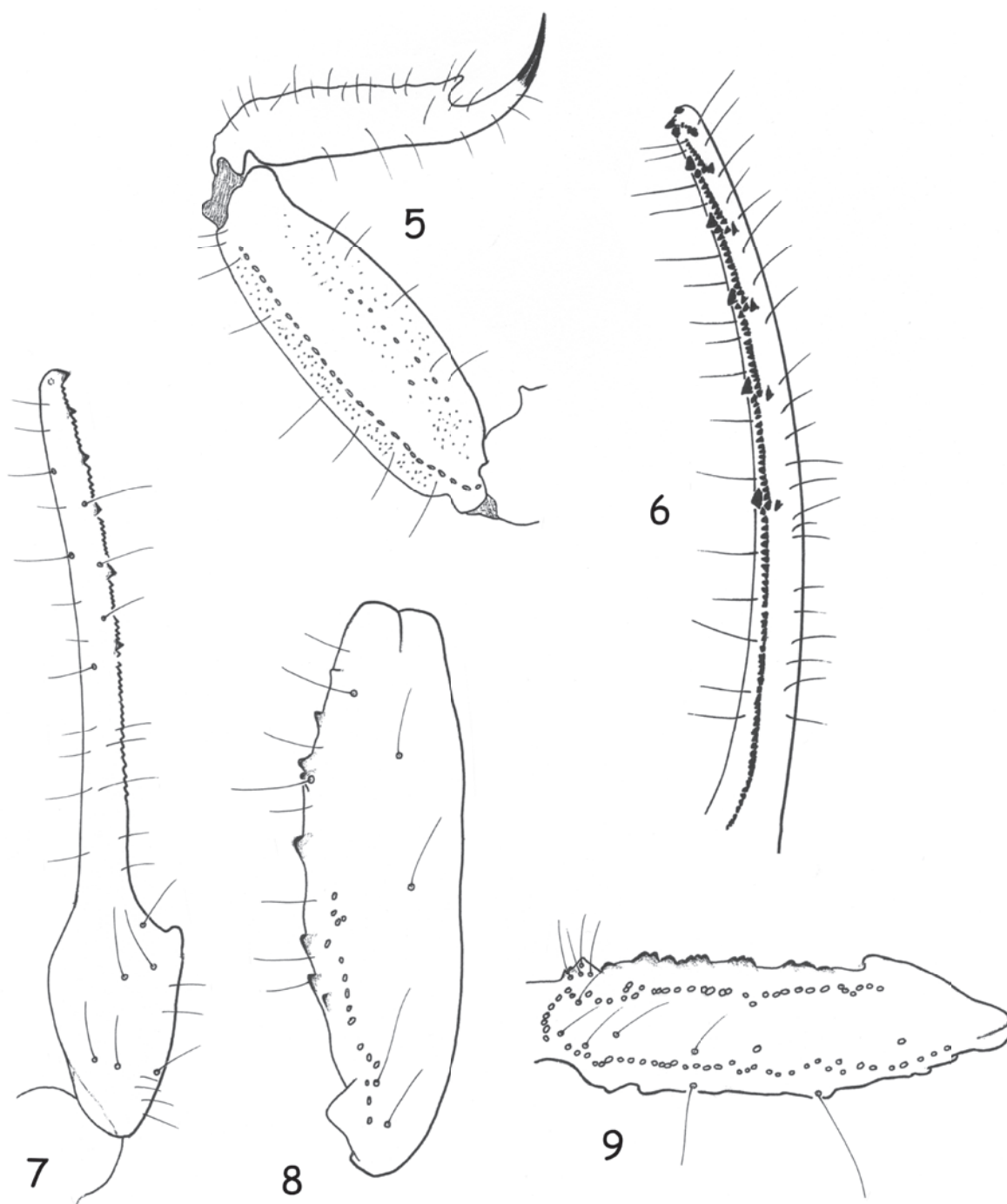
Etymology: In apposition to the name of the municipality of São Desidério.

Diagnosis: Species of moderate to small size compared with the average size of the other species in the genus (19.8 mm in total length for male; Table I). General coloration reddish-yellow, intensely marked with brownish variegated spots. Pedipalps rather short; fingers with 6 rows of granules; male pectines with 17-17 teeth. Carinae and granulation moderately marked. Trichobothria **db** and **est** of fixed finger situated almost at the same level.

Relationships: Mainly by its general pigmentation pattern, the new species shows affinities with *Ananteris balzanii* Thorell. This last species is distributed in the central savannahs of Brazil, while the new species is known from Caatinga formations in Bahia. The new species shows, however, a combination of distinct characters: (i) dark pedipalps with femur, patella, chela hand and fingers dark brown to blackish; chelicerae with variegated blackish spots over almost the entire surface, but less dense than those on *A. balzanii* (ii)



Figs. 1-4 - *Ananteris desiderio* sp. n., male holotype. **1-2.** Habitus, dorsal and ventral aspects. **3.** Carapace and chelicerae in detail, showing pigmentation pattern. **4.** Ventral aspect showing sternum, genital operculum and pectines.



Figs. 5-9 - *Ananteris desiderio* sp. n., male holotype. **5.** Metasomal segment V and telson, lateral aspect. **6.** Movable finger of pedipalp chela with rows of granules. **7-9.** Trichobothrial pattern. **7.** Chela dorso-external aspect. **8.** Patella, dorsal aspect. **9.** Femur, dorsal aspect.

distinct morphometric values (Table I), (iii) chela fingers with 6 rows of granules, (iv) granulations on carapace and tergites more strongly marked, (v)

chelicerae fixed finger with two strong basal teeth. The new species is a possible endemic element of the Caatinga formations.

