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The Jumping Spiders of the Ethiopian Region. Part II. New species of *Aelurillus*, *Langona*, *Phlegra*, *Stenaelurillus* (Araneae, Salticidae) from Kenya and Tanzania

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Abstract. Five new species of jumping spiders: *Aelurillus lymphus*, *Langona pecten*, *Phlegra crumena*, *Phlegra levis* and *Phlegra nuda* are described from Kenya and two: *Langona bitumorata* and *Stenaelurillus kronestedti* from Tanzania.

Key words: Jumping Spiders, Araneae, Salticidae, *Aelurillus*, *Langona*, *Phlegra*, *Stenaelurillus*, new species, Kenya, Tanzania

INTRODUCTION

The present paper contains a taxonomic description seven salticid species from Kenya and Tanzania, based on the collections of Dr. Åke Holm (Zoological Museum, Uppsala University) and Dr. Torbjørn Krønestedt (Naturhistoriska Riksmuseet, Stockholm).

The genera studied were included by Simon (1901), into a single group, Aelurilleae. However, the subsequent classification of Aelurilleae into the subfamily Pelleninae by Petrunkevitch (1928), went too far and is not justified. The relationships between *Aelurillus*, *Langona* and *Phlegra* remain an open question at this stage.

TAXONOMIC SURVEY

Genus *Aelurillus* Simon, 1884

Body relatively short, carapace laterally bulging, near posterior slope distinctiv. Eye field shorter than thorax. Chelicerae with a single retromarginal tooth and two promarginal teeth. Legs III or IV the longest. Colour pattern variable, often with longitudinal stripes. Occasionally males have scutum on abdomen (e.g. *Ael. politiventris* (Pick. – Cambr. O., 1872)). The joint between tibia and cymbium is accompanied by lamella. Generally there are two apophyses tibiales; one is rather rare: *Ael. wittmeri* Prószyński, 1978; *Ael. variegatus* (Kroneberg, 1875) at *Ael. lymphus* sp. n. A distinct bump appears on the ventral aspect of the palpal tibia in *Aelurillus* sp. of Turkmenia (Murab) Prószyński, 1979. Often

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males have a bump in the palpal femur. Epigyne with characteristic "wings", which accompany copulatory openings. Accessory glands in the first chamber of spermatecae.

Aelurillus lymphus sp. n.

Fig. 1a-f

Material. ♂ – holotype, ♂ – paratype – Kenya: Marsabit, Lake Paradise, a mountain forest at the crater rim of Golf Sokorte Guda with Lake Paradise, Jan. 15, 1975. T. Krønstedt. NRS.

Measurements (holotype – paratype): CL: 2.3–2.1, AL: 1.6–1.4, EFL: 0.8–0.8, CH: 1.15–1.2, AEW: 1.3–1.2, PEW: 1.2–1.1, CW: 1.7–1.6. Posterior eyes narrower than anterior ones.

Male. Carapace dark brown, covered with short, dark brown bristles; thorax with two, longitudinal, parallel stripes of white hairs; remnants of white hairs along lateral edges. Posterior eyes hardly narrower than anterior ones. Abdomen dark brown with longitudinal, median stripe of white hairs (Fig. 4);

spinnerets, dark brown. Maxillae, labium and sternum, yellowish brown; venter brownish with darker hairs. Clypeus as high as diameter of AME, covered with long white setae; chelicerae yellowish-brown. Legs yellowish brown with brown spines, III the longest. Palpal organ: see (Fig. 1b, c, d).

Female unknown.

Diagnosis. Single, straight, tibial apophysis, resembles *Aelurillus wittmeri* Prószyński, 1978 of Bhutan, but is not bent. Tegulum with vertical prolateral edge.

Genus *Langona* Simon, 1901

In most species males recognizable by a bunch of hard, dense hairs ventrally to a single, bent tibial apophysis. In both examined specimens of *L. bitumorata* sp. n., the bunch is absent. Palps of most species covered with striking, long, feather like hairs and scales. Palpal tibia with one or two ventral bumps, a femoral bump is present in some species. Females striking because of the shape of the epigyne

