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**A new genus of Triaenonychidae from South Africa (Opiliones, Laniatores)**

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# A NEW GENUS OF TRIAENONYCHIDAE FROM SOUTH AFRICA (OPILIONES, LANIATORES)

Adriano B. Kury

**Abstract:**
*Lizamontia* gen. n. is described to include three species of South African Triaenonychidae – *Lizamontia starengai* sp. n., type species, from Mpumalanga province, and two species previously described in *Acumontia* Loman, 1898, from KwaZulu-Natal province. The new combinations *Lizamontia natalensis* (Lawrence, 1931) and *Lizamontia draconensis* (Lawrence, 1931) are formed accordingly. A key is given to the species of *Lizamontia*. The distribution of *Acumontia* is thus restricted to Madagascar.

**Key words:** Opiliones, Laniatores, *Acumontia*, *Lizamontia* gen. n., Madagascar, KwaZulu-Natal, Mpumalanga, Transvaal, South African forest biome.

**Taxonomy:**
*Lizamontia* gen. n.
*Lizamontia starengai* sp. n.
*Lizamontia natalensis* (Lawrence, 1931) comb. n.
*Lizamontia draconensis* (Lawrence, 1931) comb. n.

**Nuevo género de Triaenonychidae de Suráfrica (Opiliones, Laniatores)**

**Resumen:**
Se describe el nuevo género *Lizamontia* (familia Triaenonychidae), en el que se incluyen tres especies de Suráfrica: *Lizamontia starengai* sp. n., especie tipo, procedente de la provincia de Mpumalanga, y dos especies previamente descritas en el género *Acumontia* Loman, 1898, de la provincia de KwaZulu-Natal: *Lizamontia natalensis* (Lawrence, 1931) comb. n. y *Lizamontia draconensis* (Lawrence, 1931) comb. n. Se presenta una clave de las especies del género *Lizamontia*. La distribución de *Acumontia* se restringe a Madagascar.

**Palabras clave:** Opiliones, Laniatores, *Acumontia*, *Lizamontia* gen. n., Madagascar, KwaZulu-Natal, Mpumalanga, Transvaal, bioma forestal sudafricano.

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*Lizamontia draconensis* (Lawrence, 1931) comb. n.

## Introduction

Loman (1898) created the genus *Acumontia* for the new species *Acumontia armata* from Madagascar. Along the years, 22 other species were described in this genus. All but two species of *Acumontia* are from Madagascar — *Acumontia natalensis* Lawrence, 1931 and *Acumontia draconensis* Lawrence, 1931, both described from KwaZulu-Natal province, South Africa. Star"ga (1992: 280, 281) stated that the two South African species should constitute a separate, undescribed genus.

Now, recent collecting in the Mpumalanga province yielded one male, which is here described as belonging to a new species. This species is most closely related to the two South African "*Acumontia*", and a new genus is described to include all three species. The genus *Acumontia* is therefore removed from the list of South African genera.

Type depositories are here abbreviated as NCA (National Collection of Arachnids, ARC, Pretoria, South Africa), NMSA (Natal Museum, Pietermaritzburg) and SAMC (South African Museum, Cape Town).

## *Lizamontia* new genus

**ETYMOLOGY:** From *Liza* (part of the anthroponym Elizabeth [in honor of the South African arachnologist Elizabeth J. Kassimatis, who made a big effort to collect the holotype in a devastated place]) + *montia* (last part of the names of many South African Triaenonychidae).

**TYPE SPECIES:** *Lizamontia starengai* new species, by present designation.

**OTHER INCLUDED SPECIES**: *Acumontia draconensis* Lawrence, 1939 and *Acumontia natalensis* Lawrence, 1931.

**DIAGNOSIS:** Triaenonychidae with eye mound elevated in a small spine-shaped apophysis as long as 1/5 of the scutum; scutal areas undefined, but abdominal scutum armed with small paired acuminate processes in the place of the primitive areas I-V (that of "area" III the largest); pedipalpal femur without ventral mat of small granules; femur I with ventral row of four setiferous spines (IIIi); metatarsus I of male unnotched, tarsal counts 5-6(2) (rarely 7)/10-16(3)/4/4; median prong of claws of tarsi III-IV much stouter than the lateral prongs; ventral plate of penis entire, parastyli fused forming a coat around the stylus. *Lizamontia* can be readily separated from the apparently closest South African genera as follows: from *Graemontia* Lawrence, 1931 by the absence of frontal apophyses on carapace; no sexual dimorphism on chelicera and pedipalp; no rosette (mesh) of moruliform tubercles on scutum; coxa I unarmed. From *Yulella* Lawrence, 1939 by the armed eye mound; normal basichelicerite; 5-7 tarsal counts on leg I (instead of 3); coxa I unarmed. For further comparison of *Lizamontia* with other genera, see Discussion.