TABLE I
Morphometric values (in mm) of male holotype and female paratype of *Ananteris desiderio* sp. n., *Ananteris camacan* sp. n., *Ananteris infuscata* sp. n., male holotype of *Ananteris evellynae* and male of *Ananteris balzanii*.

| | <i>A. desiderio</i> | <i>A. camacan.</i> | | <i>A. infuscata.</i> | | <i>A. evellynae</i> | <i>A. balzanii</i> |
|----------------------|---------------------|--------------------|------|----------------------|------|---------------------|--------------------|
| | ♂ | ♂ | ♀ | ♂ | ♀ | ♂ | ♂ |
| Total length* | 19.8 | 18.1 | 23.7 | 20.6 | 20.7 | 20.2 | 22.1 |
| Carapace: | | | | | | | |
| - length | 2.3 | 2.1 | 2.7 | 2.5 | 2.7 | 2.6 | 3.1 |
| - anterior width | 1.5 | 1.4 | 1.9 | 1.7 | 1.7 | 1.7 | 2.1 |
| - posterior width | 2.3 | 2.1 | 2.7 | 2.5 | 2.5 | 2.5 | 3.3 |
| Mesosoma length | 4.9 | 4.7 | 6.6 | 4.2 | 5.8 | 5.8 | 8.3 |
| Metasomal segment I: | | | | | | | |
| - length | 1.2 | 1.1 | 1.4 | 1.4 | 1.2 | 1.4 | 1.6 |
| - width | 1.3 | 1.2 | 1.6 | 1.5 | 1.4 | 1.6 | 2 |
| Metasomal segment V: | | | | | | | |
| - length | 3.3 | 2.9 | 3.7 | 3.7 | 3.2 | 3.8 | 3.9 |
| - width | 1.2 | 1 | 1.4 | 1.3 | 1.3 | 1.4 | 1.7 |
| - depth | 1.1 | 1.1 | 1.4 | 1.3 | 1.3 | 1.3 | 1.7 |
| Telson | | | | | | | |
| - length | 2.9 | 2.8 | 3.5 | 3.2 | 2.9 | 3.3 | 3.9 |
| - width | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 | 0.7 | 1 |
| - depth | 0.6 | 0.6 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 |
| Pedipalp: | | | | | | | |
| - Femur length | 2 | 1.9 | 2.6 | 2.3 | 2.1 | 2.4 | 2.8 |
| - Femur width | 0.5 | 0.4 | 0.8 | 0.7 | 0.8 | 0.7 | 0.8 |
| - Patella length | 2.4 | 2.3 | 3.4 | 2.9 | 2.5 | 2.9 | 3.3 |
| - Patella width | 0.7 | 0.6 | 1 | 0.9 | 0.9 | 0.8 | 1.1 |
| - Chela length | 3.1 | 2.7 | 4.1 | 3.5 | 3.2 | 3.6 | 4.1 |
| - Chela width | 0.5 | 0.4 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 |
| - Chela depth | 0.5 | 0.4 | 0.7 | 0.5 | 0.6 | 0.5 | 0.8 |
| Movable finger: | | | | | | | |
| - length | 2.3 | 2.1 | 3.1 | 2.7 | 2.5 | 2.8 | 3.1 |

(* including telson)

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

Coloration: Generally yellow to reddish-yellow with brown to dark brown variegated pigmented zones on the body and its appendages. Prosoma: carapace yellowish with dark brown spots on lateral, anterior and posterior edges; eyes surrounded by black pigment. Mesosoma yellowish

with confluent blackish-brown stripes on tergites. Metasomal segments I to IV yellowish; V reddish-yellow; all segments strongly marked with dark brown spots. Vesicle reddish-yellow without spots; base of aculeus yellowish, tip reddish. Venter yellow to pale yellow without any infuscations. Chelicerae yellowish with variegated blackish spots over almost the entire surface; fingers with blackish spots;

teeth pale red. Pedipalps yellow; femur and patella strongly marked with dark brown spots; chela hand dark brown; fingers yellowish with infuscations. Legs yellow, with several dark brown spots.

Morphology: Carapace with moderately to strongly marked granulation; anterior margin very slightly emarginate. All carinae weak or absent: furrows moderate to weak. Median ocular tubercle distinctly anterior to centre of carapace; median eyes large separated by approximately 0.6-0.7 of the ocular diameter. Three pairs of lateral eyes. Sternum subpentagonal. Mesosoma: Tergites with moderately marked granulations, less intense than those of carapace. Median carina moderately to weakly marked on all tergites, but even weaker on I. Tergite VII pentacarinata. Venter: genital operculum divided longitudinally, each plate more or less suboval in shape. Pectines: pectinal tooth count 17-17 in male holotype; basal middle lamellae of pectines not dilated; fulcra absent. Sternites almost smooth with a few granulations laterally; VII with some better marked granulations; spiracles moderately elongate; setation weak; sternite VII with very obsolete carinae. Metasomal segments I and II with 10 carinae, crenulate; segments III and IV with 8 carinae, crenulate; segment V slightly rounded, with 5 weakly marked carinae; intercarinal spaces weakly to moderately granular. Telson elongate and almost smooth; aculeus short and weakly curved; subaculear tooth strongly marked and spinoid. Cheliceral dentition characteristic of family Buthidae (Vachon 1963); fixed finger with two strong basal teeth; movable finger with two weak basal teeth; ventral surface of both finger and manus with long, dense setae. Pedipalps: Femur pentacarinata; patella and chela with weak to vestigial carinae; internal surface of patella with 6-7 spinoid granules; all surfaces weakly granular, almost smooth. Fixed and movable fingers with 6, almost linear, rows of granules; two small external and one internal accessory granule present at base of each row; three granules at extremity of the fingers. Trichobothriotaxy; orthobothriotaxy A- β -beta (Vachon 1974, 1975); trichobothria **db**

and **est** of fixed finger situated almost at same level. Legs: Tarsus with very numerous, fine, median setae ventrally. Tibial spurs strongly developed on leg IV, moderate on leg III.

Ananteris camacan sp. n. (Figs. 10-23)