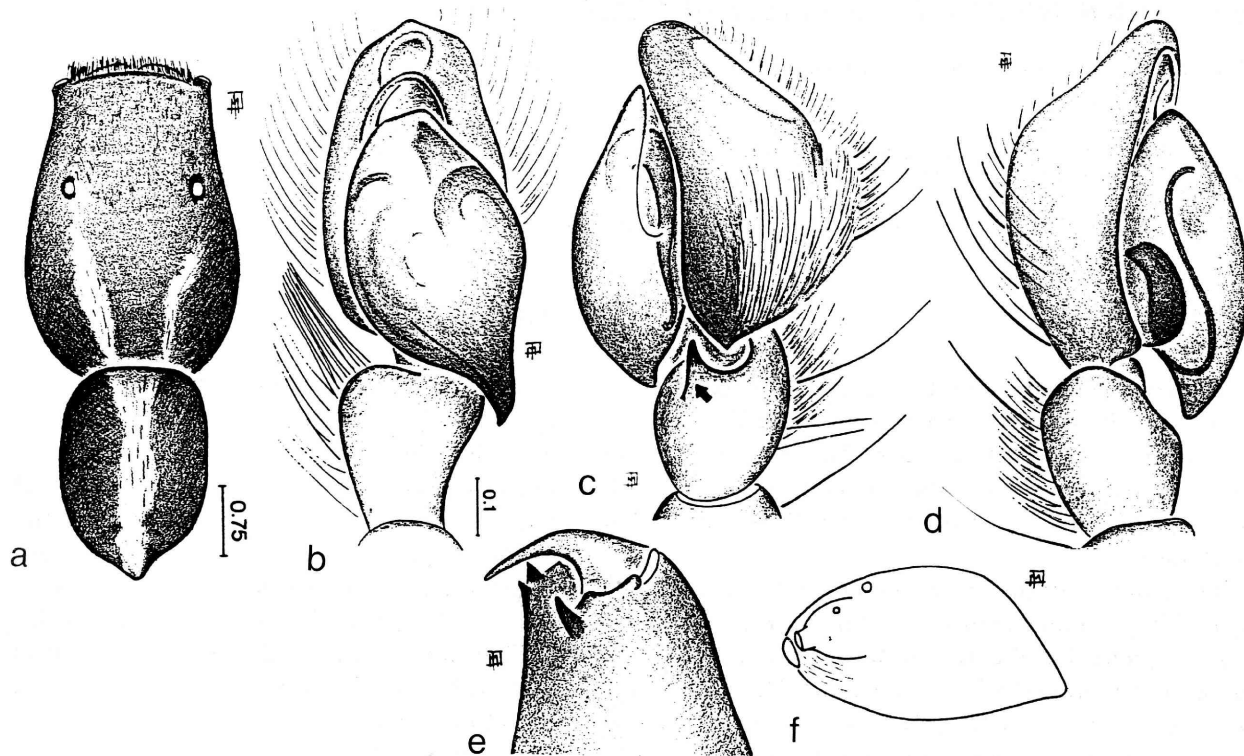
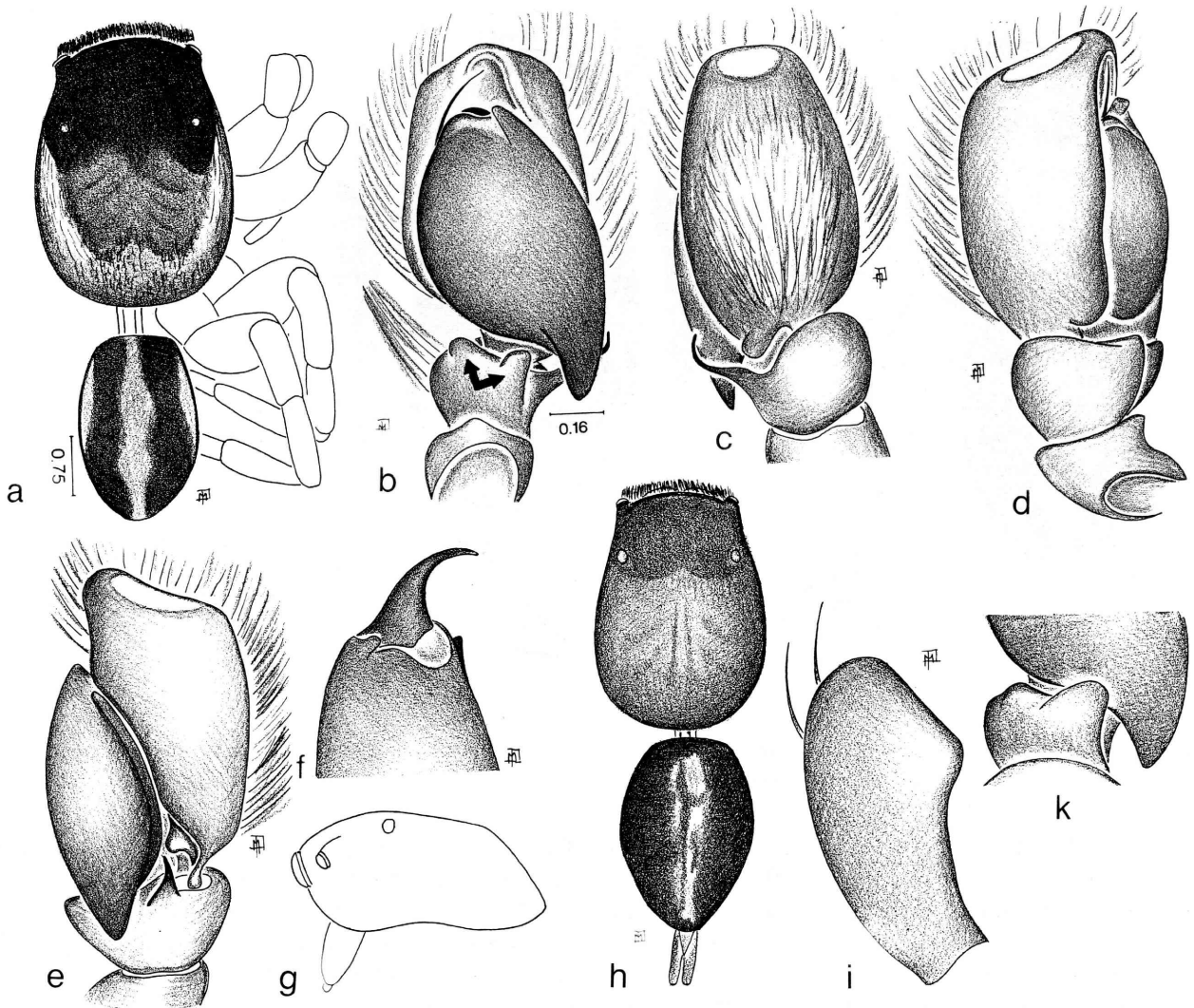


