

## Description of the males of *Auyantepuia aluku* Ythier, 2018, *A. kelleri* (Lourengo, 1997) and *A. laurae* Ythier, 2015, from French Guiana (Scorpiones, Chactidae)

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(Accepté le 21.VII.2020 ; publié le 12.X.2020)

**Abstract.** – The males of *Auyantepuia aluku* Ythier, 2018, *A. kelleri* (Lourengo, 1997) and *A. laurae* Ythier, 2015, are described for the first time. Males and females are illustrated for the three species, an identification key to the *Auyantepuia* species reported from French Guiana is proposed and a geographical distribution map is presented. Emended diagnoses for the genus *Auyantepuia* and for the three species studied in this paper are also provided.

**Résumé.** – Description des mâles d'*Auyantepuia aluku* Ythier, 2018, *A. kelleri* (Lourengo, 1997) et *A. laurae* Ythier, 2015, de Guyane française (Scorpiones, Chactidae). Les mâles d'*Auyantepuia aluku* Ythier, 2018, *A. kelleri* (Lourengo, 1997) et *A. laurae* Ythier, 2015, sont décrits pour la première fois. Mâles et femelles sont illustrés pour ces trois espèces, une clé d'identification pour l'ensemble des espèces d'*Auyantepuia* présentes en Guyane française est proposée, et une carte de répartition est présentée. Des diagnoses révisées pour le genre *Auyantepuia* ainsi que pour les trois espèces étudiées dans cet article sont également fournies.

**Keywords.** – Scorpion, Taxonomy, Morphology, Neotropical region.

The genus *Auyantepuia* Gonzalez-Sponga, 1978, was originally established to accommodate *Brotochactas scorzai* (Dagert, 1957), a species described from the region of the Auyantepui in Venezuela. In his comprehensive work on the scorpion fauna of French Guiana, LOURENÇO (1983) described the first species reported from this region: *Auyantepuia fravalae* Lourenço, 1983, *A. gaillardi* Lourenço, 1983, and *A. sissomi* Lourenço, 1983. Subsequently, four additional species were described from French Guiana: *A. kelleri* (Lourengo, 1997), *A. laurae* Ythier, 2015, *A. aluku* Ythier, 2018, and *A. aurum* Ythier, 2018. Among these species, *A. kelleri*, *A. laurae* and *A. aluku* were described on the basis of females only. Significant additional material recently collected in French Guiana (CHEVALIER, 2019a, b) allows us to describe the adult males of these three species. Emended diagnosis for the genus *Auyantepuia* and thorough diagnoses for the species studied in this note are also presented, revised from YTHIER (2018a, b), taking into consideration the new material analyzed in the present work. Distribution records are provided and an identification key to the *Auyantepuia* species reported from French Guiana is proposed.

### MATERIAL AND METHODS

Material presented herein is deposited in the following collections: MNHN, Muséum national d'Histoire naturelle, Paris, France; EYPC, Éric Ythier private collection, Romanèche-Thorins, France; JCPC, Johan Chevalier private collection, Awala-Yalimapo, French Guiana, France.

All specimens of the presented material were examined by the senior author. Measurements and illustrations were produced using a Motic DM143 digital stereomicroscope together with

a Canon EOS 7D camera and a Wacom Intuos drawing tablet. Map was built using Google Maps and Photoshop software. Measurements follow STAHNKE (1970) and are given in mm. Trichobothrial notations are those developed by VACHON (1974), morphological terminology mostly follows HJELLE (1990) and chelicerae dentition follows VACHON (1963).

## TAXONOMY

Family **Chactidae** Pocock, 1893

Genus *Auyantepuia* Gonzalez-Sponga, 1978

**Diagnosis for the genus.** – Scorpions of small size with a total length of 14 to 29 mm. General coloration reddish yellow to reddish brown. Tegument smooth overall. Pedipalp chelal fingers very short compared to chelal length, with trichobothria *db* and *esb* frequently at the same level; in some species these can be basal to trichobothrium *Et<sub>3</sub>*. Trichobothrial pattern of type C; neobothriotaxic ‘majorante’ (VACHON, 1974). Ventral surface of metasomal segment V with large spiniform granules which form an arc in the posterior region. Pectines with 5 to 8 teeth.

### *Composition of the genus Auyantepuia (in order of description)*

*Auyantepuia parvulus* (Pocock, 1897) (Brazil).

*Auyantepuia scorzai* (Dagert, 1957) (Venezuela).

*Auyantepuia fravalae* Lourenço, 1983 (French Guiana).

*Auyantepuia gaillardi* Lourenço, 1983 (French Guiana).