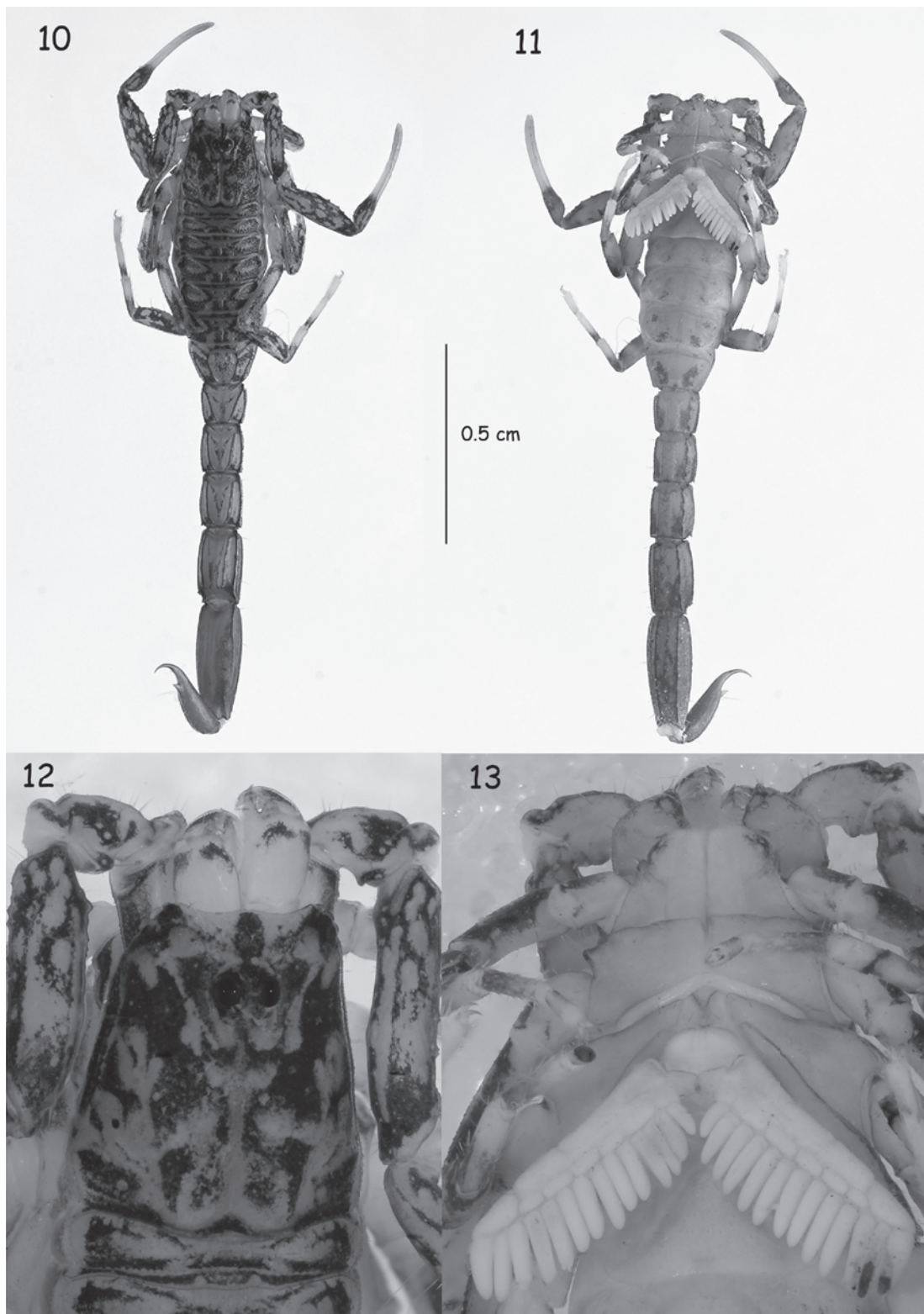
Brazil, state of Bahia, Camacã, Serra Bonita, 11-15/VI/2009 (Paris et al.), male holotype. Reserva Biológica Una, Una, 9/VI/2009 (Giupponi et al.), 1 female paratype. Jequié, Brejo Novo, 7-8/VI/2009 (Giupponi et al.) 3 males, 2 females paratypes. Male holotype and 3 paratypes deposited in the Museu Nacional, Rio de Janeiro; 3 paratypes deposited in the Muséum national d'Histoire naturelle, Paris.

Etymology: In apposition to the name of the municipality of Camacã.

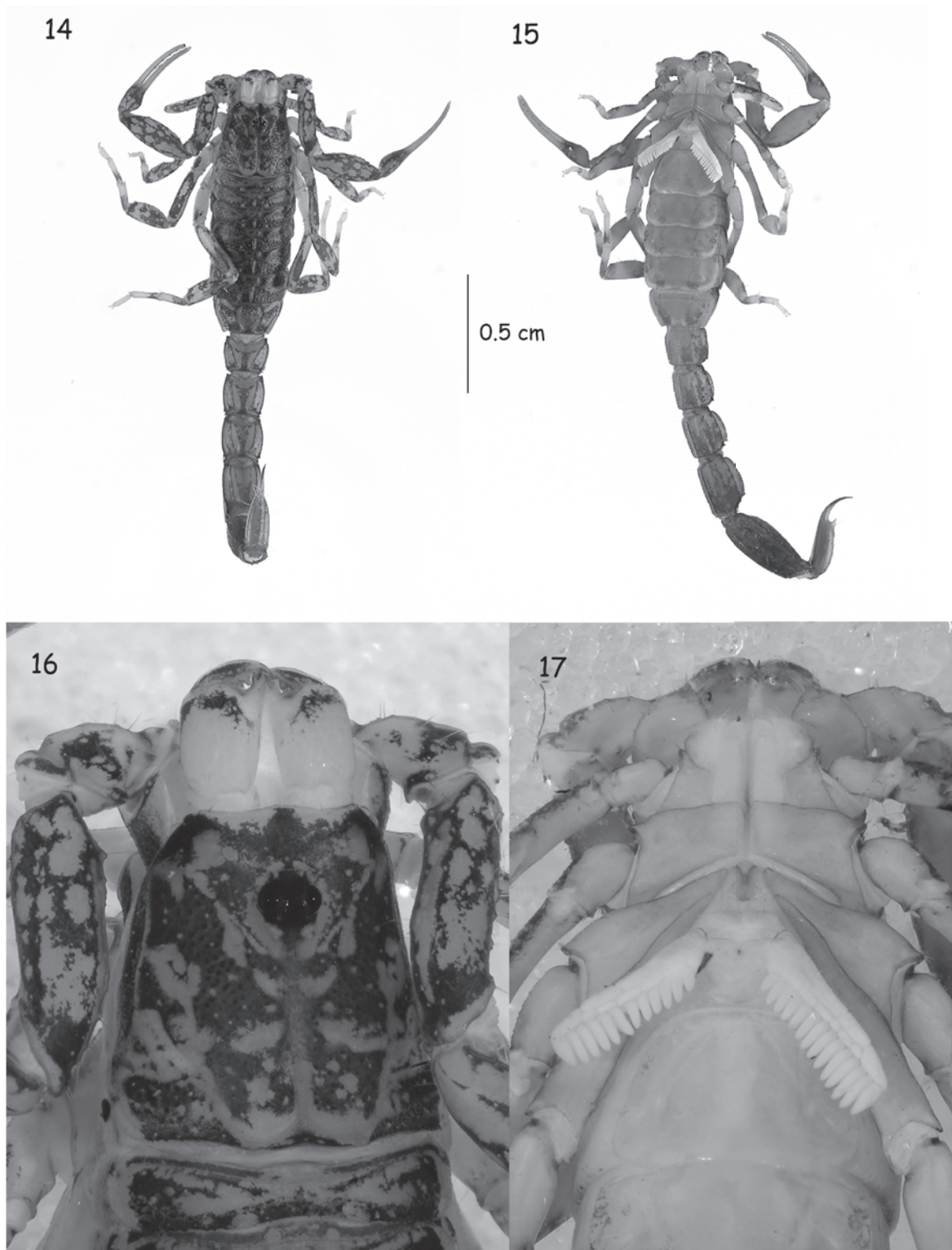
Diagnosis: Species of moderate to small size compared with the average size of the other species of the genus (18.0 mm in total length for males and 23-24 mm for females; Table I). General coloration yellowish to reddish-yellow, intensely marked with brownish variegated spots. Pedipalps rather short, including for male; fingers with 6 rows of granules; male pectines with 13 to 15 teeth; females with 12 to 15 teeth. Carinae and granulation weakly to moderately marked. Trichobothrium **db** of fixed finger situated in a distal position to **est**.

