

Próchniewicz, M. 1994. The jumping spiders of the Ethiopian region. Part I. New genus *Langelurillus* gen. n. (Araneae, Salticidae) from Kenya. *Annales Zoologici, Warszawa* 45: 27–31, figures 1–4.

The Jumping Spiders of the Ethiopian Region. Part I. New genus *Langelurillus* gen. n. (Araneae, Salticidae) from Kenya

Maciej PRÓCHNIEWICZ

Agricultural and Teacher's University, Department of Zoology, Siedlce, Poland

Abstract. The genus *Langelurillus* gen. nov. is described. Its relationships to *Aelurillus* Simon, 1884, *Langona* Simon, 1901 and *Phlegra* Simon, 1876 are discussed. Three new species: *Langelurillus primus*, *L. holmi* and *L. spinosus* from Kenya are described.

Key words: Jumping Spiders, Araneae, Salticidae, *Langelurillus* gen. n., new species, Kenya

INTRODUCTION

The present paper contains a taxonomic description of the Salticidae from Kenya, based on the collections of Dr. Åke Holm (Zoological Museum of Uppsala University).

TAXONOMIC SURVEY

Genus *Langelurillus* gen. n.

Description. Small spiders, males 3–4, females up to 5.35 mm in body length. The carapace is high and distinctly convex, longer than broad, widest at the level of coxae III. Sides truncate. Anterior eye row recurved: anterior median eyes dorsally in-

visible. Eye field rather short (up to 30%), distinctly darker than thorax, rectangular, broader than long, or eyes form a square. Thorax with a single, light median stripe and light sides, covered with scale-like hairs. Clypeus narrower than or equal to the diameter of anterior median eyes. Abdomen ovoid, in males of some species having rectangular scutum. Legs III the longest. Cheliceral margins toothless. Tegulum of male palp large, squat. Embolus short, pointed. Palpal tibia with three apophyses: dorsal, retrolateral and ventral. The dorsal one is the largest, in some species with apical scale-like hairs (Figs 3b-c, 4d: arrows). Ventral apophysis hook-shaped, visible only after separation of tegulum. Tibia with a prolateral bump or process. Palpal femur of some species with a distal bump. The palps of certain species are clothed in long, light, feather-like setae. Copulatory openings of epigyne located

Address for correspondence: Maciej Próchniewicz, Zakład Zoologii WSR-P, 08–110 Siedlce, ul. Prusa 12, Poland

laterally. The only described female has a single posterior epigynal pocket. Insemination ducts are long, tube-like and bow-shaped. Spermathecae, multi chambered and strongly sclerotized, have short accessory glands adjacent to the first chamber of spermathecae.

Diagnosis. Species of *Langelurillus* are smaller than most of representatives of *Aelurillus* and *Langona* and have less robust legs. Hairs covering the eye field are thinner and softer than in *Aelurillus* and *Langona*. Unlike in the majority of species of *Aelurillus*, *Langona* and *Phlegra* the longitudinal, parallel light thoracic stripes are missing. The abdominal pattern consists of irregular mosaic of spots instead of longitudinal stripes. In comparison with *Aelurillus* and *Phlegra* the cheliceral margins are toothless. Males have three tibial apophyses. Epigynal sclerotized "wings" absent while present in *Aelurillus* (Prószyński 1971). Unlike in *Langona*, epigyne without posterior sclerotized, vertical wall (Hęciak and Prószyński 1983). The spermathecae are simpler and the accessory glands, just as in *Aelurillus*.

Type species: *Langelurillus primus* sp. n.

Discussion. Taxonomical position of *Aelurillus* Simon, 1884, *Langona* Simon, 1901 and *Phlegra* Simon, 1876 was discussed by Simon (1901), Petrunkevitch (1928), Harm (1977), Prószyński (1978) and Hęciak and Prószyński (1983). Simon (1901) placed *Aelurillus*, *Langona*, and *Phlegra* in the group Aelurilleae, together with *Habrocestum* Simon, 1876, *Mogrus* Simon, 1882, *Neaetha* Simon, 1884, *Pellenes* Simon, 1876, *Saitidops* Simon, 1901 and *Stenaelurillus* Simon, 1885. Petrunkevitch (1928) included the genera in the subfamily Pelleninae containing also *Avakubia* Lessert, 1927 (= *Pellosesertia* Strand, 1929), *Blaisea* Simon, 1903, *Compsodecta* Simon, 1903, *Gangus* Simon, 1902, *Habrocestum* Simon 1876, *Mogrus* Simon, 1882, *Neaetha* Simon, 1884, *Pellenes* Simon, 1876, *Pensacola* Peckham, 1885, *Philotherus* Thorell, 1895 (= *Stenaelurillus* Simon, 1885), *Saitidops* Simon, 1901 and *Stenaelurillus* Simon, 1885. In my opinion the group Aelurilleae as well as the subfamily Pelleninae contain the accidental genera, except for *Aelurillus*, *Langona* and *Phlegra* which are really closely related. Prószyński (1978) and Hęciak and Prószyński (1983) stress very close relationships

between the genera and state that they form a natural group.