*Auyantepuia sissomi* Lourenço, 1983 (French Guiana).

*Auyantepuia kelleri* (Lourenço, 1997) (French Guiana).

*Auyantepuia mottai* Lourenço & Araujo, 2004 (Brazil).

*Auyantepuia amapaensis* Lourenço & Qi, 2007 (Brazil).

*Auyantepuia surinamensis* Lourenço & Duhem, 2010 (Suriname).

*Auyantepuia laurae* Ythier, 2015 (French Guiana).

*Auyantepuia aluku* Ythier, 2018 (French Guiana).

*Auyantepuia aurum* Ythier, 2018 (French Guiana).

*Auyantepuia royi* Ythier, 2018 (Brazil).

*Auyantepuia aluku* Ythier, 2018 (fig. 1, 4, 7, 10-11, 17)

*Auyantepuia aluku* Ythier, 2018a: 52.

**Examined material.** – **French Guiana.** ♀ holotype, Apatou, Crevette river, *J. Chevalier & P. Gallier coll.*, 30.VI.2017 (MNHN); 4 ♀ paratypes, *idem* (EYPC, EY0094); 3 ♂ and 3 ♀, Natural Reserve La Trinité, *J. Chevalier coll.*, XI.2018 (JCPC); 1 ♂, 1 ♀, 2 immature ♂ and 3 immature ♀, Natural Reserve La Trinité, *J. Chevalier coll.*, IV.2019 (JCPC); 2 ♂ and 1 ♀, *idem* (EYPC, EY0171); 1 ♂ and 1 juvenile ♂, Natural Reserve La Trinité, at the top of the inselberg, *J. Chevalier coll.*, 13.IV.2019 (EYPC, EY0172). Collecting permits for the material collected in Natural Reserve La Trinité: DEAL Guyane, N°R03-2018-11-08-009 and R03-2019-03-14-006.

**Diagnosis.** – Species of medium size when compared with the average size of the other species of the genus, with a total length ranging from 19.9 to 24.2 mm for the males (mean 22.4 mm; n=7) and from 20.0 to 22.4 mm for the females (mean 21.0 mm; n=10). General coloration reddish brown. Carapace reddish yellow, intensely marked with brownish variegated spots around the ocular tubercle and on the anterior and posterior edges of the carapace; ocular tubercle darker, almost black. Tergites reddish brown with reddish yellow spots. Venter yellowish to reddish yellow. Metasomal segments reddish yellow, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side with weakly marked variegated brownish spots on segments IV and V, other segments without spots. Vesicle reddish



Fig. 1-3. – *Auyantepuia* spp., adult males, habitus. – 1, *A. aluku* Ythier. – 2, *A. kelleri* (Lourenço). – 3, *A. laurae* Ythier. Scale bar = 1 cm.

yellow with basis of aculeus brownish and tip of aculeus reddish. Chelicerae yellowish with variegated dark brown spots; fingers reddish yellow with dark brown spots, teeth reddish. Pedipalps reddish brown, with longitudinal dark brown spots. Legs yellowish, marked with brownish spots. Carapace lustrous and acarinate, with some minute punctations; furrows shallow; anterior edge emarginated. Tergites acarinate, almost smooth and shiny. Pectinal tooth count 7-7 in males and ranging from 5 to 6 in females. Sternites smooth and shiny, VII acarinate; spiracles rounded in shape. Only metasomal segments IV and V longer than wide; metasomal tegument almost lustrous, without granulation in female and with small granulation ventrally and laterally in male; segment V with spinoid granulation ventrally, moderately marked; carinae on segments I-V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae moderately marked; internal face weakly granular, other faces smooth; patella smooth, with vestigial carinae; chela weakly granulated, almost smooth, with dorso-internal carina weakly marked; dentate margins on fixed and movable fingers with six rows of granules.

**Description of the male** (fig. 1, 4). – *Coloration*. General coloration reddish brown. Carapace reddish, marked with brownish variegated spots around the ocular tubercle and on the anterior and posterior edges of the carapace; ocular tubercle darker, almost black. Tergites brownish with confluent reddish yellow spots, on the sides and the middle of tergites. Venter and sternites yellowish to reddish yellow; sternum yellowish; genital opercle yellowish; pectines pale yellow. Metasomal segments reddish yellow, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side with weakly marked variegated brownish spots on segments IV and V, other segments without spots; vesicle reddish yellow with basis of aculeus brownish and tip of aculeus reddish. Chelicerae yellowish, with variegated dark brown spots; fingers reddish yellow; teeth reddish. Pedipalps reddish yellow, with longitudinal dark brown spots. Legs yellowish, marked with brownish spots.