Relationships: Mainly by its pigmentation pattern, the new species shows affinities with *Ananteris evellynae*, species also described from the state of Bahia, but from savannah-Cerrados formations. The new species shows, however, a combination of distinct characters: (i) smaller total size with distinct morphometric values (Table I), (ii) darker pigmentation on body and appendages, (iii) pectines with only 13 to 15 teeth in male vs. 17 in *A. evellynae*, (iv) trichobothria **db** and **est** of fixed finger situated at different levels. The new species is distributed in Caatinga-Agrete vegetation formations.

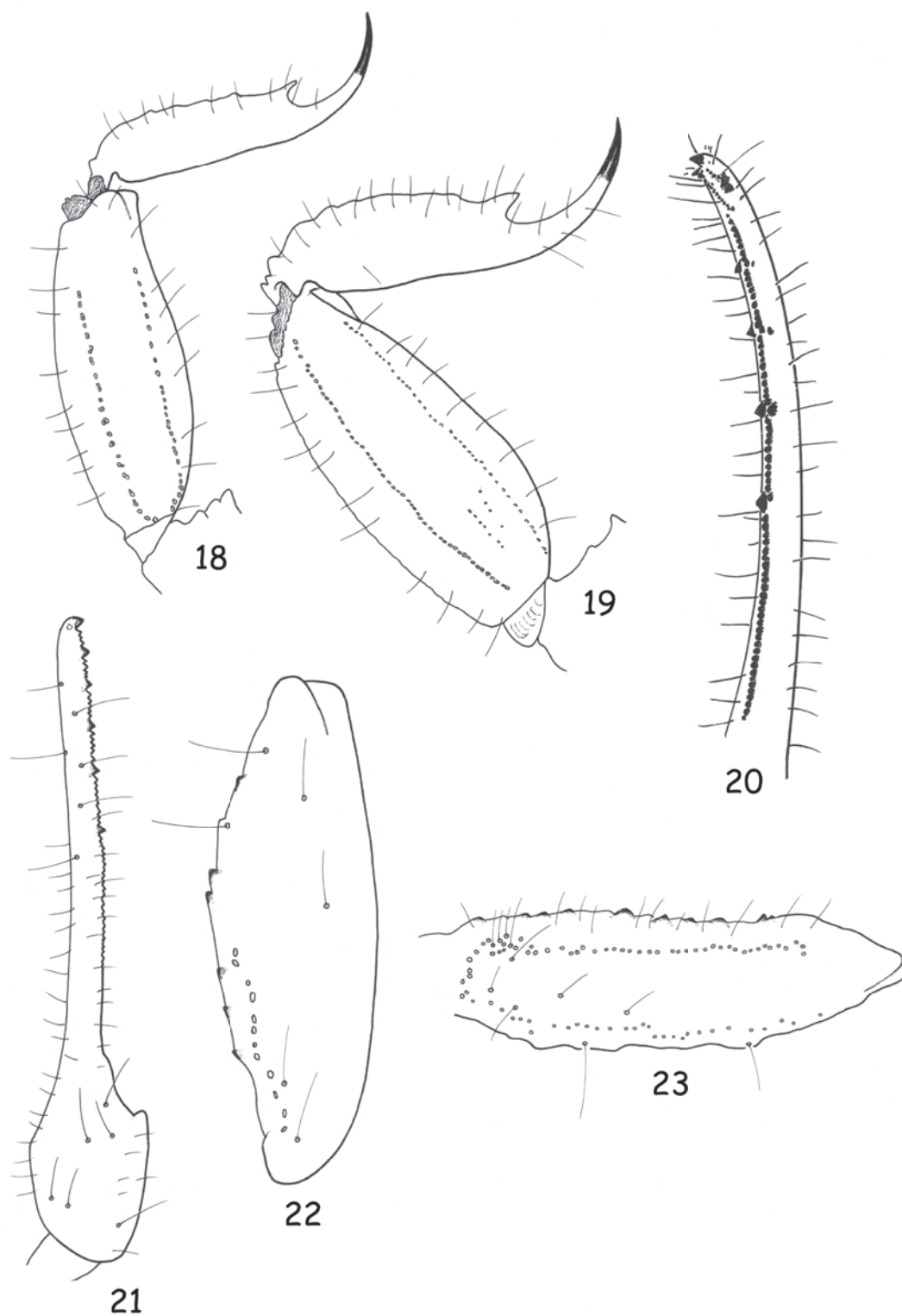
From *A. kuryi*, species also distributed in the state of Bahia, it differs by its pigmentation



Figs. 10-13 - *Ananteris camacan* sp. n., male holotype. **10-11.** Habitus, dorsal and ventral aspects. **12.** Carapace and chelicerae in detail, showing pigmentation pattern. **13.** Ventral aspect showing sternum, genital operculum and pectines.



Figs. 14-17 - *Ananteris camacan* sp. n., female paratype. **14-15.** Habitus, dorsal and ventral aspects. **16.** Carapace and chelicerae in detail, showing pigmentation pattern. **17.** Ventral aspect showing sternum, genital operculum and pectines.