## Key to the three species of *Lizamontia*

**1.** Pedipalpal femur slender, its teeth shorter than tibial teeth; body background color olive brown with lighter patches at carapace and abdominal scutum; mesotergal spines in three classes of size (III > II > others) . . . . . ***L. natalensis***

– Pedipalpal femur robust, its teeth longer than tibial teeth; body background color orange brown with black markings; mesotergal spines only in two size classes (III>others) . . . . . **2**

**2.** Frontal apophysis of carapace above cheliceral socket very well developed; body outline strongly convex in lateral view; eye mound orange with lateral thirds black; penultimate ectal apophysis of pedipalp as a powerful crooked hook adjacent to last apophysis . . . . . ***L. starengai* new species**

– Frontal apophysis of carapace above cheliceral socket absent; body outline more or less flattened in lateral view; eye mound entirely black; penultimate ectal apophysis of pedipalp as a slender curved spine placed far away from the last apophysis . . . . . ***L. draconensis***

## *Lizamontia draconensis* (Lawrence, 1939) new combination

*Acumontia draconensis* Lawrence, 1939: 237, figs 7a-f; Star"ga 1992: 276 ["belongs to an as yet undescribed genus"] [types NMSA].

**TYPE LOCALITY:** SOUTH AFRICA. KWAZULU-NATAL. Cathkin Peak Forest Reserve.

**RECORDS:** SOUTH AFRICA. KWAZULU-NATAL. Little Tugela. Champagne Castle Hotel. Giant's Castle Game Reserve (Star"ga 1992).

## *Lizamontia natalensis* (Lawrence, 1931) new combination

*Acumontia natalensis* Lawrence, 1931: 420, figs 41a-e; 1933: 222, figs 11-14; Kauri, 1950: 66; Star"ga 1992: 281 ["belongs to the same undescribed genus as *A. draconensis*"] [type SAMC, holotype].

**TYPE LOCALITY:** SOUTH AFRICA. KWAZULU-NATAL. Pietermaritzburg.

**RECORDS:** SOUTH AFRICA. KWAZULU-NATAL. World's View; Shooters Hill; Swartkop; Richmond.

## *Lizamontia starengai* new species (Figs 1-18)

**ETYMOLOGY:** Species name honors the distinguished arachnologist Dr. Wojciech Star"ga, who first noticed the nature of the South African "*Acumontia*". The "e" in Star"ga bears an ogonek, therefore it should be transliterated as "en" in Latin. The ogonek (Polish for "little tail") is a diacritic hook placed under the lower right corner of a vowel in the Latin alphabet used in Polish, Lithuanian, Navajo and Tutchone. In Polish and Navajo it indicates that the vowel is nasalized. It should not be confused with the cedilla or comma diacritic marks used in other languages.

**TYPE MATERIAL:** Male holotype (NCA AcAT 2003/1658) RSA. Mpumalanga. Mount Sheba Forest Reserve, 18.i.2003, E. J. Kassimatis & A. B. Kury col. The holotype has been collected in the Wagon Trail, a small patch of forest in a much anthropically disturbed area.

**DIAGNOSIS:** Species of *Lizamontia* very closely related to *L. draconensis*, distinguished mainly by subtle differences in pedipalpal armature, specially the shape and position of the penultimate ectal apophysis of pedipalp. Body outline strongly convex in lateral view; pedipalpal femur robust, its teeth longer than tibial teeth; body background color orange brown with black markings. Tarsal counts 5(2)-6(2) / 13(3)-15(3)/ 4 / 4. Compare with 5(2)-7(2) / 9(3)-16(3)/ 4 / 4 in *L. draconensis* and 5(2)-6(2) / 10(3)-11(3)/ 4 / 4 in *L. natalensis*.