*Morphology*. Carapace acarinate, shiny, and almost smooth, with only some minute granulations on lateral edges; furrows shallow; anterior edge emarginate. Tergites acarinate, shiny, and almost smooth. Sternum pentagonal, wider than long. Pectinal tooth count 7-7, fulcrum absent. Sternites smooth and shiny, VII acarinate; spiracles rounded in shape. Only metasomal segments IV and V longer than wide; metasomal tegument with small granulation ventrally and laterally, segment V with posterior spinoid granulation ventrally, moderately marked; carinae on segments I-V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae moderately marked, internal face weakly granular, other faces smooth; patella smooth, with vestigial carinae; chela weakly granulated, almost smooth, with dorso-internal carina weakly marked; dentate margins on fixed and movable fingers with six rows of granules. Chelicerae with dentition typical of the family Chactidae (VACHON, 1963), and with dense setation ventrally and internally.

*Sexual dimorphism*. Total length generally slightly larger in male (mean 22.4 mm; n=7) than in female (mean 21.0 mm; n=10); legs with brownish spots less marked in male than in female; pectinal tooth count higher in male (7-7) than in female (ranging from 5 to 6); pedipalp chela slightly more granulated in male than in female.

**Morphometric values of one male (in mm)**. – Total length including telson, 22.4. Carapace: length, 3.5; anterior width, 2.2; posterior width, 3.3. Mesosoma length, 6.6. Metasomal segments. I: length, 1.4; width, 2.2; II: length, 1.5; width, 1.9; III: length, 1.5; width, 1.9; IV: length, 1.8; width, 1.7; V: length, 3.1; width, 1.7; depth, 1.3. Telson: length, 3.0; width, 1.7; depth, 1.3. Pedipalp: femur length, 1.7, width, 1.3; patella length, 2.5, width, 1.5; chela length, 4.8, width, 1.8, depth, 1.8; movable finger length, 2.6.

**Comparisons**. – *Auyantepuia aluku* can be readily distinguished from other species of the genus *Auyantepuia* and, in particular, from the three species occurring in the northern part of French Guiana and Suriname, by the following main features:

– *A. laurae* Ythier, 2015 (described from Saut Sabbat, Mana): (i) smaller general size of females (22.4 to 28.2 mm in total length for *A. laurae*), (ii) ventral side with weakly marked

spots on segments IV and V, other segments reddish yellow, without spots (ventral side with intensely marked spots on segments IV and V and weakly marked spots on segment III, other segments yellowish, without spots in *A. laurae*).

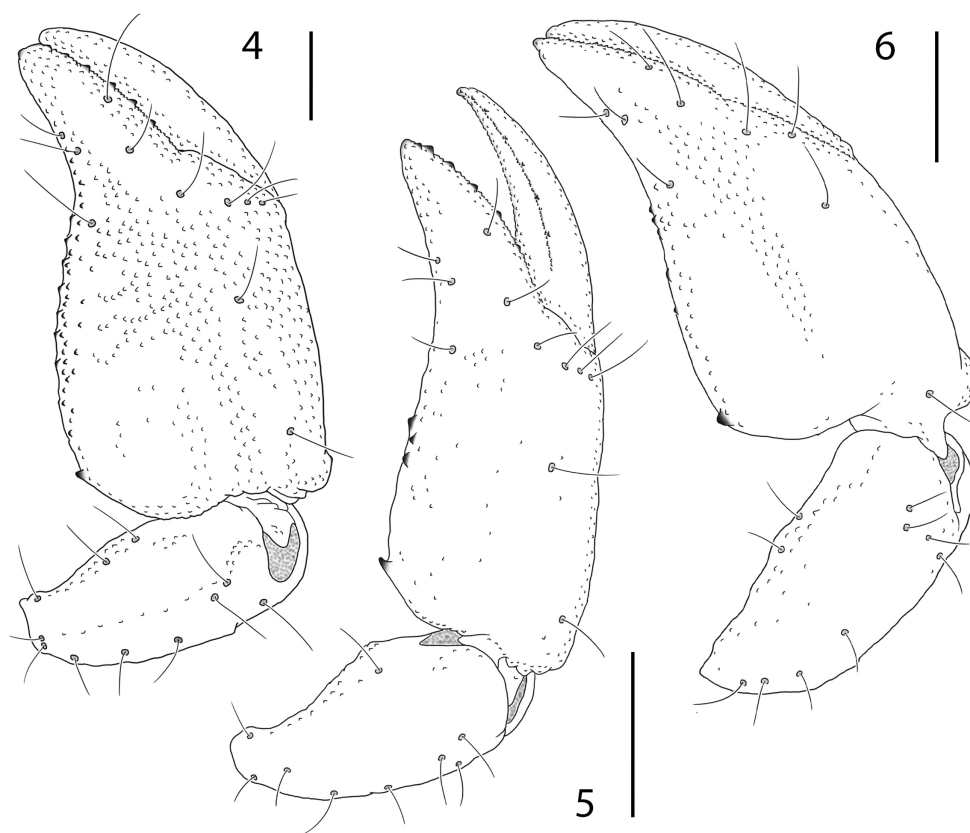
– *A. gaillardii* Lourenço, 1983 (described from Saint-Laurent-du-Maroni): (i) smaller general size of females (26.9 mm in total length for *A. gaillardii*), (ii) carapace, tergites, chelicerae, pedipalps and legs marked with darker spots (uniform coloration without darker spots in *A. gaillardii*), (iii) ventral side with weakly marked spots on segments IV and V, other segments reddish yellow, without spots (all segments uniformly reddish in *A. gaillardii*).