Figs. 18-23 - *Ananteris camacan* sp. n., male holotype and female paratype. 18-19. Metasomal segment V and telson, lateral aspect (male & female). 20. Movable finger of pedipalp chela with rows of granules (female). 21-23. Trichobothrial pattern. 21. Chela dorso-external aspect. 22. Patella, dorsal aspect. 23. Femur, dorsal aspect (female).

pattern with variegated blackish spots only on the anterior edge of chelicerae. The two species are also distributed in quite distinct environments: Caatinga/Agreste and Coastal Atlantic forest.

Description based on male holotype and paratypes. (Morphometric measurements in Table I.)

Coloration: Generally yellow to reddish-yellow with brown to dark brown variegated pigmented zones on the body and appendages. Prosoma: carapace yellowish with dark brown spots on lateral anterior and posterior edges; eyes surrounded by black pigment. Mesosoma: yellowish with confluent blackish-brown stripes on tergites. Metasomal segments I to IV yellowish; V reddish-yellow; all segments marked with dark brown spots. Vesicle reddish-yellow slightly infuscated; base of aculeus yellowish, tip reddish. Venter yellow to pale yellow with infuscations on sternites IV to VII. Chelicerae yellowish with variegated blackish spots only on the anterior edge; fingers with blackish spots; teeth pale red. Pedipalps yellow; femur, patella and chela hand strongly marked with dark brown spots; chela fingers yellow. Legs yellow, with several dark brown spots.

Morphology: Carapace with moderately marked granulation; more intense on female; anterior margin not emarginated, with a small convexity. All carinae weak or absent: furrows moderate to weak. Median ocular tubercle distinctly anterior to centre of carapace; median eyes large separated by approximately 0.8-0.9 of the ocular diameter. Three pairs of lateral eyes. Sternum subpentagonal. Mesosomal tergites with weakly to moderately marked granulations, less intense than those of carapace. Median carina moderately to weakly marked on all tergites. Tergite VII pentacarinata. Venter: genital operculum divided longitudinally, each plate more or less suboval in shape. Pectines: pectinal tooth count 13-14 in male holotype (for variation see diagnosis); basal middle lamellae of pectines not dilated; fulcra absent. Sternites smooth including VII; spiracles moderately elongate; setation moderate; sternite VII with very obsolete carinae.

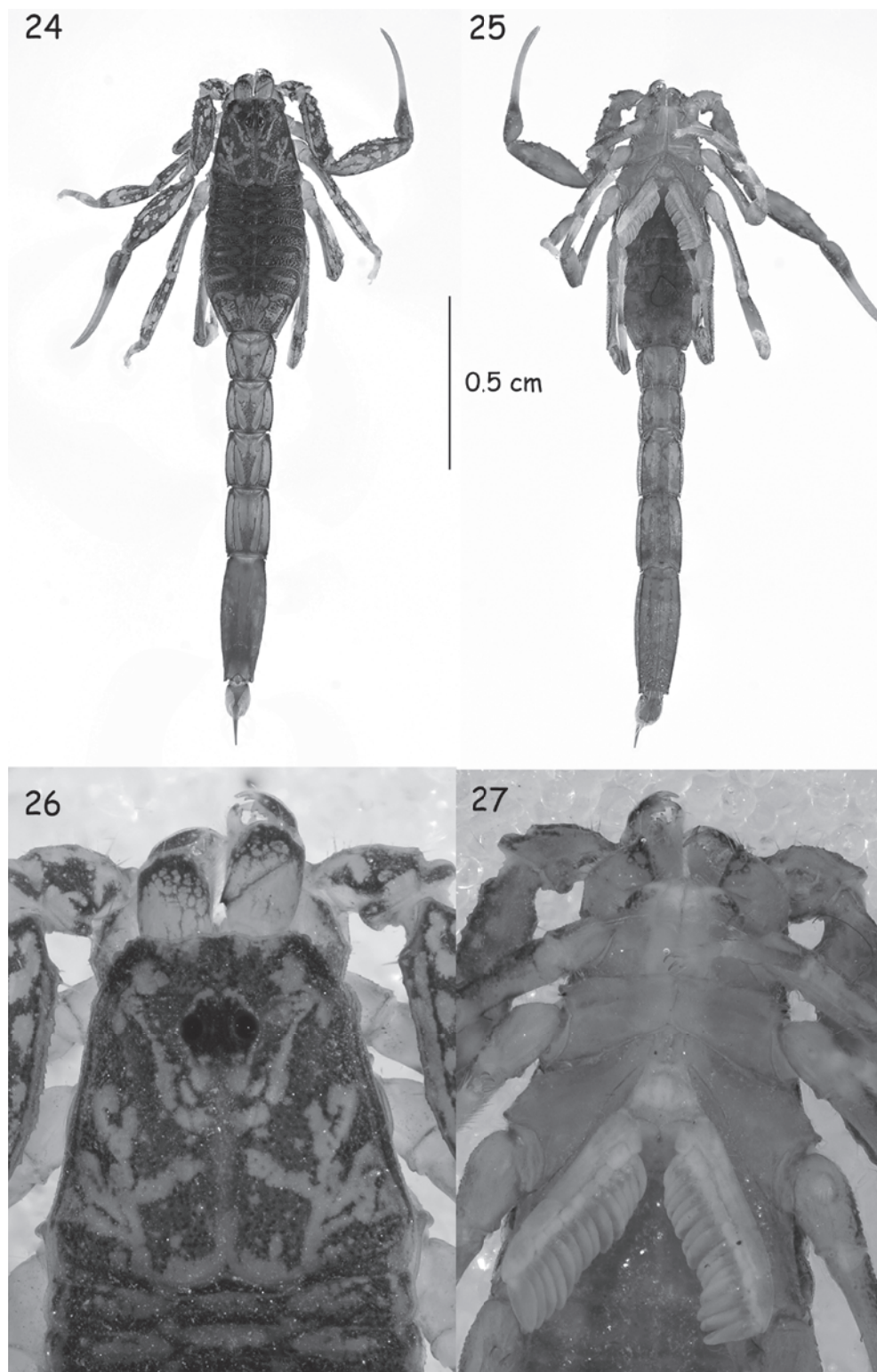
Metasomal segment I with 10 carinae, crenulate; segments II to IV with 8 carinae, crenulate; segment V slightly rounded, with 5 carinae; intercarinal spaces weakly to moderately granular. Telson elongate in male, shorter in female; almost smooth; aculeus short and weakly curved; subaculear tooth moderately marked and spinoid. Cheliceral dentition characteristic of family Buthidae (Vachon 1963); fixed finger with two strong basal teeth; movable finger with two weak basal teeth; ventral surface of both finger and manus with long, dense setae. Pedipalps: Femur pentacarinata; patella and chela with weak to vestigial carinae; internal surface of patella with 4-5 spinoid granules; all surfaces weakly granular, almost smooth. Fixed and movable fingers with 6, almost linear, rows of granules; two small external and one internal accessory granule present at base of each row; three granules at extremity of the fingers. Trichobothriotaxy; orthobothriotaxy A- β -beta (Vachon 1974, 1975); trichobothrium **db** of fixed finger in a distal position to **est**. Legs: Tarsus with very numerous, fine, median setae ventrally. Tibial spurs moderately developed on legs III and IV.

