Genus	Vol. 23(2): 201-221	Wrocław, 30 VI 2012

Redescriptions of some jumping spiders described by R. Lessert from Central Africa (Araneae: Salticidae)

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Abstract. Redescriptions of five species described by Lessert from Kilimanjaro massif (1925 - *Dendryphantes hewitti***,** *Hasarius berlandi*, *Cosmophasis fagei*, *Langona rufa*, *Plexippus auberti*) and four from Congo (1927 - *Hyllus carbonarius*, *Hasarius biprocessiger*, *Simaetha castanea*, *Tusitala lutzi*) are given. Two new genera, *Hasarinella* and *Simaethulina* are established. *Langelurillus difficilis* Wesołowska & Russell-Smith is synonymised with *Langelurillus rufus*. Six new combinations are proposed: *Evarcha carbonaria* ex *Hyllus carbonarius*, *Icius fagei* ex *Cosmophasis fagei*, *Hasarinella berlandi* ex *Hasarius berlandi*, *Langelurilus rufus* ex *Langona rufa*, *Plexippoides biprocessiger* ex *Hasarius biprocessiger* and *Simaethulina castanea* ex *Simaetha castanea*. Female of *Tusitala lutzi* and male of *Plexippus auberti* are described for the first time. *Dendryphantes hewitti* and *Plexippus auberti* are recorded for the first time in Kenya.

Key words: arachnology, taxonomy, Salticidae, redescriptions, Afrotropical Region

INTRODUCTION

Roger de Lessert (1878-1945) was one of most prominent contributors to the knowledge of African spiders. In 1915-1946 he published 21 papers devoted to Araneae, including two larger, multipart papers on spiders of Congo and Kilimanjaro massif, from where he described several tens of salticid species. As his descriptions were rather detailed, often accompanied by legible drawings, the majority of his species were correctly identified by the later students. Some of them have been synonymised or redescribed. Nevertheless, there still remains a group of species creating identification problems. Nine of them are redescribed here using the type material (supplemented by

newly collected material in two cases). As the result, several species are reclassified and placed in different genera.

The studied specimens came from the following collections:

American Museum of Natural History, New York (AMNH);
Florida State Collection of Arthropods, Gainesville, USA (FSCA);
Muséum d'Histoire Naturelle de la Ville, Genève (MHN);
Museum of Natural History, Wrocław University (MNH);
Naturhistoriska Riksmuseet, Stockholm (NR);
Royal Museum for Central Africa, Tervuren (MRAC).

SYSTEMATICS

Dendryphantes hewitti Lessert, 1925

Figs 1-11

Dendryphantes hewitti Lessert 1925: 472.

Diagnosis

The species is closely related to *D. aethiopicus* Wesołowska & Tomasiewicz, 2008 from Ethiopia and to *D. nicator* Wesołowska & van Harten, 1994 from Yemen. The male may be distinguished by the details of the embolic structure; the terminal apophysis accompanying the embolus has slightly curved tip, whereas in two other species the tip is harpoon-like (compare Figs 3, 6 here with Fig. 27 in Wesołowska & Tomasiewicz (2008) and Fig. 7 in Wesołowska & van Harten (2007). The female differs by having shorter seminal ducts, their initial parts have trough form.

Material

TANZANIA: Kiboscho, 3000 m a.s.l., 3°20'S:37°19'E, 5♂ (only one with both palps), 24♀ (syntypes), leg. Y. Sjöstedt (NR); KENYA: Mbita Point, 0°25'S:34°13'E, shore of lake Victoria, 1150 m a.s.l., 1♂, I.1998, leg. R. Jackson (FSCA); same locality, 1♀, I.1998 (FSCA); same locality, 1♀, I.2002 (FSCA); same locality, 1♂, 2♀, I.2003 (MRAC).

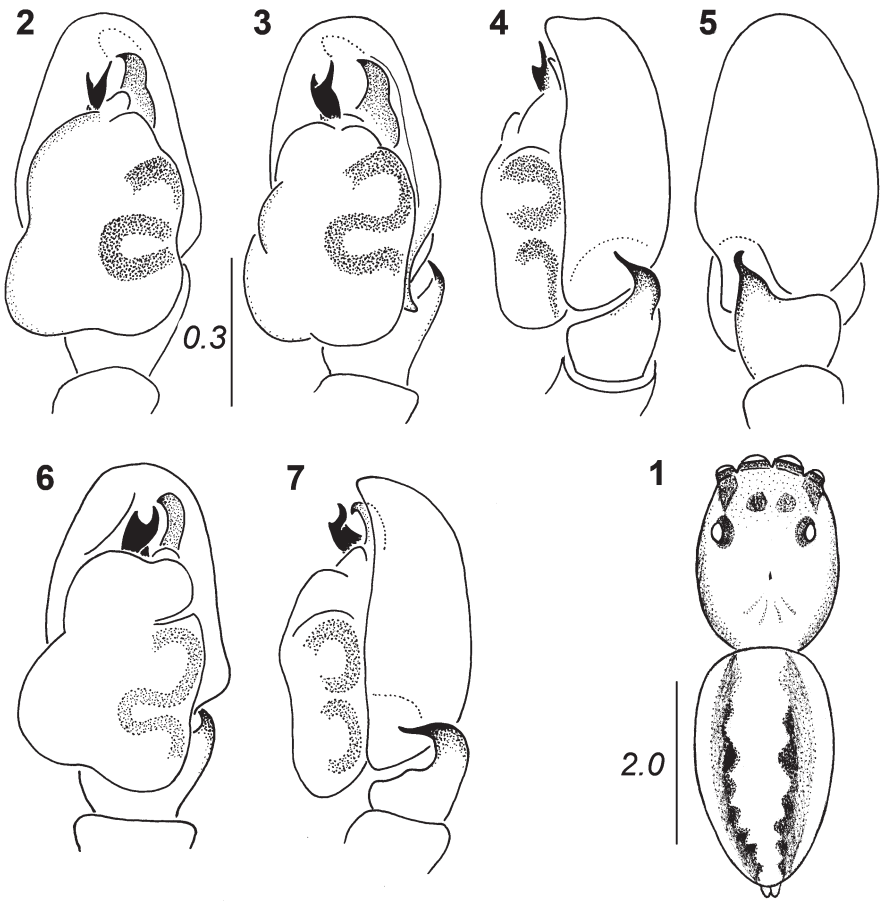
Redescription

Measurements [in mm] (male/female). Cephalothorax: length 1.8-2.2/1.9-2.0, width 1.3-1.5/1.4-1.8, height 0.5-0.7/0.6-0.7. Abdomen: length 2.1-2.6/2.6-3.5, width 1.3-1.6/1.6-2.0. Eye field: length 0.7-0.8/0.8, anterior width 1.0-1.1/1.1, posterior width 1.1-1.2/1.2.