Fig. 1. *Aelurillus lymphus* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – palp, prolateral, e – cheliceral teeth, posterior, f – carapace, lateral.



Figs. 2. *Langona bitumorata* sp. n., holotype ♂: a-g, a - general appearance, dorsal, b - palp, ventral, c - palp, dorsal, d - palp, prolateral, e - palp, retrolateral, f - cheliceral teeth, posterior, g - carapace, lateral; paratype ♂: h-k, h - general appearance, dorsal, i - palpal femur, prolateral, k - palpal tibia, ventral apophysis.

(vertical posterior wall, white membrane between lateral arches), the shape of the insemination duct and the spermathecae. Cheliceral dentition variable: single, small, retromarginal, rounded tooth, or two tiny teeth; some species toothless. Legs III the longest.

Langona bitumorata sp. n.

Fig. 2a-k

Material. ♂ - holotype, ♂ - paratype - Tanzania: Camp site at Lake Manyara, Jan. 2, 1972, T. Krønstedt. NRS.

Measurements (holotype - paratype): CL: 3.05 - 3.45, AL: 2.35 - 2.3, EFL: 1.05 - 1.2, CH: 1.45 - 1.75, AEW: 1.85 - 1.9, PEW: 1.7 - 1.8, CW: 2.3 - 2.6.

Male. Eye field, brown to blackish brown, covered with greyish hairs, anterior edge with short, strong bristles. Thorax brownish-orange with some darker, radial streaks; traces of white setae behind posterior eyes and on the posterior edge of carapace. Abdomen dark brown with a longitudinal median stripe of white hairs; spinnerets brownish to black. Maxillae, labium and sternum yellowish-orange; venter yellowish; spinnerets greyish yellow. Cly-