Ananteris infuscata sp. n. (Figs. 24-37)

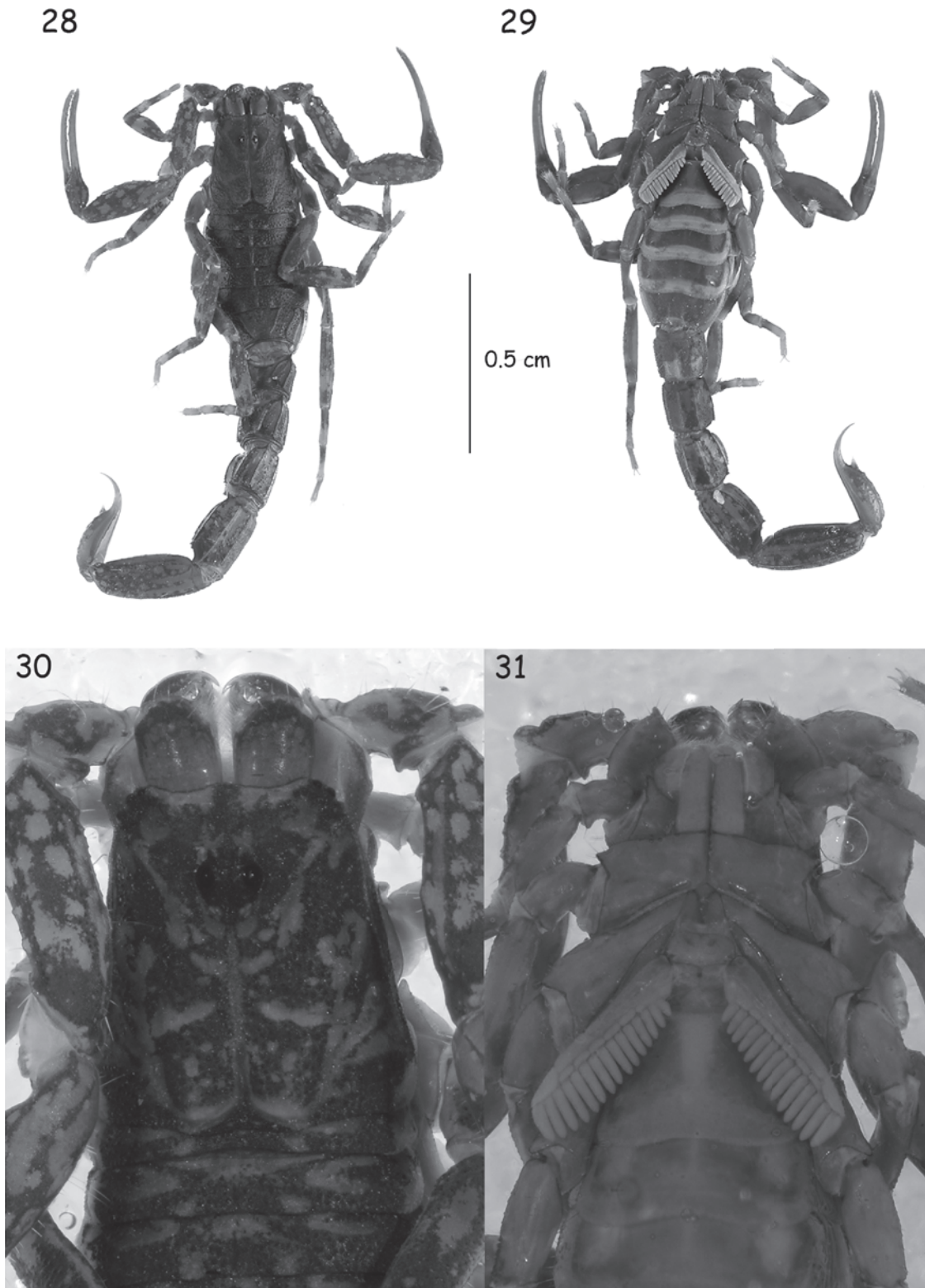
Brazil, state of Minas Gerais, Grão Mogol, gruta C-70, 756105mE – 8156155mN, 1-19/VIII/2011 (Pellegatti et al.), male holotype. Novo Horizonte, gruta [in cave] Mocarorô, 745721mE – 8228605mN, 1-19/VIII/2011 (Pellegatti et al.), 2 female paratypes. Holotype and one paratype deposited in the Museu Nacional, Rio de Janeiro. One paratype deposited in the Muséum national d'Histoire naturelle, Paris.

Etymology: The specific name *infuscata* refers to the dark colour pattern of the new species.