– *A. surinamensis* Lourenço & Duhem, 2010 (described from Albina/Moengo, Suriname): (i) ventral granulations on metasomal segment V moderately marked (weakly marked in *A. surinamensis*), (ii) ventral side with weakly marked spots on segments IV and V, other segments reddish yellow, without spots (all segments uniformly reddish and intensely marked with brownish spots in *A. surinamensis*).

***Auyantepuia kelleri* (Lourenço, 1997) (fig. 2, 5, 8, 12-13)**

*Broteochactas kelleri* Lourenço, 1997: 597.

**Examined material.** – French Guiana. ♀ holotype, Cacao, W. Lourenço leg., II.1989 (MHNG); 1 ♂, Matoury, Désirée path, J. Chevalier; E. Dewynter & M. Dewynter coll., 2.X.2018 (EYPC, EY0165);



**Fig. 4-6.** – *Auyantepuia* spp., adult males, right patella and chela. – 4, *A. aluku* Ythier. – 5, *A. kelleri* (Lourenço). – 6, *A. laurae* Ythier. Scale bars = 1 mm.



2 ♂ and 1 ♀, Kaw mountain, Regional Natural Reserve Trésor, between camp Favard and camp Savane, *J. Chevalier & J.-F. Szpigel coll.*, 22.XI.2018 (JCPC); 2 ♂ and 2 ♀, *idem*, 23.XI.2018 (EYPC, EY0166); 14 ♂, Kaw mountain, Regional Natural Reserve Trésor, on the path of the reserve, *J. Chevalier & J.-F. Szpigel coll.*, 21.XI.2018 (JCPC). Collecting permit for the material collected in Regional Natural Reserve Trésor: Collectivité Territoriale de Guyane, N°372469/2018/PATDDT/DDDT/SEDDT///EW.

**Diagnosis.** – Species of small size when compared with the average size of the other species of the genus, with a total length ranging from 14.4 to 17.7 mm for the males (mean 15.8 mm; n=19) and from 16.9 to 18.5 mm for the females (mean 17.6 mm; n=3). General coloration brownish to reddish brown. Carapace reddish brown to reddish yellow, intensely marked with brownish variegated spots around the ocular tubercle and on the anterior edge of the carapace; posterior part and furrows lighter; ocular tubercle darker. Tergites brownish with confluent yellowish spots. Venter yellowish to yellowish brown. Metasomal segments reddish brown, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side of all segments reddish brown, without spots. Vesicle reddish brown with basis of aculeus reddish brown and tip of aculeus reddish black. Chelicerae yellowish with variegated dark brown spots anteriorly, at the base of fingers; fingers yellowish with reddish teeth. Pedipalps reddish brown with longitudinal dark brown spots, chela reddish. Legs yellowish with brownish spots. Carapace lustrous and acarinate, with some minute punctations; furrows shallow; anterior edge emarginated. Tergites acarinate, almost smooth and shiny. Pectinal tooth count ranging from 6 to 8 in males and 6-6 in females. Sternites smooth with spiracles rounded in shape. Metasomal tegument almost lustrous, without granulation, and with a few punctations; segment V with spinoid granulation ventrally, moderately marked; carinae on segments I to V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Vesicle flattened with few scattered granules ventrally. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae well-marked; internal face weakly granular, other faces smooth; patella and chela with vestigial carinae; chela weakly granulated dorsally, almost smooth, with few scattered granules internally, dorso-internal carina weakly marked; dentate margins on fixed and movable fingers with 6 rows of granules.