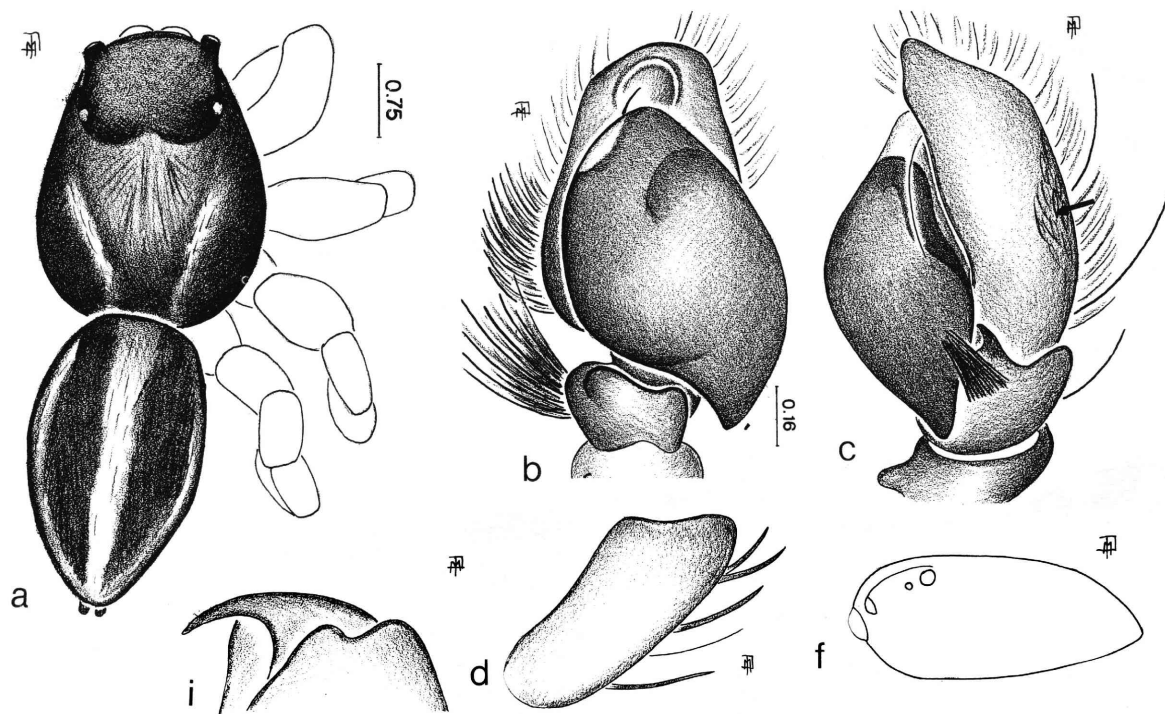


Fig. 3. *Langona pecten* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – palpal femur, retrolateral, e – cheliceral teeth, posterior, f – carapace, lateral.

peus equal to the diameter of AME, covered with long, white, soft setae; chelicerae yellowish orange. Legs orange yellow with brown spines and setae, IV the longest.

Female unknown.

Diagnosis. Palpal tibia with two ventral bumps and a hook-shaped, retrolateral apophysis; tibial bunch of setae, absent. Palpal femur with bump.

Langona pecten sp. n.

Fig. 3a-g

Material. ♂ – holotype – Kenya: Mount Elgon, 2000 m above sea level. Jan. 17, 1938, Å. Holm (UUZM).

Measurements. CL: 3.2, AL: 3.25, EFL: 0.9, CH: 1.35, AEW: 1.45, PEW: 1.5, CW: 1.9.

Male. Eye field blackish brown with short, soft, greyish hairs; thorax with two longitudinal, parallel stripes of white hairs. Abdomen brown orange with longitudinal, yellowish white, median stripe; lateral stripes whitish; spinnerets brown. Maxillae, labium and sternum yellowish orange; venter yellowish.

Clypeus height of equal to diameter of AME; chelicerae brown. Legs IV slightly longer than III.

Female unknown.

Diagnosis. Cymbium covered dorsally with whitish scales resembling that of *Langona bhutani*, palpal femur with thick, dorsal spines, chelicerae toothless.

Genus *Phlegra* Simon, 1876

The body is slender and covered with velvety, adpressed hairs; the carapace is low and elongate. Legs IV the longest (Hęciak, Prószyński 1983: 207), chelicerae with a single retromarginal tooth and two promarginal teeth. Tegulum narrower and slenderer than in *Aelurillus*. Palpal tibia with two pronged apophyses; embolus of variable width and length, pointed or rounded apically (Prószyński 1979: 316, 357–358). Epigyne without wings or posterior vertical wall; openings in the outer part of round, posterior depressions, separated by a narrow ridge; accessory glands long or medium long, accompanied the first chamber of spermathecae.