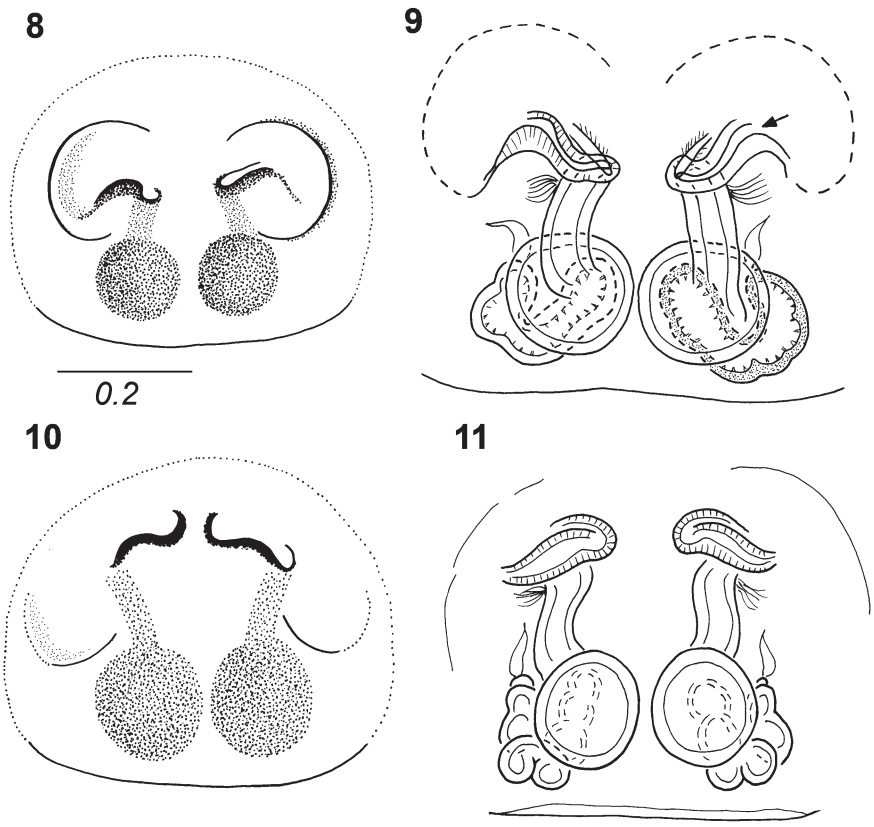
Male. General appearance as in Fig. 1. Small spider with flattened body. Carapace oval, reddish brown, darker at margins, eye field lighter, with two blackish patches in centre in some specimens, eyes surrounded with dark rings. Fovea readily visible. Brown bristles near eyes, whitish hairs on slopes. Clypeus low, brownish. Mouthparts light brown, sternum orange. Abdomen ovoid, with wide serrate median light streak, framed laterally with brown area, sides of abdomen yellowish white, venter light with

trace of dark stripe. Abdominal hairs delicate, mostly brown with admixture of whitish ones. In Kenyan specimens abdomen darker, ferruginous, clothed in reddish hairs, venter also dark. Spinnerets yellowish. Legs yellow to brown, first pair slightly darker and longer than remaining. Leg hairs dense, greyish. Pedipalps with short tibiae. Tibial apophysis curved, with thin end, hidden in cymbial grove (Figs 4, 5, 7). Embolus short, bifid, with accompanying large dark membranous apophysis (Figs 2, 3, 6).

Female. Habitus similar to male, abdomen lighter coloured, only with traces of dark patches posteriorly. Epigyne with two rounded depressions, copulatory openings hidden in trough-like channels (Figs 8, 10). Internal structures as in Figs 9, 11, accessory glands fall into initial part of seminal ducts, receptacles two-chambered, first of them spherical.



1-7. *Dendryphantes hewitti*, male: 1 – general appearance, 2, 6 – palpal organ, ventral view, 3 – palpal organ, ventrolateral view, 4, 7 – palpal organ, lateral view, 5 – palpal organ, dorsal view.1-5 – syntype, 6-7 – Kenyan specimen



8-11. *Dendryphantes hewitti*, female: 8, 10 – epigyne, 9, 11 – internal structure of epigyne. 8-9 – syntype, 10-11 – Kenyan specimen

Distribution

Hitherto known only from Kilimanjaro massif in Tanzania, for the first time recorded in Kenya.

Evarcha carbonaria (Lessert, 1927), comb. n.

Figs 12-13

Hyllus carbonarius Lessert 1927: 450.

Diagnosis

The male palp structure is similar to that in *Evarcha bakorensis* Rollard & Wesołowska, 2002 from western Africa, but differs in shape of tibial apophysis, which has acute tip (blunt in the latter species). Additionally, bulb is more rounded.

Material

CONGO (Zaire): Faradje, 3°43'N:29°43'E, 2♂ (syntype) (MHN).

Redescription

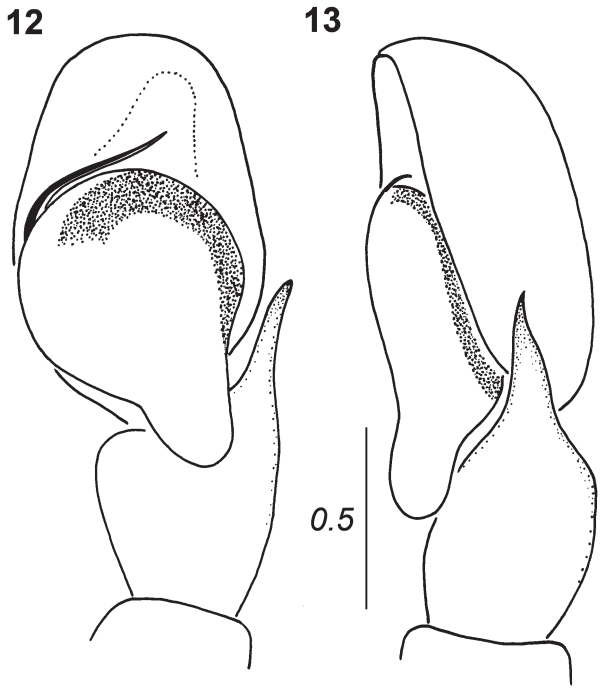
Measurements. Cephalothorax: length 3.3, width 2.6, height 1.4. Abdomen: length 3.6, width 2.0. Eye field: length 1.4, anterior width 2.0, posterior width 1.9.

Male. Medium-sized spider. Carapace oval, moderately high, brown, vicinity of eyes slightly darker. Fovea clearly visible. Some delicate grayish hairs on carapace. Mouthparts and sternum brown. Abdomen ovoid, brown, lighter in anterior half, with traces of submarginal whitish patches posteriorly. Legs brown, bearing brown hairs and spines. Palpal structure as in Figs 12, 13. Tibia rather long, tibial apophysis single, straight, pointed (Fig. 13). Bulb rounded with large posterior lobe, embolus compound, thin, bent towards bulb (Fig. 12).

Female unknown.

Distribution

Known only from the type locality.



12-13. *Evaracha carbonaria*, male, syntype: 12 – palpal organ, ventral view, 13 – palpal organ, lateral view

Hasarinella n. gen.

Type species: *Hasarius berlandi* Lessert, 1925.
Gender: feminine.

Etymology
It is diminutive of *Hasarius*, the genus in which the type species has been originally placed.

Diagnosis
The genus belongs to fissidentati salticids, the body is elongated, legs long and eye field slightly rectangular, wider anteriorly. The male palp has short – placed on the bulb tip – embolus, oval tegulum (without vertical fissure typical for *Hasarius*) and short tibial apophysis. The epigynal pocket is very wide, copulatory openings placed anteriorly (versus posteriorly in *Hasarius*).

Hasarinella berlandi Lessert, 1925 comb. n.

Figs 14-18

Hasarius berlandi Lessert 1925: 511.