### DESCRIPTION OF MALE HOLOTYPE

**Measurements** (mm): dorsal scutum 3.53 long, 3.15 wide. Pedipalp Fe 2.15, Pa 1.12, Ti 1.38, Ta 1.39.

**Dorsal scutum and free tergites.** Body outline typical of the family, as an asymmetrical hourglass, rounded and convex, body outline strongly convex in lateral view. All scutal grooves vestigial.

**Chelicera**. Weakly developed, bulla attenuate with one dorsal setiferous tubercle, hand with four frontal small setiferous tubercles.

**Pedipalp**. Trochanter with one ventro-ectal subdistal high setiferous tubercle. Femur robust, convex dorsally, with one ventral and one dorsal row of five high setiferous tubercles each, bearing subdistal (not apical) setae. Patella with two mesal subdistal setiferous tubercles and

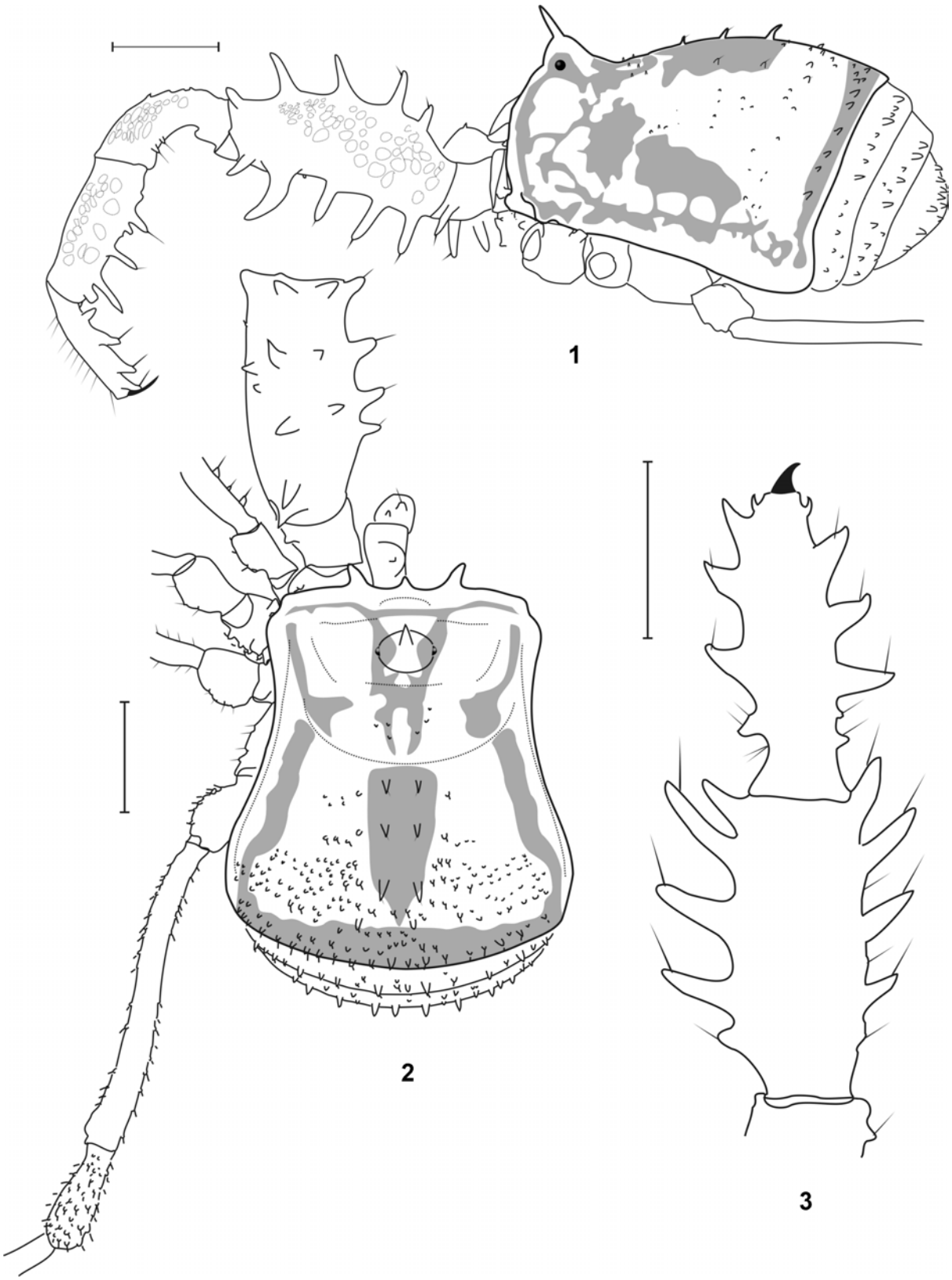



**Fig. 1-3.** *Lizamontia starengai*, new species, male holotype (NCA AcAT 2003/1658). **1.** Habitus, lateral view. **2.** Same, dorsal view. **3.** Left pedipalpus, tibia and tarsus, dorsal view. Scale bars = 1 mm.