**Description of the male** (fig. 2, 5). – *Coloration.* General coloration reddish brown. Carapace reddish yellow, intensely marked with brownish variegated spots around the ocular tubercle and on the anterior and posterior edges of the carapace; ocular tubercle darker, almost black. Tergites brownish with confluent yellowish spots. Venter and sternites yellowish brown; genital opercle reddish yellow; pectines pale yellow. Metasomal segments reddish brown, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side of all segments reddish brown, without spots; vesicle reddish brown with basis of aculeus reddish brown and tip of aculeus reddish black. Chelicerae yellowish, with variegated dark brown spots anteriorly, at the base of fingers; fingers yellowish, teeth reddish. Pedipalps reddish brown with longitudinal dark brown spots, chela reddish. Legs yellowish with brownish spots.

*Morphology.* Carapace lustrous and acarinate, with some minute punctations; furrows shallow; anterior edge emarginate. Tergites acarinate, almost smooth and shiny, with only minute granulations on their posterior edges. Sternum pentagonal, wider than long. Pectinal tooth count 7-8, fulcrum absent. Sternites smooth and shiny, VII acarinate; spiracles rounded in shape. Only metasomal segments IV and V longer than wide; metasomal tegument almost lustrous, without granulation, and with a few punctations; segment V with spinoid granulation ventrally, moderately marked. Carinae on segments I-V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Vesicle flattened with few scattered granules ventrally. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae well-marked; internal face weakly granular; other faces smooth. Patella smooth, with vestigial carinae. Chela weakly granulated, almost smooth, with dorso-internal carina weakly marked. Dentate margins on fixed and movable fingers with six rows of granules separated by bigger granules. Chelicerae with dentition



Fig. 7-9. – *Auyantepuia* spp., adult females, habitus. – 7, *A. aluku* Ythier. – 8, *A. kelleri* (Lourenço). – 9, *A. laurae* Ythier. Scale bar = 1 cm.

typical of the family Chactidae (VACHON, 1963), and with dense setation ventrally and internally. Trichobothriotaxy of type C; neobothriotaxic ‘majorante’ (VACHON, 1974).

**Sexual dimorphism.** Total length generally slightly larger in female (mean 17.6 mm; n=3) than in male (mean 15.8 mm; n=19); general coloration slightly paler with pedipalps more reddish in male than in female; legs with brownish spots less marked in male than in female; pectinal tooth count higher in male (ranging from 6 to 8) than in female (6-6).

**Morphometric values of one male (in mm).** – Total length including telson, 14.7. Carapace: length, 2.2; anterior width, 1.5; posterior width, 2.6. Mesosoma length, 3.9. Metasomal segments. I: length, 0.9; width, 1.3; II: length, 1.0; width, 1.3; III: length, 1.2; width, 1.3; IV: length, 1.4; width, 1.3; V: length, 2.3; width, 1.3; depth, 1.0. Telson: length, 1.8; width, 1.2; depth, 0.6. Pedipalp: femur length, 1.3, width, 0.7; patella length, 1.8, width, 0.9; chela length, 3.5, width, 1.1, depth, 1.0; movable finger length, 1.8.

**Comparisons.** – *Auyantepuia kelleri* can be readily distinguished from other species of the genus *Auyantepuia* and, in particular, from *A. fravalae* Lourenço, 1983, occurring in the eastern and central parts of French Guiana (described from Saut Pararé and also found in Saül), by the following main features: smaller general size (28.6 to 28.8 mm in total length for *A. fravalae*), (ii) pedipalps with chelae weakly granulated, almost smooth (strongly granulated dorsally in *A. fravalae*).

### *Auyantepuia laurae* Ythier, 2015 (fig. 3, 6, 9, 14-15)

*Auyantepuia laurae* Ythier, 2015: 99.

**Examined material.** – **French Guiana.** ♀ holotype and 2 ♀ paratypes, Near Saut Sabbat, 50 km south of Mana and 50 km east of Saint-Laurent-du-Maroni, under wood log, *E. Ythier & G. Roy coll.*, I.2015 (MNHN). 1 ♂, Mana, Camp Angoulême, *J. Chevalier & B. Tan coll.*, 3.III.2018 (EYPC, EY0169). 1 ♀, Mana, path of the Forêt des Sables Blancs, *J. Chevalier & B. Tan coll.*, 21.I.2017 (JCPC). 1 ♀, *idem*, 8.VII.2017 (EYPC, EY0097). 2 ♀, *idem*, 24.XI.2018 (JCPC). 1 ♀, Saint-Laurent-du-Maroni, ADNG path, *J. Chevalier & B. Tan coll.*, 11.VII.2018 (EYPC, EY0168).