Diagnosis
The species slightly resembles *Hasarius roeweri* Lessert, 1925 from Tanzania, the male differs by the presence of two tegular process accompanying embolus. The female is distinctive in having a unique form of epigyne, with very wide pocket at epigastric furrow.

Material
TANZANIA: Kibonoto, 3°11'S:37°6'E, 1♂, 1♀ (syntypes), leg. Y. Sjöstedt (NR).

Redescription
Measurements (male/female). Cephalothorax: length 3.0/2.4, width 2.4/1.8, height 1.3/1.0. Abdomen: length 3.4/2.9, width 1.7/2.0. Eye field: length 1.5/1.2, anterior width 2.0/1.7, posterior width 2.1/1.7.

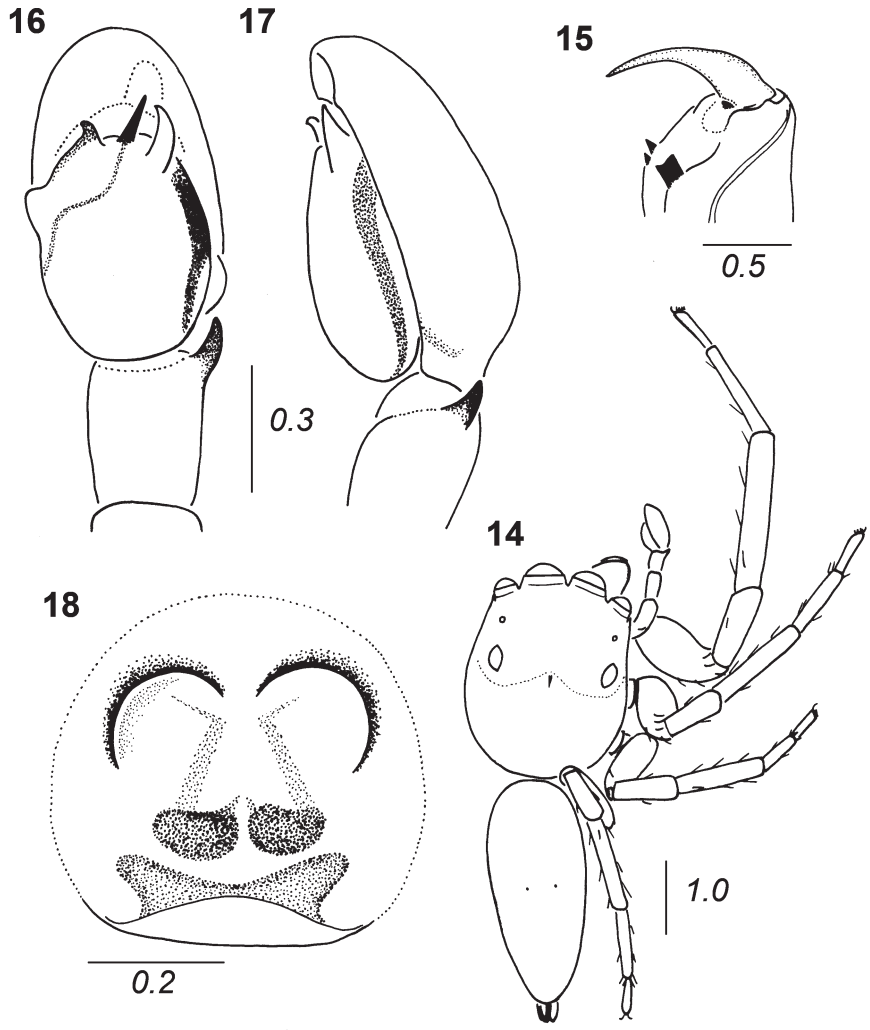
Male. General appearance as in Fig. 14. Carapace light brown, lighter at margins, eye field orange, dark patches near posterior eyes. Eyes large, fovea well visible. Few long bristles in vicinity of eyes, scarce delicate light hairs on carapace slopes. Clypeus low, mouthparts light brown. Chelicerae large, promargin with two small teeth, retromargin with large bifid tooth, sclerotized slat on ventral surface of chelicera (Fig. 15). Sternum light yellow. Abdomen elongate, narrow, yellow, covered with short delicate hairs, slightly longer and denser at anterior edge, venter whitish. Spinnerets yellowish. Legs yellowish, first pair clearly longer than others. Spines long, brown, leg hairs light. Pedipalp (only right present) light, clothed in long whitish hairs. Tibial apophysis very

short, small angle on retrolateral edge of cymbium, bulb oval, embolus straight and short, accompanied by two tegular apophyses (Figs 16, 17).

Female. Similar to male, but slightly smaller, abdomen wider, legs shorter (only right legs preserved). Epigyne large, with wide pocket at epigastric furrow and two rounded depressions anteriorly (Fig. 18).

Distribution

Known only from the type locality.



14-18. *Hasarinella berlandi,* male and female, syntypes: 14 – general appearance of male, 15 – cheliceral dentition of male, 16 – palpal organ, ventral view, 17 – palpal organ, lateral view, 18 – epigyne

Remarks

Inclusion of this species into *Hasarius* Simon, 1871 is not justified, it is unlike the type species of the genus. Its morphological characters and structure of genitalia are unique, so new genus for the species is proposed. The species shows some similarities to *Hasarius roeweri*, which is probably also misplaced. Unfortunately, the female of the latter species is unknown, that makes the settlement of its generic status difficult.

Icius fagei (Lessert, 1925), comb. n.

Figs 19-26

Cosmophasis fagei Lessert 1925: 453.

Diagnosis

The male has elongate abdomen, very long first leg, palp with short embolus and unique shape of dorsal tibial apophysis. The female differs from others in the genus in having a clearly shorter seminal ducts and copulatoryvopenings placed close to each other.

Material

TANZANIA: Kibonoto, 3°11'S:37°6'E, 1♂, 1♀ (syntypes), leg. Y. Sjöstedt (NR); same data, 2♂, 2♀ (syntypes) (MHN).

Redescription

Measurements (male/female). Cephalothorax: length 2.5-2.7/2.0-2.2. Abdomen: length 3.8-4.6/2.9-3.8. Eye field: length 1.2-1.3/1.1-1.2, anterior width 1.6-1.7/1.3-1.5, posterior width 1.5-1.6/1.4-1.5.

Male. General appearance as in Fig. 19, body elongate. Carapace oval, moderately high, pitted, brown with darker rings surrounding eyes. Some long bristles in vicinity of eyes, delicate scarce light hairs on carapace. Clypeus not marked. Chelicerae long, yellow, unidentate (Fig. 20). Endites and sternum yellowish, labium light brown with paler tip. Abdomen narrow and very long, its length three to four times longer than its width, light yellow width median wide brownish streak, traces of darker pattern on sides (Fig. 19); probably bleached (in the original description: black end of abdomen and spinnerets). Venter yellow with traces of darker median band. Legs long, first pair clearly longer than others, with especially long femora and tibiae. Coloration of legs yellow, first leg has brown streaks along lateral surfaces of femur, patella and tibia, three pairs of spines on tibia ventrally, two pairs on metatarsus. Traces of similar dark streaks on tibia and metatarsus of IV leg. Pedipalps relatively small, yellow. Bulb of irregular shape, embolus very short (Fig. 21). Retrolateral tibial apophysis thin (Figs 21-23), additional dorsal apophysis lobe-shaped (Figs 21, 24).