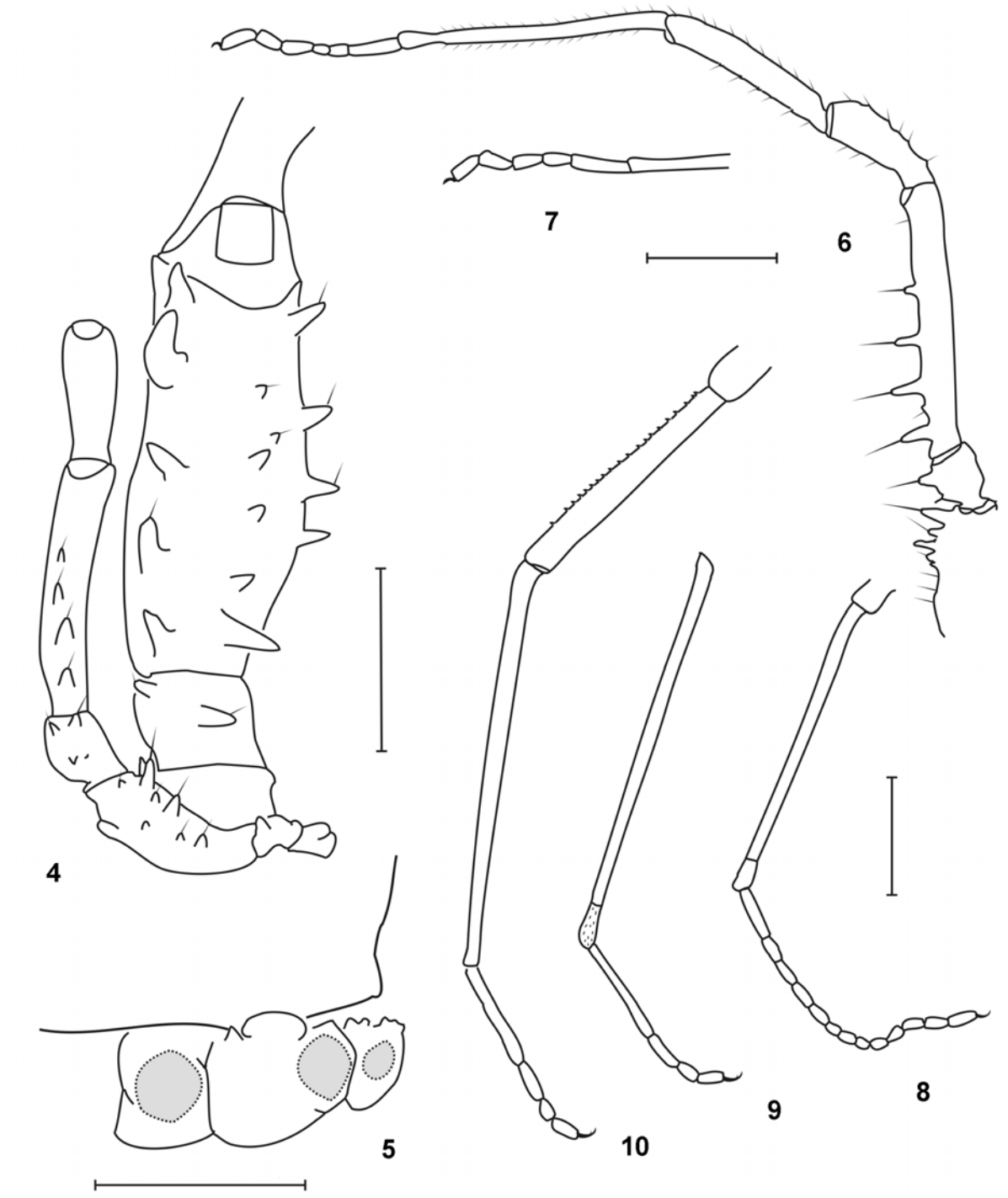