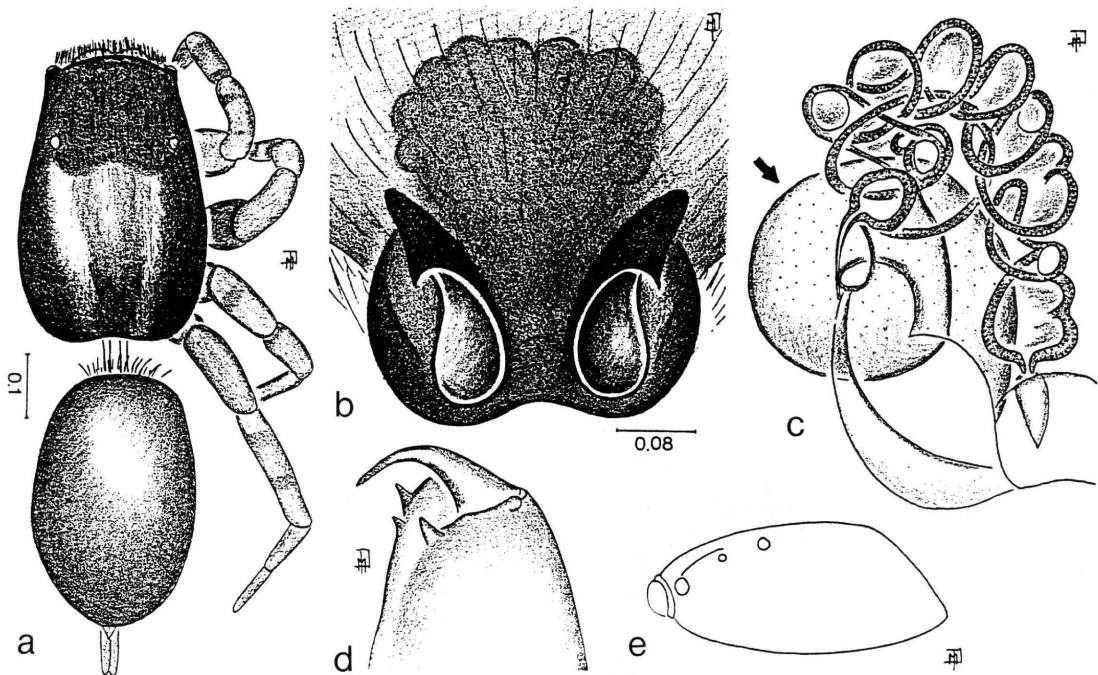


Fig. 4. *Phlegra crumena* sp. n., holotype ♀: a – general appearance, dorsal, b epigyne, c – vulva, d – cheliceral teeth, posterior, e – carapace, lateral.

***Phlegra crumena* sp. n.**

Fig. 4a-e

Material. ♀ – holotype – Kenya: Mount Elgon, Å. Holm (UUZM).

Measurements. CL: 2.05, AL: 1.9, EFL: 0.75, CH: 1.0, AEW: 1.0, PEW: 1.0, CW: 1.4.

Female. Eye field brown; sides orange brown; two longitudinal light stripes along the thorax, separated by orange-brown area, lighter than the sides. Abdomen brown with velvety, greyish hairs. Spinnerets brown. Maxillae and labium brownish-yellow; sternum yellowish-brown with a greenish tint; venter yellowish. Clypeus brown, low (1/3 of the diameter of AME); chelicerae brown-yellow. Legs yellowish brown with brown bands on the proximal and distal parts of segments; IV longest.

Male unknown.

Diagnosis. Seminal duct membranous, proximally twisted into helix shaped loop.

***Phlegra levis* sp. n.**

Fig. 5a-e

Material. ♀ – holotype – Kenya: Mount Debasien. March 13, 1938, Å. Holm (UUZM).

Measurements. CL: 1.8, AL: 1.75, EFL: 0.6, CH: 0.7, AEW: 0.9, PEW: 0.95, CW: 1.2.

Female. Eye field brown with velvety hairs; thorax orange-brownish; abdomen brownish-yellow covered with brownish hairs; spinnerets, yellowish-grey. Maxillae and labium yellow-brown; sternum and abdomen yellow. Clypeus narrower than the diameter of AME; chelicerae yellow-brown. Legs orange yellow.

Male unknown.

Diagnosis. Epigyne with two lateral, semicircular edges.

***Phlegra nuda* sp. n.**

Fig. 6a-f

Material. ♂ – holotype – Kenya: Cherangani, Kapulet Forest. 1960 m, Jan. 24, 1986, Å. Holm (UUZM).