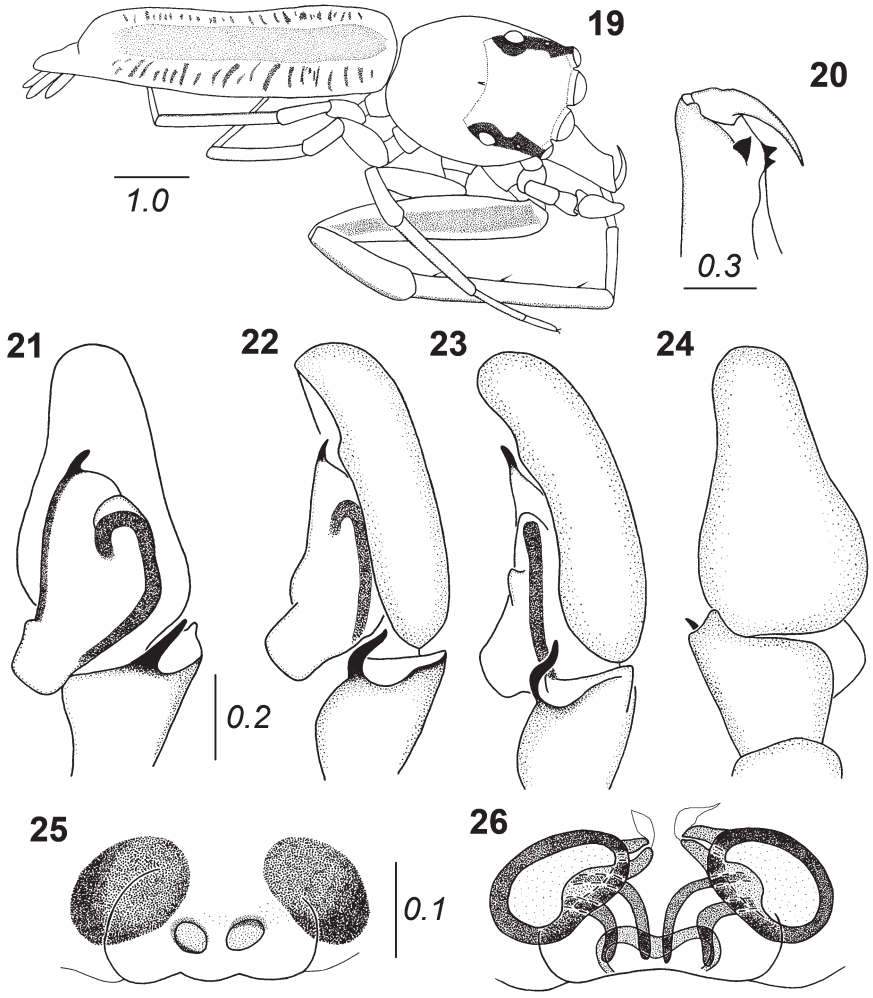
Female. Slightly smaller than male. Carapace as in male. Mouthparts and sternum yellowish. Abdomen wider than carapace, 2.5 times longer than wide, yellow without pattern, one pair of sigilla in centre. Spinnerets long. Legs light yellow, shorter than in male, fourth ones the longest. Epigyne small, weakly sclerotized, with shallow oval depression and two round copulatory openings in centre (Fig. 25). Internal structure simple, seminal ducts short, receptacles oval (Fig. 26).

Distribution

Hitherto known only from Kilimanjaro massif in Tanzania.

Remarks

Inclusion of this species in *Cosmophasis* Simon, 1901 is unfounded, as it is unrelated to the type species of the genus. Morphological characters, especially general structure of genitalia show similarities to members of *Icius* Simon, 1876.



19-26. *Icius fagei*, male and female, syntypes: 19 – general appearance of male, 20 – cheliceral dentition of male, 21 – palpal organ, ventral view, 22 – palpal organ, ventrolateral view, 23 – palpal organ, lateral view, 24 – palpal organ, dorsal view, 25 – epigyne, 26 – internal structure of epigyne

Langelurillus rufus (Lessert, 1925), comb. n.

Figs 27-34

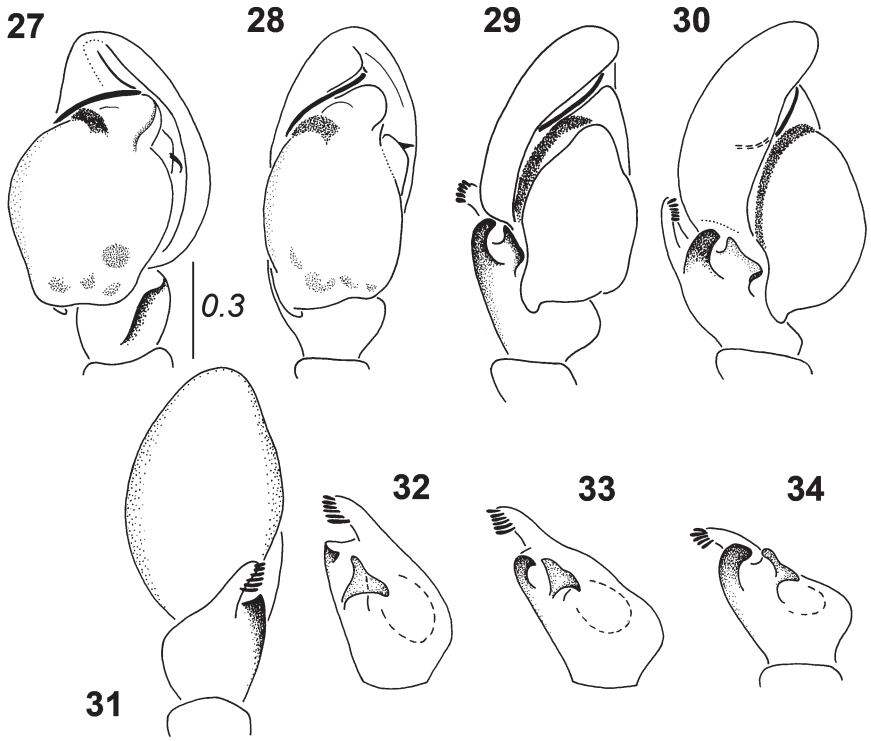
Langona rufa Lessert 1925: 475.
Langelurillus difficilis Wesołowska & Russell-Smith, 2000: 52, **syn. n.**

Synonymisation

Langelurillus difficilis is junior synonym of *Langona rufa*. Structure of their male palps is identical, also abdominal pattern is similar (the type of *L. rufa* is damaged and deprived of abdomen, but in the original description: brownish black with median lighter band, serrated posteriorly). The species is member of *Langelurillus* Próchniewicz, 1994 (the presence of a small prolateral tegular apophysis is synapomorphy for this genus).

Diagnosis

The male is closely related to *Langelurillus manifestus* Wesołowska & Russell-Smith, 2000 from Tanzania, and has very similar structure of palpal organ. These species



27-34. *Langelurillus rufus*, male, holotype: 27 – palpal organ, ventroprolateral view, 28 – palpal organ, ventral view, 29 – palpal organ, ventroretrolateral view, 30 – palpal organ, lateral view, 31 – palpal organ, dorsal view, 32 – palpal tibia, ventroapical view, 33 – palpal tibia, ventroretrolateral view, 34 – palpal tibia, lateral view

are easily separated by coloration of abdomen (yellowish with median brown streak in *L. manifestus* but brown with yellowish median streak in *L. rufus*).