The synonymisation of *Aelurillus* and *Phlegra* based on the form of male palps and on the general appearance of European species proposed by Harm (1977) seems unjustified. *Langelurillus* seems to be closely related to *Aelurillus*, *Langona* and *Phlegra*. Its toothless cheliceral margins resemble those of some *Langona* species. Feather-like hairs covering male palps are also present in some *Langona* species (Hęciak in prep.). The prolateral tibial bump or process resembles the tibial bumps in *Langona* (Próchniewicz and Hęciak, in prep.) The femoral bumps of some species of *Langelurillus* also occur in some representatives of *Aelurillus* and *Langona*. The structure of the epigyne and shape of the insemination duct are similar to *Aelurillus festivus* (C. L. Koch, 1834).

Langelurillus primus sp. n.

Figs 1a-e, 2a-e

Material. ♂ – holotype, ♀ – allotype, Kenya, Meru National Park, Dec. 25-27, 1975, Å. Holm (UUZM).

Male. Dimensions. CL: 2.20, AL: 1.95, EFL: 0.90, CH: 1.10, AEW: 1.45, PEW: 1.45, CW: 1.65.

Eye field brownish-black, thorax orange-brown with orange anchor-like pattern, abdomen yellowish-green with irregularly arranged greyish spots and rectangular scutum, spinnerets with black median bands. Maxillae, labium and sternum yellowish-orange, anterior venter orange-brown, behind epigastric fold yellow-greenish. Clypeus yellowish-orange, slightly smaller than diameter of anterior median eyes. Chelicerae yellowish-orange. Legs III slightly longer than IV, all pairs with brown hairs, spines and scopula.

Female. Dimensions. CL: 2.35, AL: 3.00, EFL: 0.90, CH: 1.20, AEW: 1.35, PEW: 1.35, CW: 1.60.

Eye field dark brown, thorax orange-brown with a median, whitish stripe of hairs, abdomen yellowish with brownish spots. Sternum, maxillae and labium yellowish, venter brownish. Yellowish-orange clypeus, slightly narrower than diameter of anterior median eyes. Chelicerae orange-brown. Legs orange-yellow; some segments with brown, proximal bands.