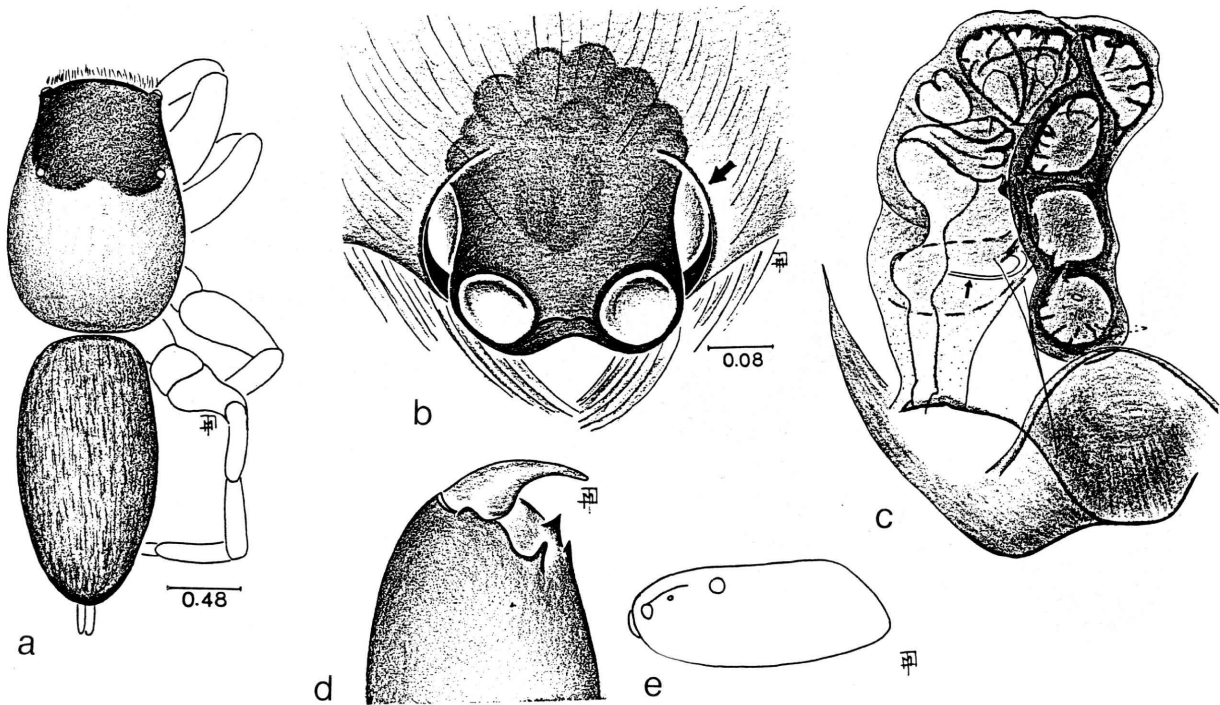


Fig. 5. *Phlegra levis* sp. n., holotype ♀: a – general appearance, dorsal, b – epigyne, c – vulva, d – cheliceral teeth, posterior, e – carapace, lateral.

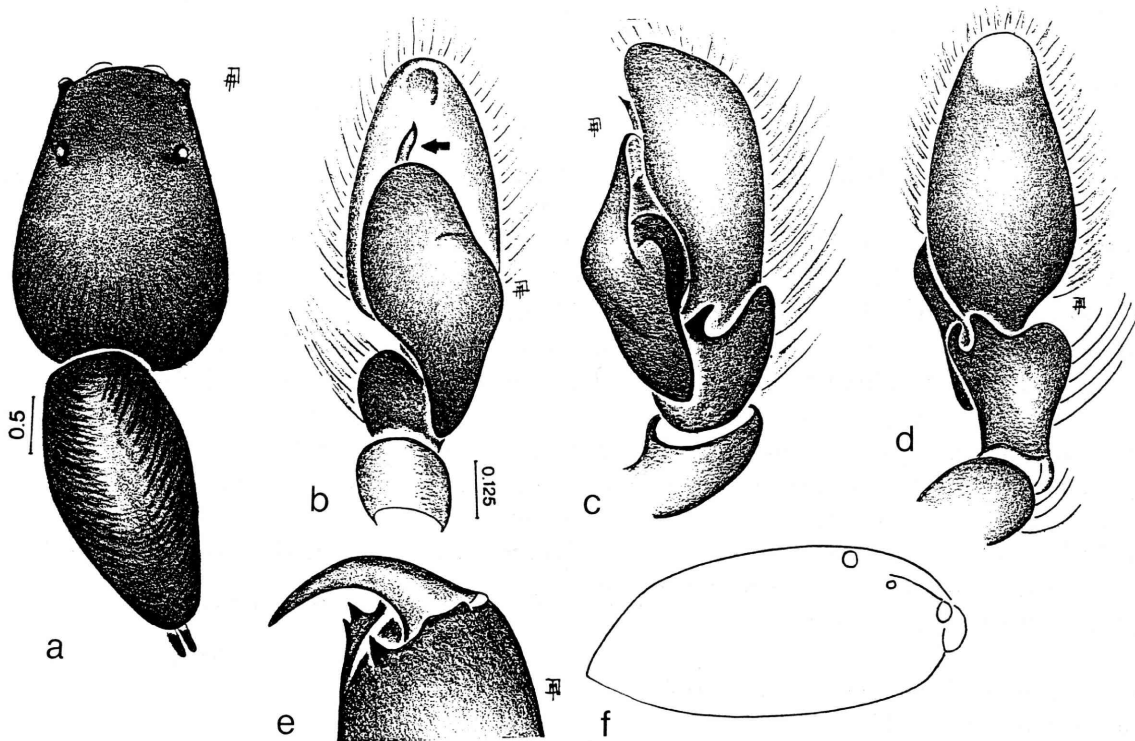


Fig. 6. *Phlegra nuda* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – palp, dorsal, e – cheliceral teeth, posterior, f – carapace, lateral.