Material

TANZANIA: Kibonoto, 3°11'S:37°6'E, ♂ (holotype), damaged, without abdomen and palps, leg. Y. Sjöstedt (NR, palps of this specimen in MHN).

Comparative material

TANZANIA: Mkomazi Game Reserve, Ibaya camp, 3°55'S:37°45'E, pitfall trap, 6♂, 1♀, paratypes of *Langelurillus difficilis*, 5-10.V.1995, leg. A. Russell-Smith (MNH).

Redescription

Measurements. Cephalothorax: length 2.1, width 1.9, height 1.0. Eye field: length 0.8, anterior width 1.5, posterior width 1.4.

Male. Specimen damaged, without abdomen. Cephatothorax high, with short eye field, distance between anterior lateral eyes slightly larger than between posterior ones. Carapace brown, eyes surrounded by black rings. Long brown bristles near eyes, denser on eye field anteriorly, delicate short greyish hairs on carapace slopes, white hairs on clypeus. Chelicerae brown, two diminutive teeth on promargin. Legs dark yellow bearing brown hairs. Palpal structure as in Figs 27-31, bulb very convex, dorsal tibial apophysis with few black scales, two retrolateral apophyses, ventral of these shovel-shaped (Figs 32-34). Small tegular apophysis (Figs 27, 28) characteristic for the genus.

Description of female in Wesołowska & Russel-Smith (2000).

Distribution

Species known only from Tanzania (Kilimanjaro massif and Mkomazi Game Reserve).

Plexippoides biprocessiger (Lessert, 1927), comb. n.

Figs 35-40

Hasarius biprocessiger Lessert 1927: 459.

Diagnosis

The structure of palpal organ is similar to that in *Plexippoides regius* Wesołowska, 1981 from Far East, but differs in having forked tibial apophysis.

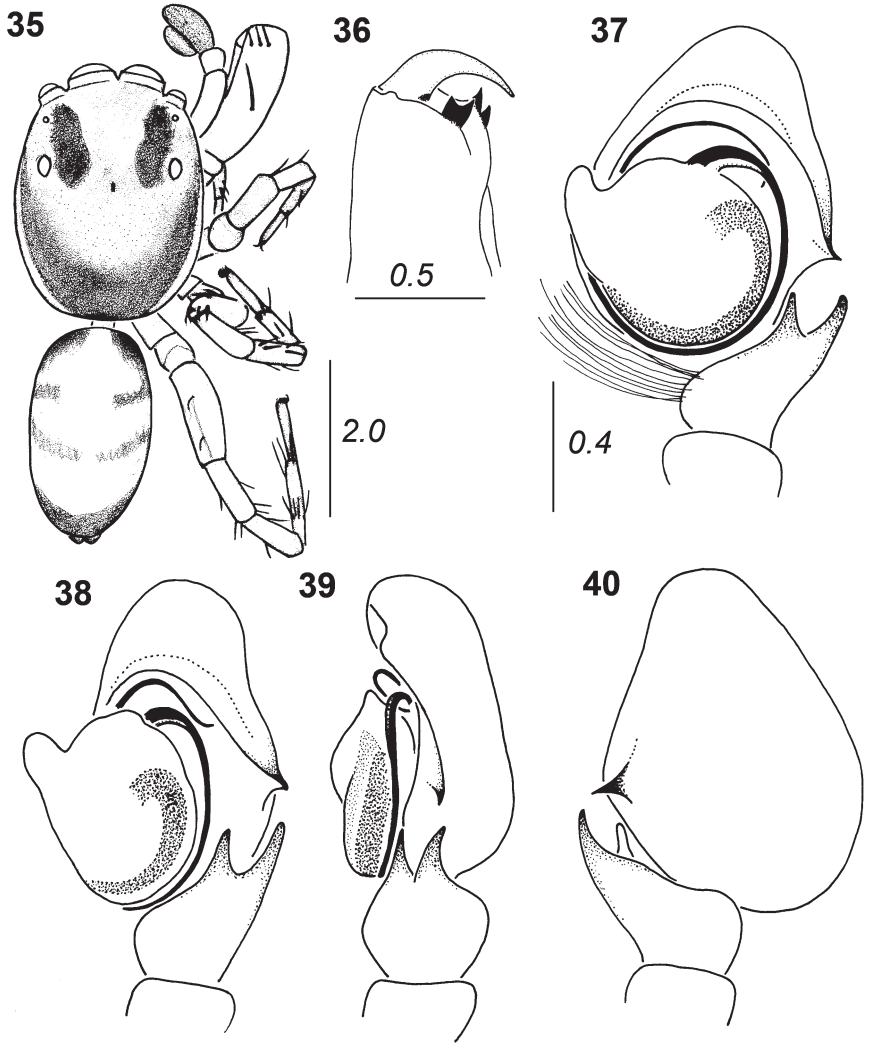
Material

CONGO (Zaire): Avakubi, 1°20'N:27°34'E, 1♂ (syntype) +1 additional palp (MHN).

Redescription

Measurements. Cephalothorax: length 2.7, width 1.9, height 1.1. Abdomen: length 2.2, width 1.8. Eye field: length 1.0, anterior width 1.4, posterior width 1.5.

Male. General appearance as in Fig. 35. Carapace oval, moderately high, gently sloping posteriorly, brown, darkening towards margins, with large black patches on eye field (Fig. 35). White hairs form two bands along lateral edge of carapace. Carapace clothed in brown hairs clinging to surface, long brown bristles near eyes. Clypeus very low, brown. Chelicerae fissidentate, with short fang (Fig. 36). Mouthparts and sternum light brown. Abdomen oval, yellowish with traces of brownish grey transverse streaks (Fig. 35). Delicate brown hairs on abdomen. Venter light. Spinnerets brown. Legs



35-40. *Plexippoides biprocessiger*, male, syntype: 35 – general appearance of male, 36 – cheliceral dentition of male, 37 – palpal organ, ventral view, 38 – palpal organ, ventrolateral view, 39 – palpal organ, lateral view, 40 – palpal organ, dorsal view

yellow, bearing brown hairs. Spines dark, numerous. Spination of leg I: femur with single very long spine on dorsal surface centrally and three spines at apical end, tibia 1-1 prolaterally and 2-2 ventrally, metatarsus 2-2 ventrally. Pedipalps brown, clothed in long brown hairs. Bulb rounded with prolateral lobe, embolus long, encircling bulb (Figs 37, 38). Tibial apophysis bifurcated, sharp process on retrolateral edge of cymbium, corresponding with tibial apophysis (Figs 38-40).

Female unknown.

Distribution

Species known only from the type locality.

Remarks

The new generic status of the species, proposed here, is uncertain and remains to be settled. Finding the unknown female of this species and examination of structure of its epigyne would help in solving this question. The pedipalp structure is very similar to members of *Plexippoides* Prószyński, 1984. However, the presence of bifid tooth on cheliceral retromargin makes it unlike (*Plexippoides* spp. have unidentate chelicerae). *Plexippoides* is distributed in eastern part of Palaearctic and Orient, with two species in northern east Africa.

Plexippus auberti Lessert, 1925

Figs 41-46

Plexippus auberti Lessert 1925: 503.