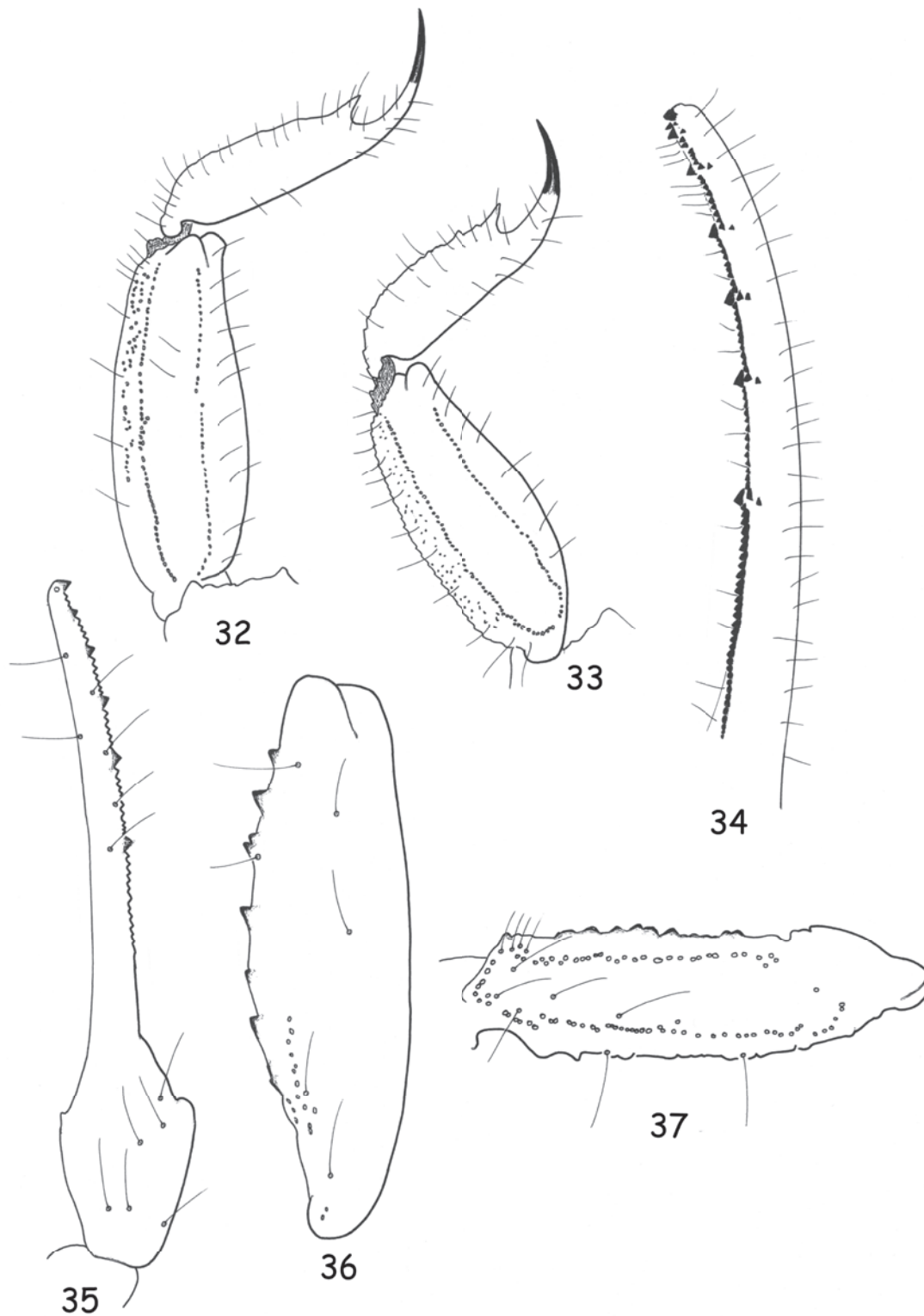
Diagnosis: Species of moderate to small size compared to the average size of the other species of the genus (20.6 mm in total length for male and female; Table I). General coloration reddish-yellow, intensely infuscated particularly



Figs. 24-27 - *Ananteris infuscata* sp. n., male holotype. **24-25**. Habitus, dorsal and ventral aspects. **26**. Carapace and chelicerae in detail, showing pigmentation pattern. **27**. Ventral aspect showing sternum, genital operculum and pectines.



Figs. 28-31 - *Ananteris infuscata* sp. n., female paratype. **28-29.** Habitus, dorsal and ventral aspects. **30.** Carapace and chelicerae in detail, showing pigmentation pattern. **31.** Ventral aspect showing sternum, genital operculum and pectines.



Figs. 32-37 - *Ananteris infuscata* sp. n., male holotype and female paratype. **32-33**. Metasomal segment V and telson, lateral aspect (male & female). **34**. Movable finger of pedipalp chela with rows of granules (female). **35-37**. Trichobothrial pattern. **35**. Chela dorso-external aspect. **36**. Patella, dorsal aspect. **37**. Femur, dorsal aspect (male).