Measurements. CL: 2.6, AL: 2.6, AEW: 1.2, CH: 0.9, PEW: 1.2, CW: 1.9, EFL: 0.8.

Male. Carapace brownish black without a striped pattern; eye field darker. Abdomen brownish with a median, longitudinal, yellowish orange stripe, posteriorly darker and covered with greyish, velvety hairs; spinnerets brown. Chelicerae light brown; maxillae, labium and sternum yellowish-brown; venter anteriorly yellowish-brown, brownish behind epigastric fold. Clypeus less than the diameter of AME. Legs I brown, II-IV, brownish yellow, spines and setae of similar colour.

Female unknown.

Diagnosis. Embolus wide and flat, similar to that of *P. sogdiana* Charitonov, 1946 (cf. Prószyński, 1979: Figs. 260, 268-269), apically more pointed than rounded.

Genus *Stenaelurillus* Simon, 1885

Eye field covered with short bristles, distinctly stronger than in *Aelurillus*; carapace with streaks in some species. Abdominal pattern irregular, with-

out longitudinal stripes; spinnerets long. Chelicerae with one retromarginal tooth, two promarginals, separated or fused. Legs IV the longest but the difference from legs III insignificant. Tibia of male palp with two apophyses: broad, dorso-lateral, covered with short, strong hairs; ventral one between tegulum and cymbium. Embolus variable. Spermathecae bag-like, simple.

Stenaelurillus kronstedti sp. n.

Figs 7a-k, 8a-e

Material. ♂ – holotype, ♀ – allotype – Tanzania: Camp Site at Lake Manyara. Febr. 1, 1972. T. Krønstedt (NRS).

Measurements (♂ – ♀ –): CL: 2.6–2.9, AL: 2.5–3.5, EFL: 0.9–1.0, CH: 1.1–1.3, AEW: 1.–1.6, PEW: 1.5–1.5, CW: 2.0–2.3.

Male. Carapace dark brown with thick bristles, longitudinal stripes of white hairs dorsally and laterally; edge of carapace brown. Abdomen with a proximal bunch of brownish hairs, medially with an irregular pattern, brownish with white spots of