**Diagnosis.** – Species of medium to large size when compared with the average size of the other species of the genus, with a total length of 20.6 mm for the male and ranging from 22.4 to 28.2 mm for the females (mean 26.1 mm; n=8). General coloration reddish brown. Carapace reddish yellow, intensely marked with brownish variegated spots around the ocular tubercle and on the anterior and posterior edges of the carapace; ocular tubercle darker, almost black. Tergites reddish brown with reddish yellow spots. Venter yellowish to reddish yellow. Metasomal segments reddish yellow, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side with intensely marked variegated brownish spots on segments IV and V and weakly marked variegated brownish spots on segment III, other segments without spots. Vesicle reddish yellow with basis of aculeus brownish and tip of aculeus reddish. Chelicerae yellowish with variegated dark brown spots; fingers reddish yellow with dark brown spots, teeth reddish. Pedipalps reddish brown, with longitudinal dark brown spots. Legs yellowish, intensely marked with brownish spots. Carapace lustrous and acarinate, with some minute punctations; furrows shallow; anterior edge emarginated. Tergites acarinate, almost smooth and shiny. Pectinal tooth count 7-7 in male and ranging from 5 to 6 in females. Sternites smooth and shiny, VII acarinate; spiracles rounded in shape. Only metasomal segments IV and V longer than wide; metasomal tegument almost lustrous, without granulation, and with a few punctations; segment V with spinoid granulation ventrally, weakly to moderately marked; carinae on segments I to V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae moderately marked, internal face weakly granular, other sides smooth; patella smooth,



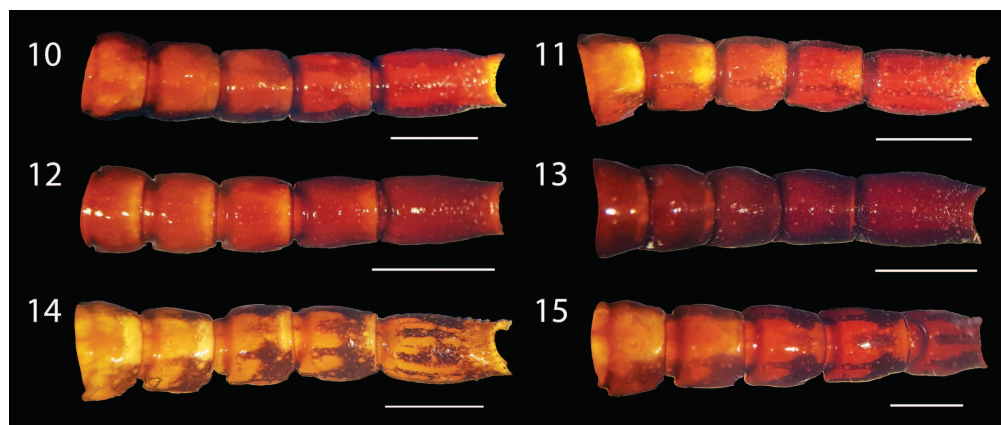
with vestigial carinae; chela weakly granulated, almost smooth, with dorso-internal carina weakly marked; dentate margins on fixed and movable fingers with six rows of granules.

**Description of the male** (fig. 3, 6). – **Coloration.** General coloration reddish brown. Carapace reddish yellow, intensely marked with brownish variegated spots around the ocular tubercle and on the anterior and posterior edges of the carapace; ocular tubercle darker, almost black. Tergites reddish brown, darker on the posterior margin of segments, with few reddish yellow spots. Venter and sternites yellowish to reddish yellow; genital opercle reddish yellow; pectines pale yellow. Metasomal segments reddish yellow, marked with variegated brownish spots on lateral and dorsal sides of segments I to V; ventral side with intensely marked variegated brownish spots on segments IV and V and weakly marked variegated brownish spots on segment III, other segments without spots; vesicle reddish yellow with basis of aculeus brownish and tip of aculeus reddish. Chelicerae yellowish, with variegated dark brown spots; fingers reddish yellow with dark brown spots at their basis, teeth reddish. Pedipalps reddish yellow, with longitudinal dark brown spots. Legs yellowish, intensely marked with brownish spots.

**Morphology.** Carapace lustrous and acarinate, with some minute punctations; furrows shallow; anterior edge emarginate. Tergites acarinate, almost smooth and shiny, with only minute granulations on their posterior edges. Sternum pentagonal, wider than long. Pectinal tooth count 7-7, fulcrum absent. Sternites smooth and shiny, VII acarinate; spiracles rounded in shape. Only metasomal segments IV and V longer than wide; metasomal tegument almost lustrous, without granulation, and with a few punctations; segment V with spinoid granulation ventrally, moderately marked. Carinae on segments I-V vestigial or absent; only dorso-lateral carinae are weakly marked on segments I to IV. Pedipalp femur with dorsal internal, dorsal external and ventral internal carinae moderately marked; internal face weakly granular; other faces smooth. Patella smooth, with vestigial carinae. Chela weakly granulated, almost smooth, with dorso-internal carina weakly marked. Dentate margins on fixed and movable fingers with six rows of granules. Chelicerae with dentition typical of the family Chactidae (VACHON, 1963), and with dense setation ventrally and internally. Trichobothriotaxy of type C; neobothriotaxic ‘majorante’ (VACHON, 1974).