Diagnosis

The species may be distinguished by the abdominal pattern (median lighter streak is framed by thin white lines). The structure of the palpal organ similar to that in *Plexippus baro* Wesołowska & Tomasiewicz, 2008 from Ethiopia, but the tibial apophysis has bifid tip (pointed in other species of this genus). The female has clearly wider anterior epigynal depression than in congeners.

Material

TANZANIA: Kilimanjaro, Ngare Nanyuki, 3°9'S:36°51'E, 1♀, (syntype, in bad condition), leg. Y. Sjöstedt (NR); KENYA: Mbita Point, 0°25'S:34°13'E, shore of lake Victoria, 1150 m a.s.l., 1♂,1♀, XII.2002, leg. R. Jackson (FSCA); same locality, 2♀, I.2002 (FSCA).

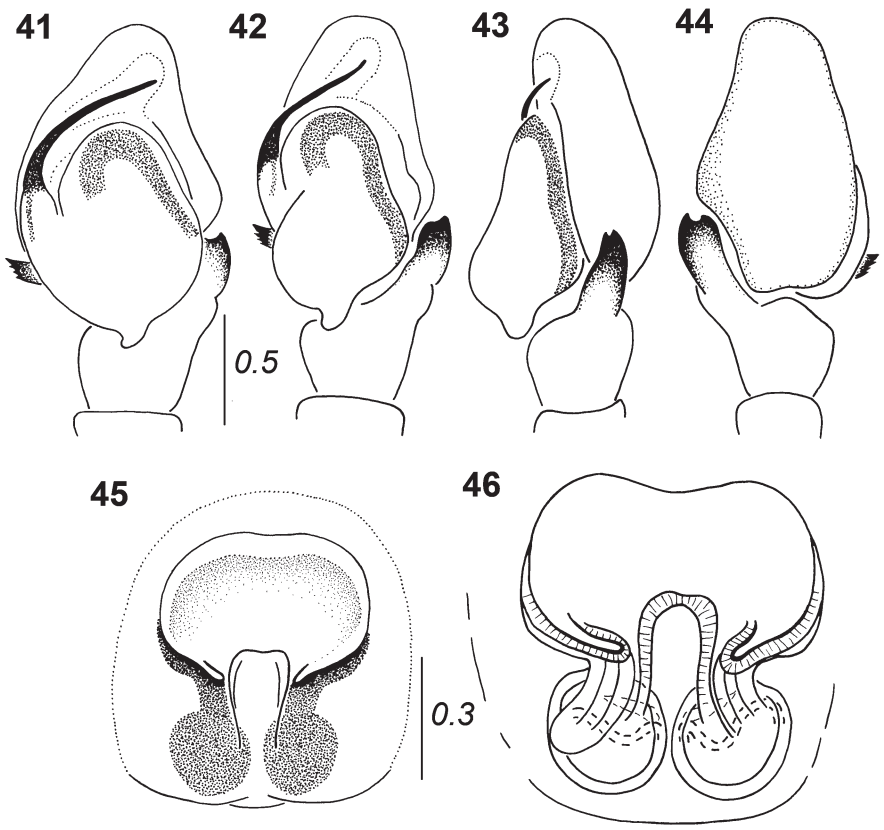
Redescription

Measurements (male/female). Cephalothorax: length 4.0/3.5, width 3.0/2.5, height 1.6/1.4. Abdomen: length 4.5/4.0, width 2.7/2.0. Eye field: length 1.5/1.5, anterior and posterior width 2.2/2.0.

Male. Large spider ranging c. 10 mm. Carapace oval, broadest posteriorly, brown, darkening towards margins, two white streaks composed of light hairs on sides. Foveal

area orange, same coloured streak running from fovea to posterior edge of carapace. Whole carapace clothed in brown hairs, dense long brown bristles on eye field. Chelicerae and labium brown, gnathocoxae and sternum slightly lighter. Abdomen ovoid, striped, with two marginal brown streaks and median yellowish fawn, the last framed by thin white lines. Sides yellowish white, venter tinged with grey. Dorsum of abdomen covered with brown hairs, among them scarce long bristles, denser at anterior edge. Spinnerets dark brown. Legs brown, dorsal surfaces of femora lighter. Leg hairs dense brown, spines dark. Pedipalps light brown, only femora darker. Palpal femora without "brush" of long dense hairs (typical for many *Plexippus* spp.). Brown hairs on cymbium. Tibial apophysis long, with notch on tip (Figs 43, 44), short serrate keel at base of embolus (Figs 41, 42).

Female. General appearance similar to male, but light streaks on sides of carapace absent. Hairs covered body denser. Epigyne as in Fig. 45, with broad anterior depression. Copulatory openings wide spaced, seminal ducts very short (Fig. 46).



41-46. *Plexippus auberti,* male and female, Kenyan specimens: 41 – palpal organ, ventral view, 42 – palpal organ, ventrolateral view, 43 – palpal organ, lateral view, 44 – palpal organ, dorsal view, 45 – epigyne, 46 – internal structure of epigyne

Distribution

Hitherto known only from the type locality in Kilimanjaro massif, recorded for the first time in Kenya.

Remarks

The male of this species is described for the first time.

Simethulina n. gen.

Type species: *Simaetha castanea* Lessert, 1927.
Gender: feminine.

Etymology

It is diminutive of *Simaetha*, the genus in which the type species has been originally placed.

Diagnosis

The genus is distinctive in having a unique form of chelicera with strongly sclerotized serrate keel on external edge. It shows some similarities to Australian genera *Simaetha* Thorell, 1881 and *Simethula* Simon, 1902 in body shape and in general plan of the female genitalia, but differs from them in the following characters: short tibia of male palp, lack of a cymbial apophysis, lack of epigynal pocket.

Simaethulina castanea (Lessert, 1927), comb. n.

Figs 47-54

Simaetha (?) *castanea* Lessert 1927: 469.