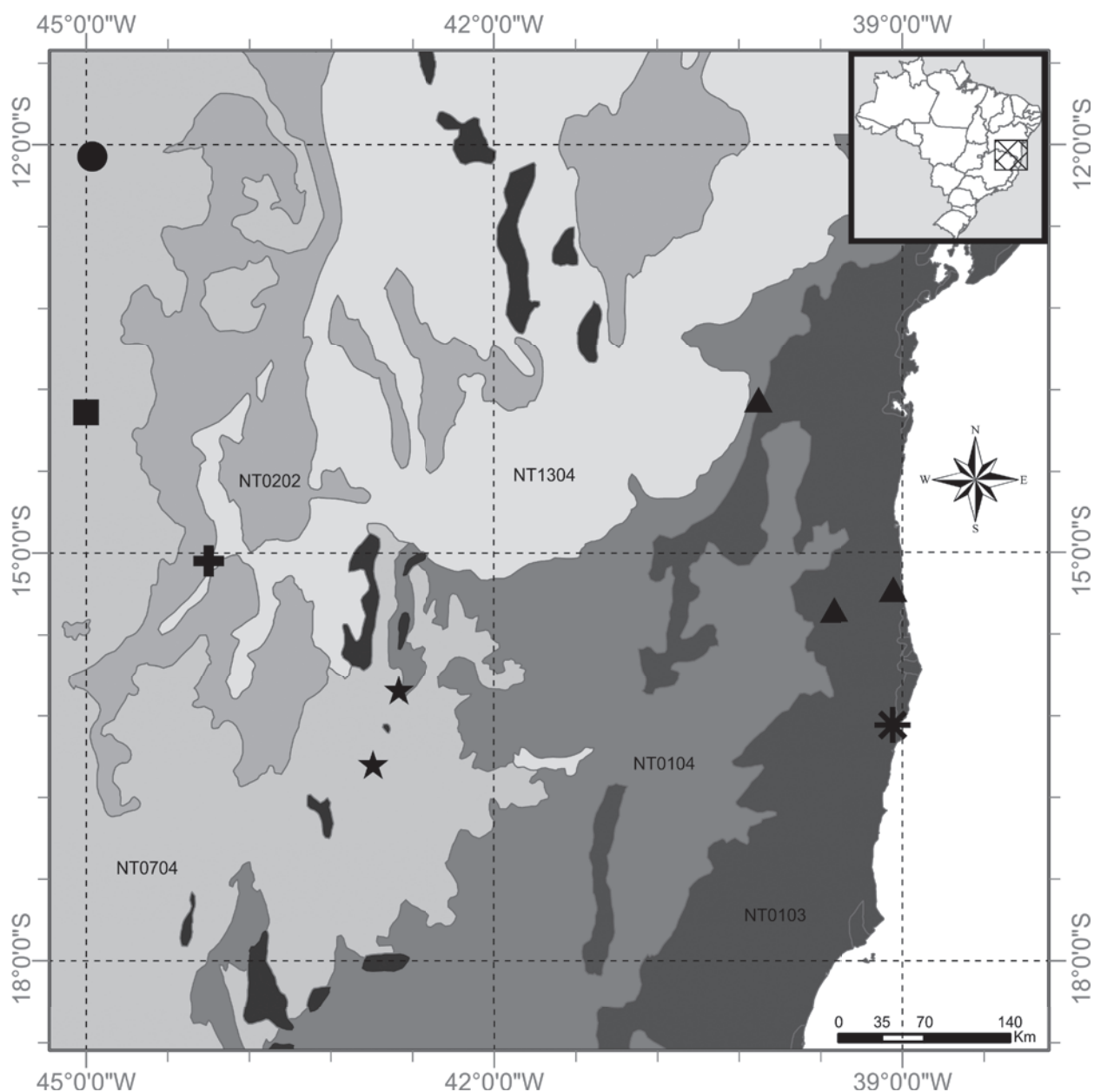


Fig. 38 - Map showing the known distribution of *Ananteris* species in the states of Bahia and Minas Gerais, Brazil. *Ananteris evellynae* (black circle). *Ananteris chagasi* (black cross). *Ananteris kuryi* (black asterisk). *Ananteris desiderio* sp. n. (black circle). *Ananteris camacan* sp. n. (black triangle). *Ananteris infuscata* sp. n. (black star).

in female, with brownish to blackish variegated spots. Pedipalps moderately long; fingers with 6 rows of granules; male pectines with 15-15 teeth; female pectines with 14 to 16. Carinae and granulation moderately to strongly marked. Trichobothria db and est of fixed finger situated almost at the same level.

Relationships: By its size and morphology, the new species shows affinities with *Ananteris balzanii*. *A. balzanii* has not, however, been reported from the eastern regions of Bahia. The new species shows a combination of distinct characters: (i) dark infuscated coloration, brown to blackish, most noticeably in female; chelicerae with variegated

blackish spots covering only the anterior and internal edges; vesicle with lateral spots, (ii) carapace and tergites more intensely granular, (iii) anterior edge of carapace straight, (v) trichobothria **db** and **est** of fixed finger situated almost at the same level.

Description based on male holotype and female paratypes. (Morphometric measurements in Table I.)

Coloration: Generally yellow to reddish-yellow with intensely infuscated with dark brown to blackish variegated pigmented zones; females more strongly infuscated. Prosoma: carapace reddish-yellow with dark brown spots covering almost the entire surface; eyes surrounded by black pigment. Mesosoma: yellowish with confluent blackish-brown stripes on tergites. Metasomal segments I to V yellow to reddish-yellow; all segments strongly marked with dark brown to blackish spots. Vesicle reddish-yellow with dark spots laterally; base of aculeus yellowish, tip reddish. Venter yellow to pale yellow with infuscations on sternites IV to VII. Chelicerae yellowish with variegated blackish spots over the anterior and internal edge; fingers with blackish spots; teeth pale red. Pedipalps: yellow; femur, patella and chela hand strongly marked with dark brown to blackish spots; chela fingers yellow with infuscations. Legs yellow, with several dark brown to blackish spots.

Morphology: Carapace with moderately to strongly marked granulation; anterior margin almost straight. All carinae weak or absent: furrows moderate to weak. Median ocular tubercle distinctly anterior to centre of carapace; median eyes large and separated by approximately one ocular diameter. Three pairs of lateral eyes. Sternum subpentagonal. Mesosomal tergites with moderately to strongly marked granulations, as intense as those of carapace. Median carina moderately marked on all tergites. Tergite VII pentacarinata. Venter: genital operculum divided longitudinally, each plate more or less suboval in shape. Pectines: pectinal tooth count 15-15 in male holotype, 14 to 16 on female

paratypes); basal middle lamellae of pectines not dilated; fulcra absent. Sternites smooth; only VII with some vestigial granulations in male; spiracles moderately elongate; setation moderate to strong in male; sternite VII with obsolete carinae in female, moderate in male. Metasomal segment I with 10 carinae, crenulate; segments II to IV with 8 carinae, crenulate; segment V slightly rounded, with 5 carinae; dorsal carinae on segments I to IV with one distal spinoid granule; intercarinal spaces moderately granular. Telson moderately elongate in both sexes; almost smooth in male, with some granulations in female; aculeus short and weakly curved; subaculear tooth moderately to strongly marked and spinoid. Cheliceral dentition characteristic of family Buthidae (Vachon 1963); fixed finger with two strong basal teeth; movable finger with two weak basal teeth; ventral surface of both finger and manus with long, dense setae. Pedipalps: Femur pentacarinata; patella and chela with weak to vestigial carinae; internal surface of patella with 7-8 spinoid granules; all surfaces weakly to moderately granular. Fixed and movable fingers with 6, almost linear, rows of granules; two small external and one internal accessory granule present at base of each row; three granules at extremity of the fingers. Trichobothriotaxy; orthobothriotaxy A- β -beta (Vachon 1974, 1975); trichobothria **db** and **est** of fixed finger situated almost at the same level. Legs: Tarsus with very numerous, fine, median setae ventrally. Tibial spurs strongly developed on leg IV, moderate on leg III.

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RESUMO

Três novas espécies de *Ananteris* Thorell são descobertas para o Brasil. *Ananteris desiderio* sp. n., *Ananteris camacã* sp. n. and *Ananteris infuscata* sp. n. São respectivamente descritas de espécimes coletados nas regiões de São Desidério, Camacã, Reserva Biológica UNA e Jequié no estado da Bahia, e nos municípios de Grão Mogol e Novo Horizonte no estado de Minas Gerais, Brasil. Novos registros geográficos são propostos para *Ananteris luciae* Lourenço, *Ananteris mauryi* Lourenço and *Ananteris franckei* Lourenço. O número conhecido de espécies de *Ananteris* para a escorpiofauna brasileira é agora aumentado para 24.

Palavras chave: Biodiversidade, Fauna Neotropical, Taxonomia, Escorpiões, Bahia e Minas Gerais.

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