**Sexual dimorphism.** Total length generally larger in female (mean 26.1 mm; n=8) than in male (20.6 mm); general coloration slightly paler with pedipalps more reddish in male than in female; brownish spots on body and appendages more intensely marked in male than in female; pectinal tooth count higher in male (7-7) than in female (ranging from 5 to 6); pedipalp chela slightly more granulated in male than in female.

**Morphometric values of one male (in mm).** – Total length including telson, 20.6. Carapace: length, 3.2; anterior width, 1.9; posterior width, 3.2. Mesosoma length, 6.8. Metasomal segments. I: length, 1.3; width, 1.9; II: length, 1.4; width, 1.9; III: length, 1.4; width, 1.7; IV: length, 1.7; width, 1.6; V: length, 2.6; width, 1.6; depth, 1.3. Telson: length, 2.2; width, 1.2; depth, 0.9. Pedipalp: femur length, 1.7, width, 0.9; patella length, 2.3, width, 1.0; chela length, 4.5, width, 1.6, depth, 1.6; movable finger length, 2.5.



**Fig. 10-15.** – *Auyantepuia* spp., metasomal segments, ventral aspect. – 10-11, *A. aluku* Ythier: 10, ♂; 11, ♀. – 12-13, *A. kelleri* (Lourenço): 12, ♂; 13, ♀. – 14-15, *A. laurae* Ythier: 14, ♂; 15, ♀. Scale bars = 2 mm.

**Comparisons.** – *Auyantepuia laurae* can be distinguished from other species of the genus *Auyantepuia* and, in particular, from the three species occurring in the northern part of French Guiana and Suriname, by the following main features:

– *A. aluku* Ythier, 2018 (described from Apatou and also found in Natural Reserve La Trinité): (i) larger general size of females (20.0 to 22.4 mm in total length for *A. aluku*), (ii) ventral side with intensely marked spots on segments IV and V and weakly marked spots on segment III, other segments yellowish (ventral side with weakly marked spots on segments IV and V, other segments reddish yellow, without spots in *A. aluku*).