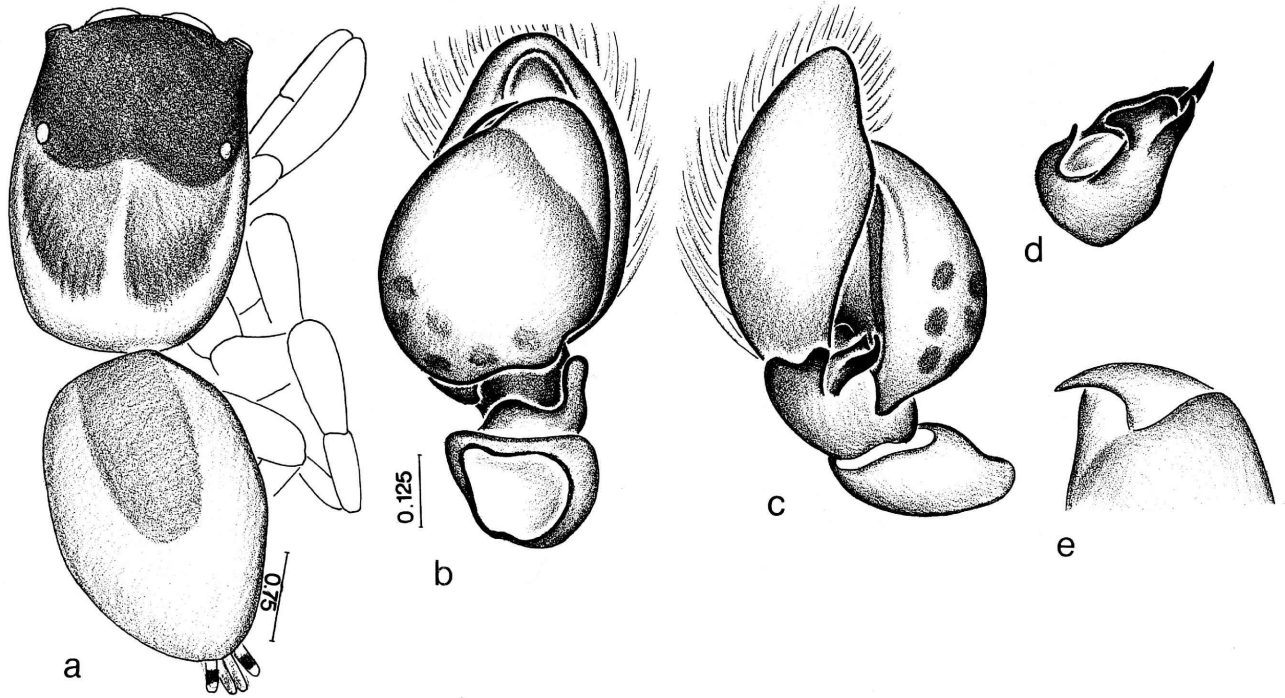


Fig. 1. *Langelurillus primus* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – tibia, ventral; tegulum separated, e – cheliceral teeth, inner view.

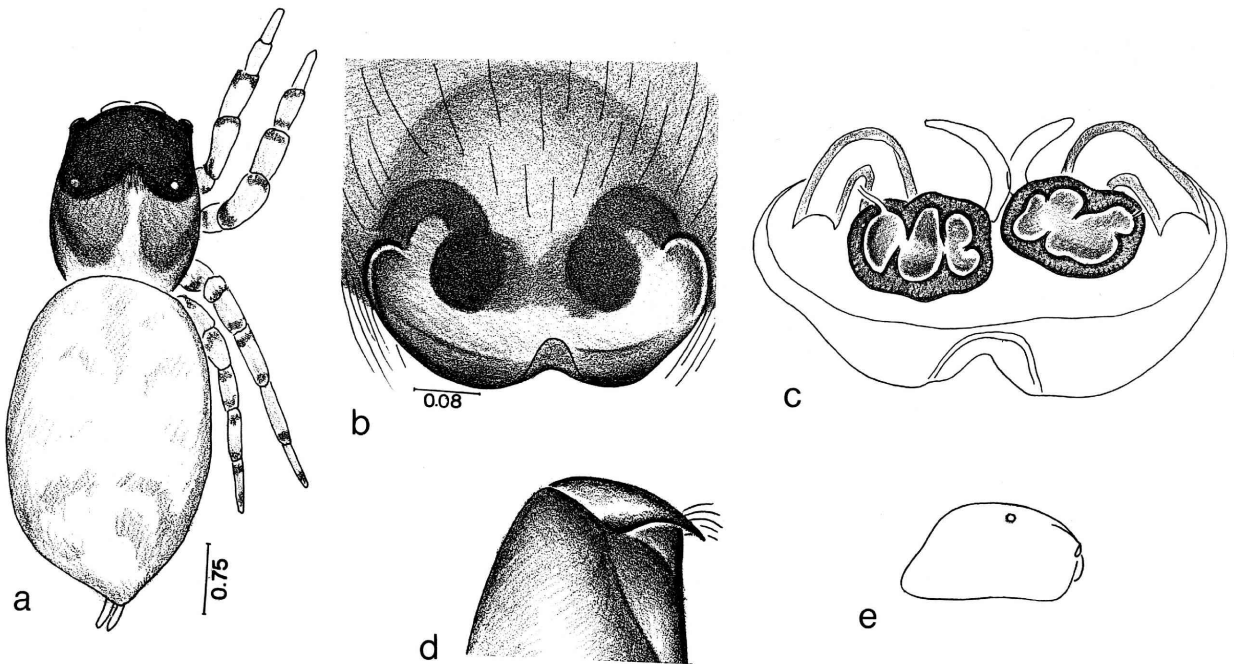


Fig. 2. *Langelurillus primus* sp. n., allotype ♀: a – general appearance, dorsal, b – epigyne, c – vulva, dorsal view, d – cheliceral teeth, inner view, e – carapace, lateral.