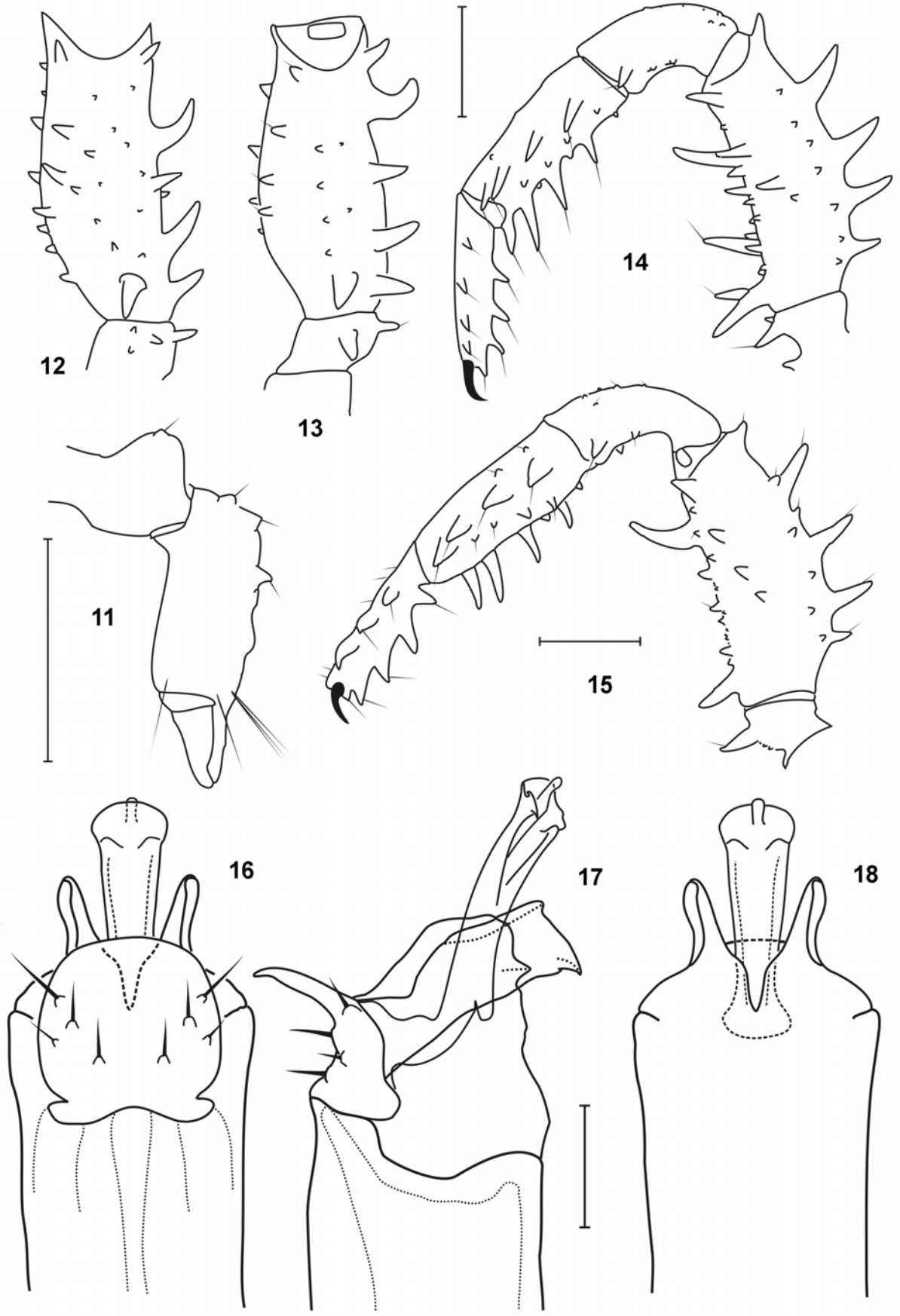