Diagnosis

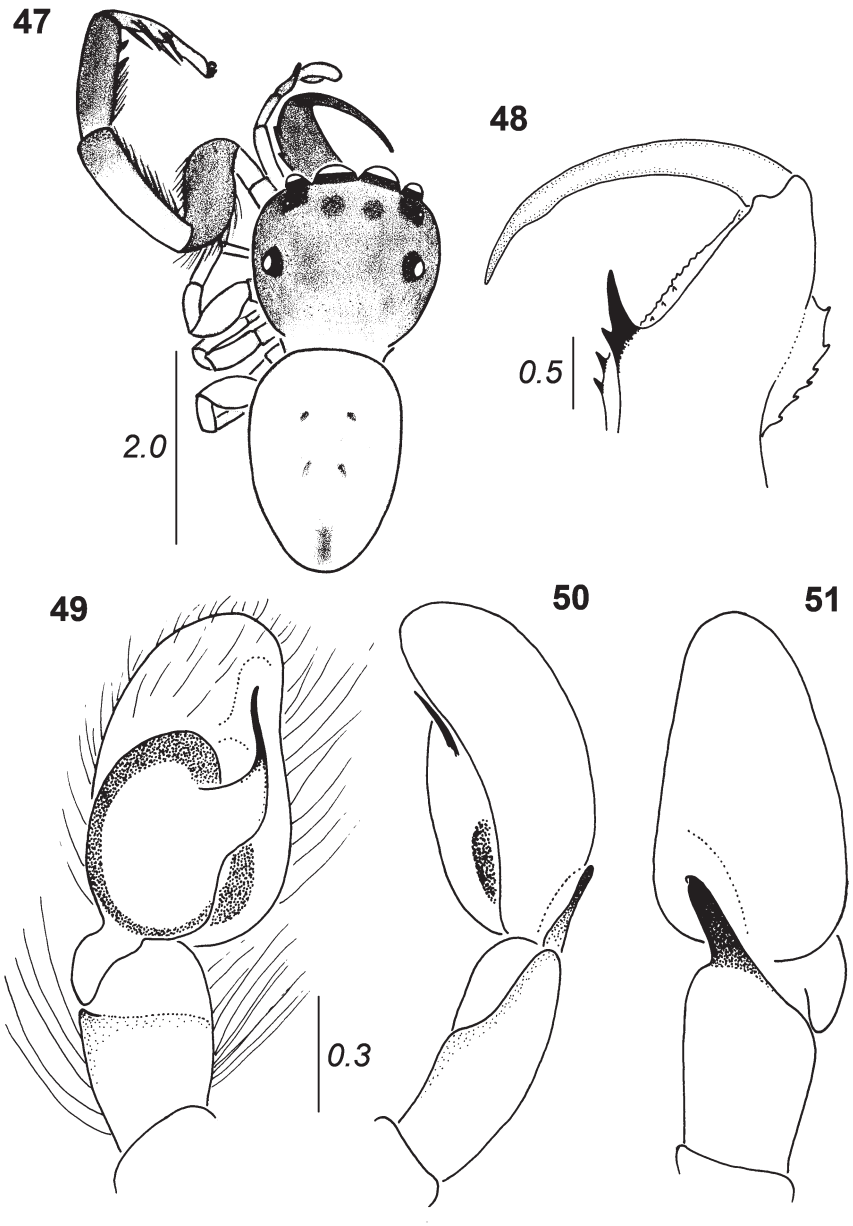
The species is distinctive in having large serrate keel on external edge of chelicerae (in both sexes). The male palp has bulb with ligulate posterior lobe. Female is distinguishable by the epigyne with long and wide median fissure.

Designation of lectotype

Lessert (1927) described the species on basis of several specimens from three localities in Congo, series from Faradje being indicated as types. Some of these specimens are damaged now, so a well preserved male is designated as lectotype to stabilise the nomenclature.

Material

CONGO (Zaire): Faradje, 3°43'N:29°43'E, ♂ (lectotype, designated here, in a separate vial); together with lectotype, 2♂, 9♀ (paralectotypes) (NR).



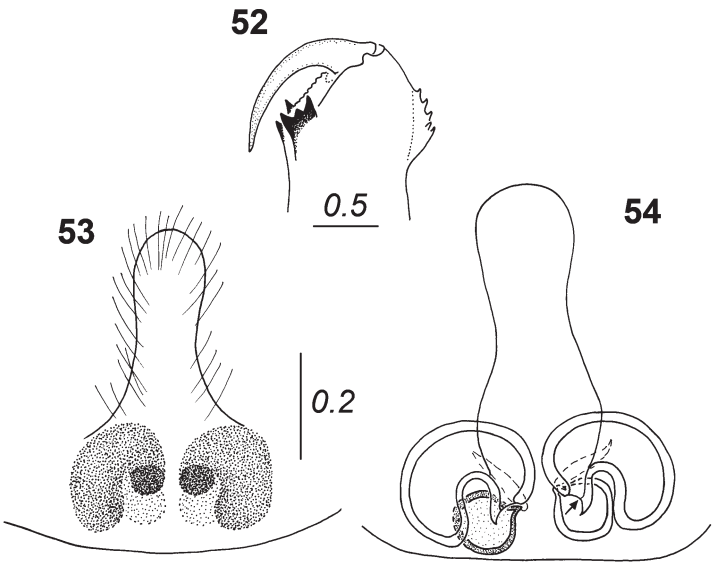
47-51. *Simaethulina castanea,* male, paralectotype: 47 – general appearance, 48 – cheliceral dentition, 49 – palpal organ, ventral view, 50 – palpal organ, lateral view, 51 – palpal organ, dorsal view

Redescription

Measurements (male/female). Cephalothorax: length 2.2-3.0/2.3-2.7, width 1.9-2.7/2.2-2.5, height 1.2-1.7/1.4-1.6. Abdomen: length 2.8-3.2/3.5-4.1, width 1.6-2.3/2.3-2.5. Eye field: length 1.2-1.7/1.4-1.6, anterior width 1.4-1.9/1.6-1.9, posterior width 1.7-2.4/2.0-2.4.

Male. General appearance as in Fig. 47. Spider robust, strongly flattened. Carapace flat, greatly broadened, almost square, reddish brown with black rings around eyes and two dark spots on centre of eye field. Eye field large, trapezoid, distance between posterior lateral eyes clearly larger than between anterior laterals, first and second rows of eyes close to each other. Whole carapace pitted, covered with delicate colourless hairs, only in vicinity of eyes some longer bristles. Clypeus not marked, anterior median eyes touch base of chelicerae. Chelicerae very large with long fang, anterior margin with two teeth, posterior with large bifid tooth, along external rims of chelicerae large serrate kill (Fig. 48). Labium and gnathocoxae long, brown. Sternum brown. Abdomen ovoid, flattened, dorsum covered with large greyish fawn scutum. Venter slightly lighter. Spinnerets short. First pair of legs considerably stouter and longer than others, brown, bearing long and thin light hairs. Tibia I with 2 prolateral and 3 retrolateral spines, metatarsus with two pairs of ventral spines. Legs II-IV greyish yellow. Pedipalps long and thin, tibia elongate with flat dorsal apophysis (Figs 50, 51), bulb with long posterior lobe (Fig. 49).

Female. Similar to male but larger, carapace slightly narrower. Chelicerae smaller than in male, retromargin with large tricuspid tooth, serrate kill on external side pres-



52-54. *Simaethulina castanea,* female, paralectotype: 52 – cheliceral dentition, 53 – epigyne, 54 – internal structure of epigyne

ent (Fig. 52). Epigyne as in Fig. 53, with long depression. Internal structure simple, receptacles spherical (Fig. 54).

Distribution

Species known only from Congo.

Remarks

Lessert included this species into the Australian genus *Simaetha* Thorell, 1887, on the basis of similarities in body proportions. Probably these similarities are result of convergence rather than relationships, but the problem requires further (e.g. molecular) study. The presence of sclerotized serrate keel on chelicerae is unique. Also genital characters are different, so new genus for the species is proposed.

Tusitala lutzi Lessert, 1927

Figs 55-64

Tusitala lutzi Lessert 1927: 462.

Diagnosis

The male may be easily distinguished by the shape of chelicerae with large process on dorsal surface and large shallow cave on ventral one. The structure of female genitalia resembles that in *Tusitala yemenica* Wesołowska & van Harten, 1994 (seminal ducts form single loop in both species), but receptacula in *T. lutzi* are elongate, whereas in the second species are rounded.

Material

CONGO (Zaire): Avakubi, 1°20'N:27°34'E, 1♂ (holotype, without palps and chelicerae) (AMNH) (palps of this specimen in MHN); same locality, 2♀ (MHN).