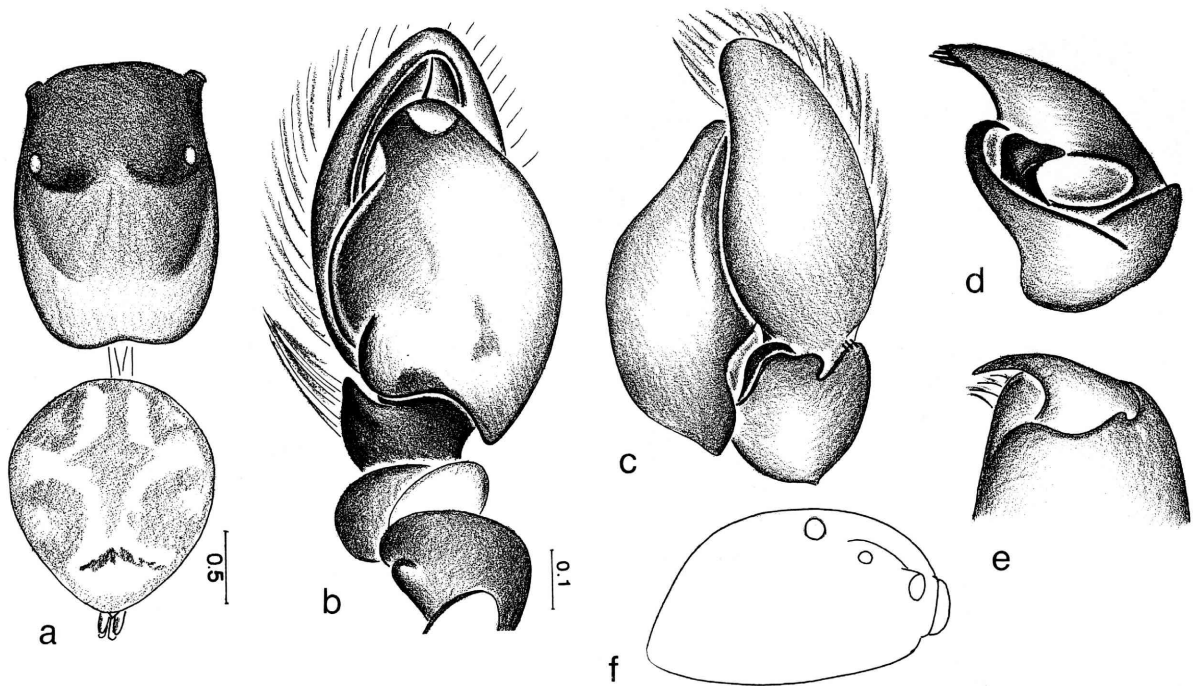


Fig. 3. *Langelurillus holmi* sp. n. holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – tibia, ventral; tegulum separated, e – cheliceral teeth, inner view, f – carapace, lateral.