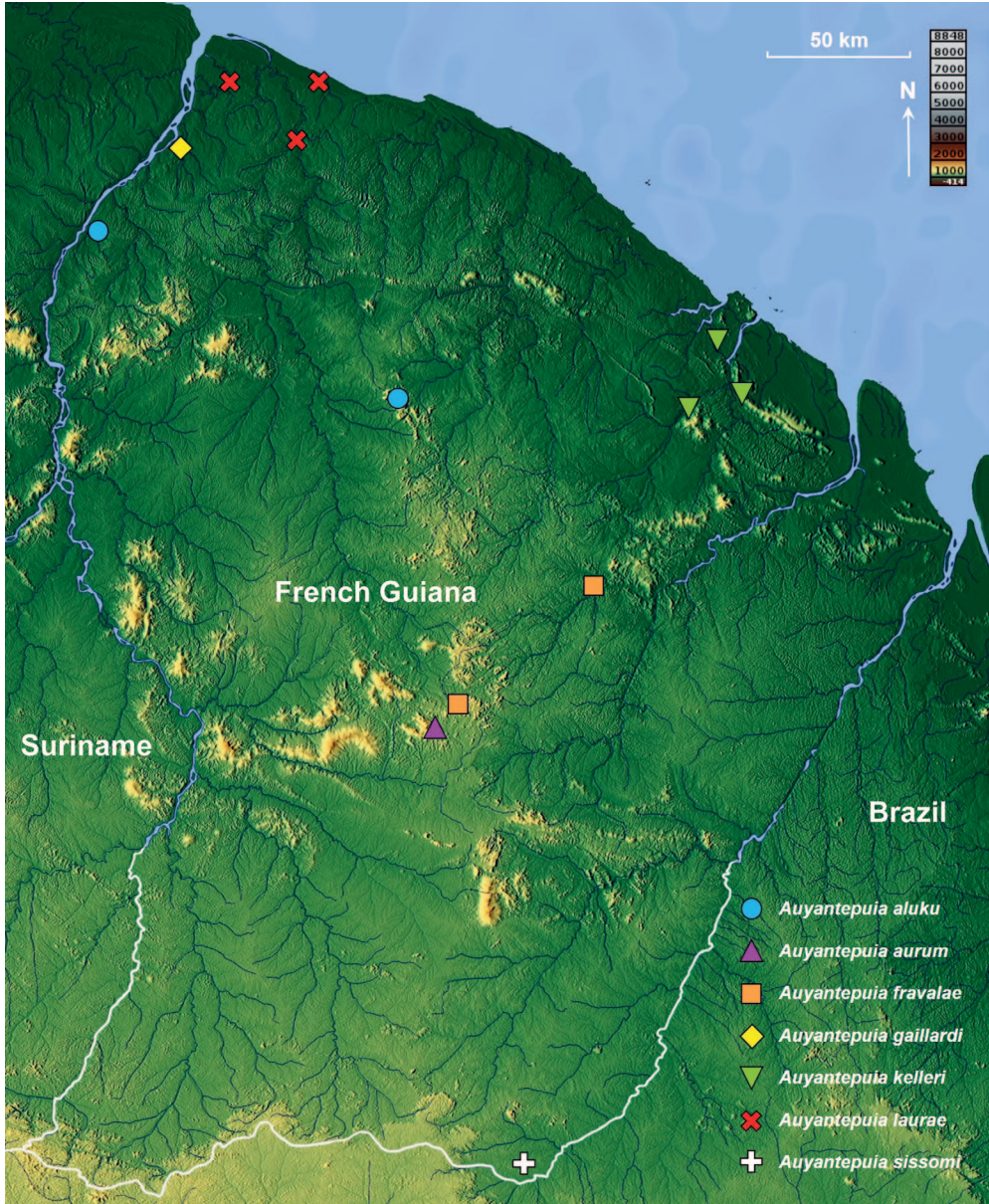


Fig. 16. – Map of the known distribution of *Auyantepuia* species in French Guiana.



– *A. gaillardi* Lourenço, 1983 (described from Saint-Laurent-du-Maroni): (i) carapace, tergites, chelicerae, pedipalps and legs marked with darker spots (uniform coloration without darker spots in *A. gaillardi*), (ii) ventral side with intensely marked spots on segments IV and V and weakly marked spots on segment III, other segments yellowish (all segments uniformly reddish in *A. gaillardi*).

– *A. surinamensis* Lourenço & Duhem, 2010 (described from Albina/Moengo, Suriname): (i) ventral granulations on metasomal segment V moderately marked (weakly marked in *A. surinamensis*), (ii) ventral side with intensely marked spots on segments IV and V and weakly marked spots on segment III, other segments yellowish (all segments uniformly reddish and intensely marked with brownish spots in *A. surinamensis*).

### KEY TO THE SPECIES OF *AUYANTEPUIA* FROM FRENCH GUIANA

The following key is proposed for the seven species of *Auyantepuia* described from French Guiana. This key is based on the previous key proposed by YTHIER (2018a), taking into consideration the new material analysed in the present note. This key must be considered as imperfect, provisional and susceptible to possible exceptions, hence it is to be used with caution and should not be the only tool for identifying a specimen. If there is any doubt, original descriptions should also be consulted.

1. Pedipalps with chelae weakly granulated, almost smooth ..... 2  
   – Pedipalps with chelae moderately to strongly granulated ..... 5
2. Ventral side of several metasomal segments without darker variegated spots ..... 3  
   – Ventral side of all metasomal segments without darker variegated spots ..... 4
3. Ventral side with weakly marked spots on segments IV and V, other segments reddish yellow, without spots ..... *A. aluku* Ythier  
   – Ventral side with intensely marked spots on segments IV and V and weakly marked spots on segment III, other segments yellowish, without spots ..... *A. laurae* Ythier
4. Body, pedipalps, legs and chelicerae marked with variegated brownish spots; small species (14-19 mm) ..... *A. kelleri* (Lourenço)  
   – Body, pedipalps, legs and chelicerae without variegated brownish spots; larger species (25-27 mm) ..... *A. gaillardi* Lourenço



Fig. 17. – *Auyantepuia aluku* Ythier, alive, female with pullus.

5. Ventral side of metasomal segments I and II without darker variegated spots ..... 6  
 – Ventral side of all metasomal segments without darker variegated spots ..... *A. fravalae* Lourenço
6. General coloration reddish brown; ventral side of metasoma with medium size granulation on segments III to V ..... *A. aurum* Ythier  
 – General coloration yellowish; ventral side of metasoma with medium size granulation on segment V only ..... *A. sissomi* Lourenço

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