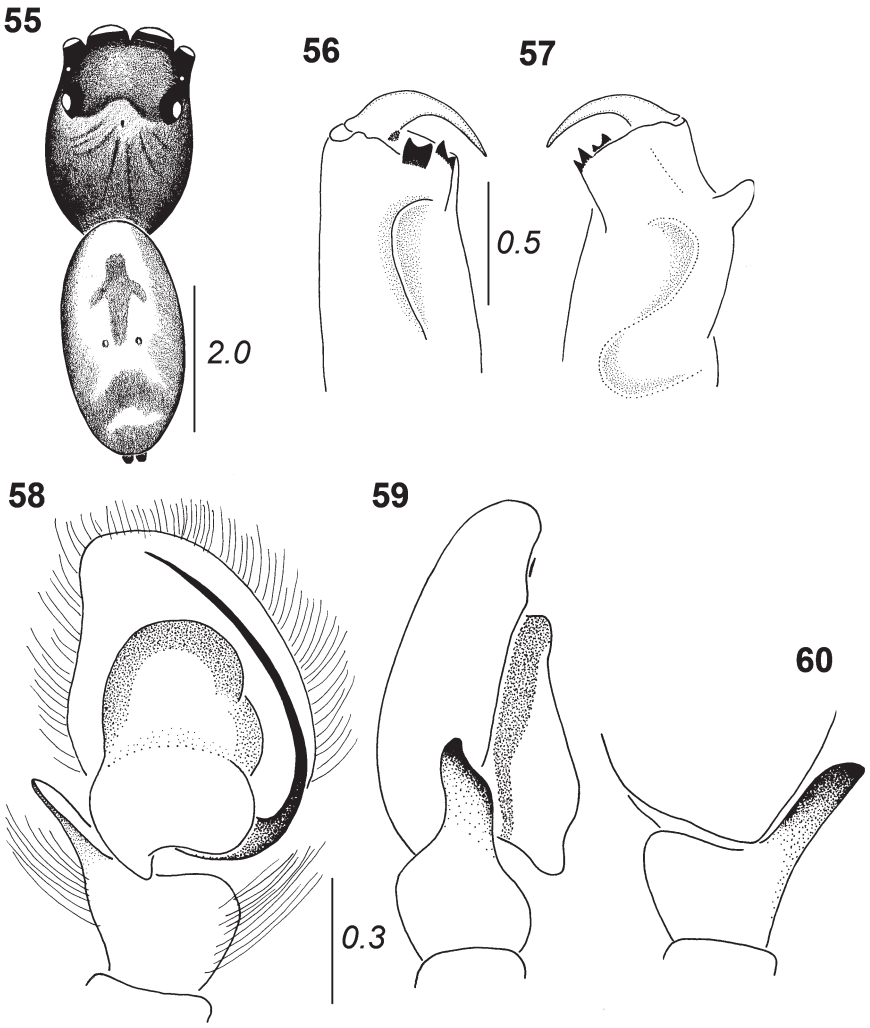
Redescription

Measurements (male/female). Cephalothorax: length 2.8/2.2, width 2.1/2.0, height 1.5/1.3. Abdomen: length 2.6/2.5, width 1.8/2.2. Eye field: length 1.2/1.1, anterior width 2.0/1.8, posterior width 2.1/1.9.

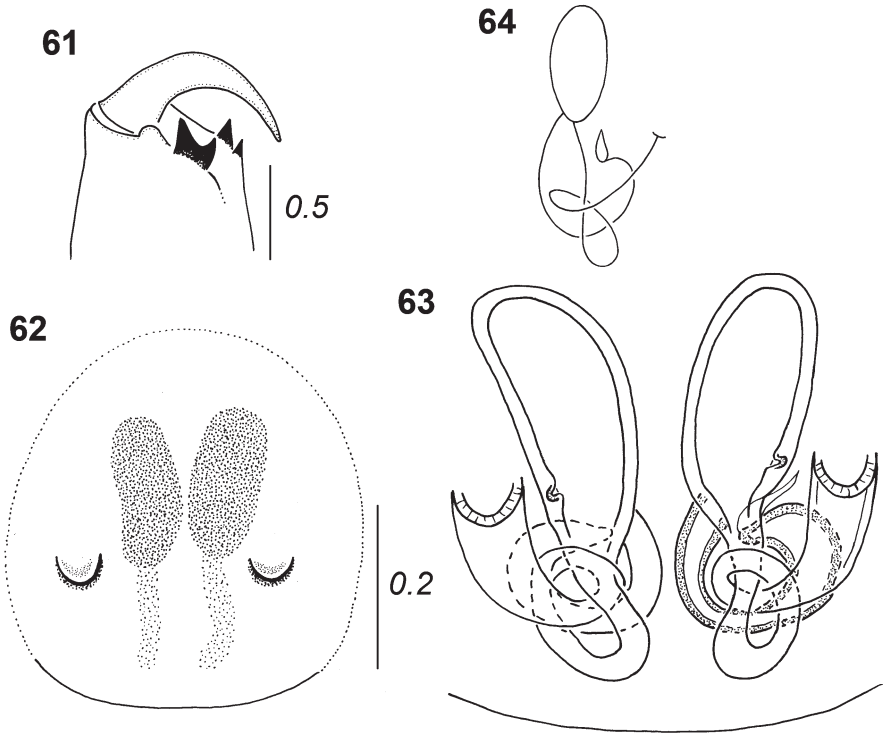
Male. General appearance as in Fig. 55. Carapace oval, moderately high, with short eye field. Eyes surrounded with black rings, carapace orange brownish, foveal area slightly lighter, from fovea radiating lines. Posterior part of carapace covered with whitish hairs, near eyes brown bristles. Chelicerae fissidentate, with large shallow depressions on dorsal and ventral surfaces (Figs 56, 57) and grandeur process on dorsal surface, placed at external margin of chelicerae (Fig. 57). Mouthparts and sternum orange. Abdomen oval, narrower than carapace, brownish with wide median orange band, dark patch in its centre (Fig. 55). Venter yellowish with wide dark band. Whitish and brown hairs at anterior edge of abdomen, long brown bristles scattered on dorsum. Spinnerets brown. Legs yellow. Leg hairs brown, spines numerous. Pedi-

palps light, clothed in whitish hairs. Tibial apophysis broad, with blunt tip (Fig. 60), embolus thin (Fig. 58).

Female. Lighter coloured than male, abdomen light brown with fish-bone shaped darker pattern, covered with brown hairs, venter light. Chelicerae fissidentate (Fig. 61). Labium yellow with brown base. Epigyne with two widely spaced, rounded copulatory openings (Fig. 62). Seminal ducts shorter than in majority of *Tusitala* spp., form single loop, receptacula composed with two chambers joined by channels, primary receptacu-



55-60. *Tusitala lutzi*, male, holotype: 55 – general appearance, 56 – chelicera, ventral view, 57 – chelicera, dorsal view, 58 – palpal organ, ventral view, 59 – palpal organ, lateral view, 60 – tibial apophysis, dorsal view



61-64. *Tusitala lutzi*, female: 61 – cheliceral dentition, 62 – epigyne, 63 – internal structure of epigyne, 64 – diagrammatic course of seminal duct

lum elongate with accessory gland in its wall, secondary receptaculum smaller than in congeners, not wider than channel (Fig. 63).

Distribution

Species known only from Congo.

Remarks

Lessert described only male of this species, but there are females deposited together with male specimens, representing one species. The female is described for the first time.

Acknowledgements

The curators of the institutions listed above are acknowledged for the access to the collections. My thanks go also to R. Jackson for providing specimens for study.

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