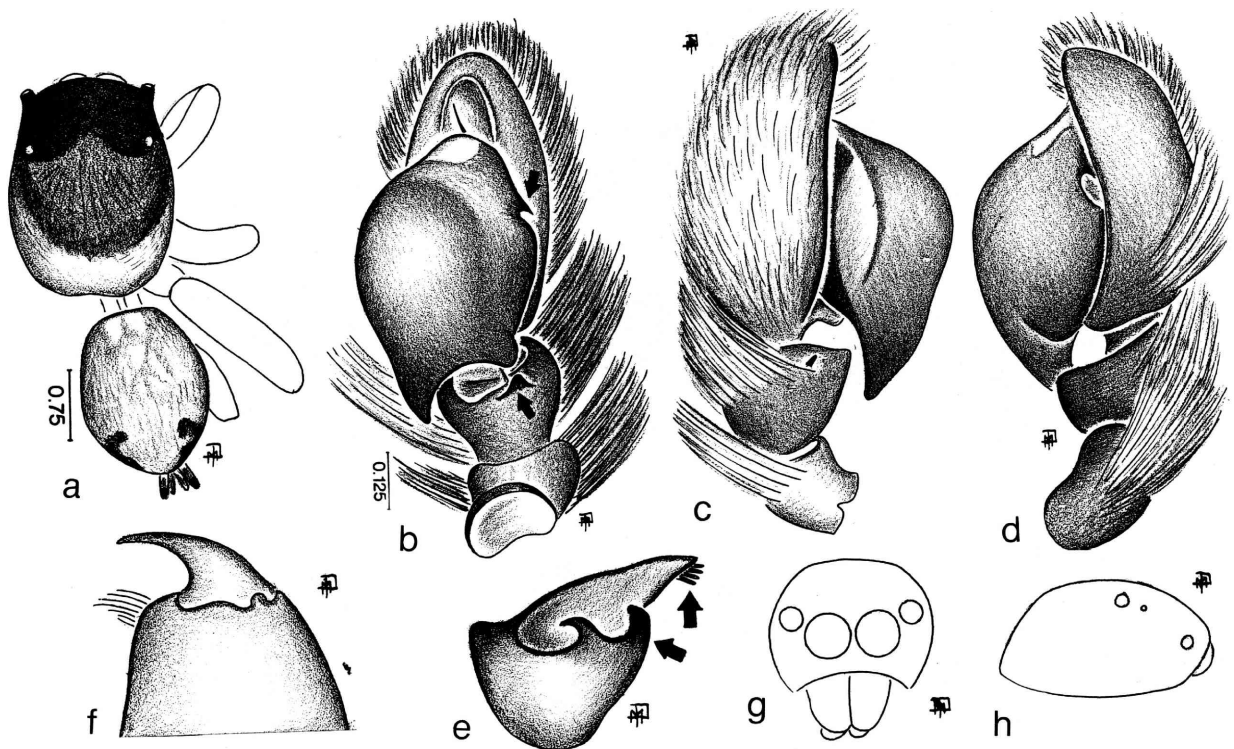


Fig. 4. *Langelurillus spinosus* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – palp, prolateral, e – tibia, ventral; tegulum separated, f – chelicera, inner view, g – carapace, frontal, h – carapace, lateral.

Diagnosis. The males can be recognized by a robust, ovoid tegulum, the shape of tibial apophyses, the presence of a triangular prolateral tibial process and a rectangular strongly sclerotized scutum. The females can be distinguished by the structure of epigyne and vulva.

***Langelurillus holmi* sp. n.**

Fig. 3a-f

Material. ♂ – holotype, Kenya, Diani Beach, March 6, 1970, Å. Holm, (UUZM).

Male. Dimensions. CL: 1.90, AL: 1.30, EFL: 0.80, CH: 1.15, AEW: 1.30, PEW: 1.20, CW: 1.40.

Eye field brown, thorax orange-brown, margins with traces of scale-like, whitish hairs; abdomen with rectangular, orange-brown scutum and yellowish pattern on brownish background. Maxillae, labium and sternum orange-yellow, venter yellowish-orange. Orange-yellow clypeus, slightly narrower than diameter of anterior median eyes. Chelicerae orange-yellow. Legs. Orange-yellow, femur III and IV with proximal dorsal spine.

Female unknown.

Diagnosis. The species can be recognized by a prolateral horn-shaped process of palpal tibia, the structure of the tibial apophyses and by a femoral, prolateral bump.

***Langelurillus spinosus* sp. n.**

Fig. 4a-g

Material. ♂ – holotype, Kenya, Kikambala Beach, Nov. 30, – Dec. 4, 1973, Å. Holm. (UUZM).

Male. Dimensions. CL: 2.45, AL: 1.70, EFL: 1.00, CH: 1.20, AEW: 1.45, PEW: 1.50, CW: 1.75.

Eye field dark brown, covered with velvety hairs, thorax orange-brown, posteriorly with whitish area of scale-like hairs; abdomen with orange anterior scutum, posteriorly yellowish, covered with brownish hairs, with two brown spots. Maxillae, labium and sternum orange-yellow. Venter light-yellow. Clypeus orange-yellow, slightly higher than diameter of anterior median eyes. Chelicerae orange-yellow. Femur and metatarsus I ventrally dark brown, tarsus I brown. Legs II-IV orange-yellow with brown hairs and spines.

Female unknown.

Diagnosis. The species differs from the others by somewhat rectangular tegulum with a retrolateral, tooth-like process, and by the shape of retrolateral process of palpal tibia.

Acknowledgements. I am indebted to the Zoological Museum of Uppsala University for the loan of the salticid material from Professor Å. Holm's collection. I am also grateful to Doctors: T. Krnstedt and M. Żabka, Professor J. Prószyński for their comments on the manuscript.

Abbreviations used in text: CL – length of carapace, AL – length of abdomen, EFL – length of eye field, CH – height of carapace, AEW – width of anterior eye row, PEW – width of posterior eye row, CW – width of clypeus.

REFERENCES

- Harm M. 1977. Revision der mitteleuropäischen Arten der Gattung *Phlegra* Simon. *Senckenbergiana Biologica*, 58: 63–77
- Hęciak S., Prószyński J., 1983. Remarks on *Langona* Simon (Araneae, Salticidae). *Annales Zoologici*, 37: 208–233.
- Prószyński J. 1971. Notes on systematics of Salticidae (Aranei). I–VI. *Annales Zoologici*, 28: 227–255.
- Prószyński J. 1978. Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel. Araneae: Fam. Salticidae, Genera *Aelurillus*, *Langona* and *Cyrba*. *Entomologica Basiliensia*, 3: 7–21.
- Simon E. 1901. Histoire naturelle des Araignées. 2: 381–668, Paris.