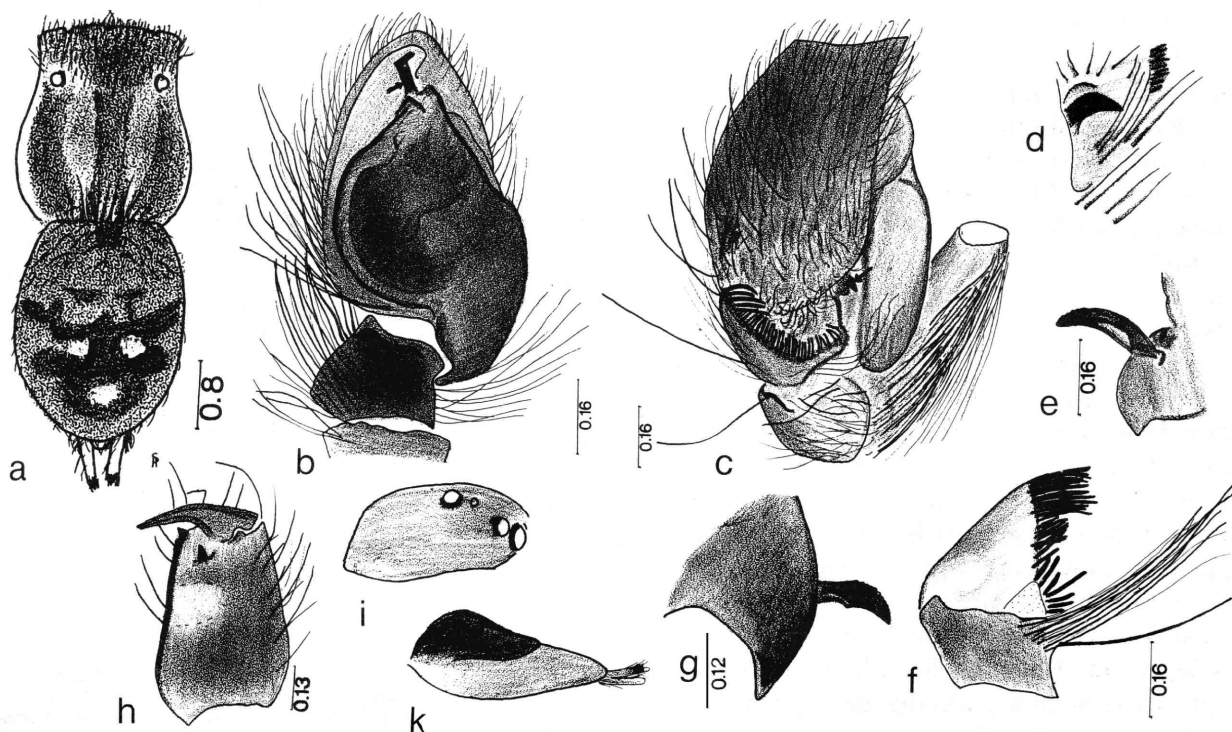


Fig. 7. *Stenaelurillus kronstedti* sp. n., holotype ♂: a – general appearance, dorsal, b – palp, ventral, c – palp, retrolateral, d – lateral apophysis, between tegulum and cymbium, e, g – lateral apophysis, in two various views, tegulum separated, f – tibial apophysis, dorsal, tegulum separated, h – cheliceral teeth, posterior, i – carapace, lateral, k – abdomen, lateral.

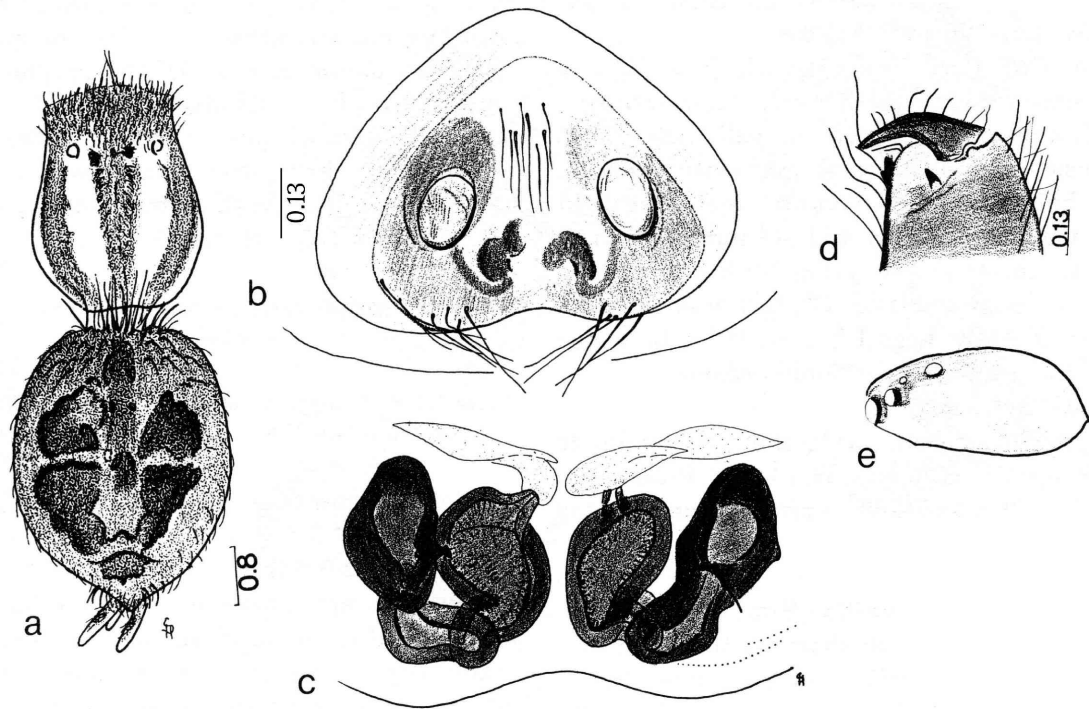


Fig. 8. *Stenaelurillus kronestedti* sp. n., allotype ♀: a – general appearance, b – epigyne, c – vulva, dorsal, d – cheliceral teeth, posterior, e – carapace, lateral.

hairs; scutum present. Spinnerets long with bands of black hairs. Labium and maxillae brown; sternum yellow with white hairs; venter light yellow with brownish spots. Clypeus brown; anterior eyes surrounded with white scales; chelicerae brown. Legs brownish yellow with brown and white adpressed setae and long, bristle-like spines; first legs the darkest.

Female. Carapace with three broad, longitudinal stripes of brown hairs; eye field dark, with a triangular spot of brown hairs between the posterior eyes; abdomen brownish yellow with darker brown pattern. Maxillae, labium and sternum whitish yellow; venter pale yellow with bunches of brown setae. Clypeus yellowish-brown; chelicerae brownish. Legs brownish yellow, femora III and IV lighter; tarsi and metatarsi with long bristles.

Diagnosis. Embolus hook-like; dorso-lateral apophysis triangular, basally broad, with short, thick bristles at the edge; lateral apophysis small, pointed, lying between tegulum and cymbium. Fe-

male can be recognized by the internal epigynal structure.

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Abbreviations for the collections: NRS – Naturhistoriska Riksmuseet, Stockholm, UUZM – Zoological Museum of Uppsala University.

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 carapace.

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