**Fig. 4-10.** *Lizamontia starengai*, new species, male holotype (NCA AcAT 2003/1658). **4.** Basal segments of right pedipalpus and leg I, ventral view. **5.** Right coxae I-III,showing dorso-basal apophyses. **6.** Right leg I, prolateral view. **7.** Left leg I, tarsus only, prolateral view. **8.** Metatarsus-Tarsus II, prolateral view. **9.** Metatarsus-Tarsus III, prolateral view. **10.** Metatarsus-Tarsus IV, prolateral view. Tarsal segmentation = 5(2)-6(2) / 13(3)-15(3) / 4 / 4. Scale bars = 1 mm.

**Fig. 11-15. 11**, **13**, **15:** *Lizamontia starengai*, new species, male holotype (NCA AcAT 2003/1658). **12**, **14:** *Lizamontia draconensis* (Lawrence, 1939), adapted from original description. **11.** Right chelicera, ectal view. **12-13.** Trochanter + Femur of right pedipalpus segments of right pedipalpus, ventral view. **14-15.** Right pedipalpus, mesal view . Scale bars = 1 mm. '
**Fig. 16-18.** *Lizamontia starengai*, new species, male holotype (NCA AcAT 2003/1658), distal part of penis: **16.** Ventral view. **17.** Lateral view. **18.** Dorsal view. Scale bar = 0.1 mm. '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small dorsal granules. Tibia ectal with four main setiferous tubercles intercalated with smaller ones and mesal with four main setiferous tubercles. Tarsus with four ectal and 3 mesal setiferous tubercles.

**Legs**. Femur I with a row of 4 ventral setiferous spines (IIIi). All podomeres finely granular.

**Color**. Body background orange-yellow with black mottling, arranged in three main irregular stripes on carapace and three on abdominal scutum, reaching posterior margin, which has a wide transverse black stripe; free tergites blackish; legs densely reticulated in black.

**Genitalia**. Ventral plate lens-shaped, uncleft, strongly concave, bearing two pairs of median setae and two pairs of latero-marginal setae. Dorso-lateral plate well developed as two stout divergent prongs. Complex of stylus very long, erect. Stylus surrounded by parastylar coat.

## Discussion — relationships of *Lizamontia*

The genera of Triaenonychidae in South Africa were never studied under a phylogenetic framework. Their diagnosis is accomplished by trivial Roewerian features, although Lawrence's (e.g. Lawrence, 1931, 1933) descriptions are more informative than Roewer's (e.g., 1923, 1931). It is noteworthy that all three species of *Lizamontia* show intraspecific variation in the number of tarsomeres of leg I (5 to 6, see Lawrence, 1931, 1933, 1939) which is a key feature in Roewer's system to define genera. Even *L. starengai*, which is known only by a single specimen, is asymmetric with regard to tarsal counts on left and right legs. The cohesion of the three species of *Lizamontia* as a possible monophyletic group cannot be supported by genitalic features (unknown for two species). It has to rest for now on the unique structure of pedipalp, with accessory longitudinal rows of femoral spines (although much weaker in *A. natalensis*) and on the unique relative size and arrangement of the spines of mesotergum, strongly resembling Malagasy genera. *Lizamontia* can be easily separated from the Madagascar lineages of Triaenonychinae (e. g. *Acumontia*, *Millomontia* Lawrence, 1959, *Millotonyx* Lawrence, 1959, *Paulianyx* Lawrence, 1959) by the ventral plate entire (not cleft as in the mentioned taxa), parastyli fused forming a coat around the stylus (not separated as two branches), eye mound elevated in a small spine as long 1/5 of the scutum (not very high, as long as 2/3 of the scutum), abdominal scutum armed with only small paired processes (not stout spines atop bulbous elevations), and metatarsus I of male unnotched. Among the South African genera, the absence of sexual dimorphism in the chelicerae and the stout dorsal and ventral armature of pedipalp separates *Lizamontia* from most other genera, and the absence of a ventral granular mat on pedipalpal femur separates it from the so called *Ceratomontia* group (Kauri, 1961). The complex structure formed by the stylus plus a pair of fused parastyli occurs in many Triaenonychidae such as the North American *Fumontana* Shear, 1977, the South African *Monomontia* Lawrence, 1931 and the South American *Triaenonyx* Sørensen, 1886 and *Valdivionyx* Maury, 1988. The presence of a well-developed bifid dorso-lateral plate resembles the New Zealand *Synthetonychia* Forster, 1954 or the South American *Diasia* Sørensen, 1902. The absence of a clearly marked dorsal plate separates *Lizamontia* readily from the typical Australian genera such as *Odontonuncia* Hickman, 1958 and *Equitius* Simon, 1880. Relationships of *Lizamontia* are still obscure while a worldwide comparative study of Triaenonychidae is not produced.

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