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New Genus and Species of Free-Developing Gall Midges of the Subfamily Porricondylinae from Somalia (Diptera, Cecidomyiidae)

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Новий рід і новий вид галиць підродини Porrycondylinae з Сомалі. Мамаєв Б. М., Зайцев О. І. – Наведено описи нового роду *Zatsepinomyia* gen. n., нового підроду *Asycampta* subgen. n. та 9 нових видів галиць. Вперше в Афротропічній області зареєстровані представники родів *Pseudocamptomyia* Parn. і *Asynapta* Loew. Матеріали зібрані в Сомалі на електричне світло П. П. Зацепіним.

Новый род и новый вид галлиц подсемейства Porrycondylinae из Сомали. Мамаев Б. М., Зайцев А. И. – Приведены описания нового рода (*Zatsepinomyia* gen. n.), нового подрода (*Asycampta* subgen. n.) и 9 новых видов галлиц. Впервые в Афротропической области зарегистрированы представители родов *Pseudocamptomyia* Parn. и *Asynapta* Loew. Материалы собраны в Сомали на электрический свет П. П. Зацепиным.

Mr. P. P. Zatsepin, who worked in Somalia in 1970–71, had collected on electric light and conserved in 70% alcohol a number of very interesting series of gall midges, which were partly investigated by us and are described below. For the first instance gall midges genera which were not included in the Catalogue of the Diptera of the Afrotropical Region (Harris, 1980) were investigated. Fauna of free-developing gall midges of Africa was investigated practically insufficiently. Only 6 species belonging to 4 genera of the subfamily Porricondylinae were included in the above-mentioned Catalogue. Our materials will be noticeable contribution to investigation of Afrotropical fauna of gall midges.

Genus *Zatsepinomyia* Mamaev & Zaitzev, gen. n.

Type species: *Zatsepinomyia inopina* Mamaev et Zaitzev, sp. n.

Head round; eye bridge well developed, 6–7 ommatidia broad; antennae of male with 2+14 segments; basal enlargement of flagellar segments 2.0 times as long as broad; stem of segments elongated; ring-shaped circumfila on the first 11 or 12 flagellar segments variable, sometimes with loops and lateral extensions projecting distally; palpi with 1+4 segments of increasing length distally; 4th segment almost 2.0 times as long as 1st. Wing venation incomplete: M_{3+4} reduced; Cu evanescent distally; rm-M weakly curved; R_1 and R_5 well developed. Legs long; 1st tarsal segment with short blunt projection; tarsal claws simple; empodium as long as claw. Gonocoxites of male postabdomen with long acute apical lobe and curved basal spine; gonostyles beak-shaped, removed subapically; tegmen strongly sclerotized laterally; roots of gonocoxites long; genital rod long, thin, moderately sclerotized.

Differential diagnosis. New genus is similar to *Porricondyla* Rond. in the following characters: male antennae with 2+14 segments; circumfila

ring-shaped, eye bridge well developed, palpi with 1+4 segments, 1st tarsal segment with short blunt projection, empodium as long as claw. The differences are the following: in *Zatsepinomyia* tarsal claws simple, antennal circumfila sinuous; gonocoxites with curved basal spines.

The new genus is named in honour of Mr. P. P. Zatsepin.

Zatsepinomyia inopina Mamaev & Zaitzev, sp. n.

(Fig. 1, *a*, *b*)

Material. Holotype ♂, Somalia, Hargeysa, 19.IV.1970, Zatsepin leg.(in coll. B. Mamaev). Paratypes, 13 ♂, the same locality, 8.III.–25.IV.1970, 27.IX.1971, leg. Zatsepin (in B. Mamaev and A. Zaitzev collections).

Male. Pale brown; body length 1.2 mm. Thorax with 3 dark dorsal streaks. Stem of flagellar segments slightly shorter than basal enlargement; circumfila on the first 12 flagellar segments. Gono- coxite with long acute apical lobe; gonostyles dilated basally with long distal part and large transparent apical claw; basal spine of gonocoxites curved outwards; tegmen bilobed, lobes with acute dents; genital rod weakly sclerotized; roots of gonocoxites long with semicercular emargination separating them.

Zatsepinomyia intercalaris Mamaev et Zaitzev, sp. n.

(fig. 1, *c*)

Material. Holotype ♂, Somalia, Hargeysa, 8.III.1970, Zatsepin leg. Paratype ♂, with same label data (coll. B. Mamaev).

Male. Pale brown, body length 1.4 mm; thorax with 3 dark dorsal streaks. Stem of flagellar segments slightly longer than basal enlargement; circumfila on the first 11 flagellar segments. Gonocoxites with long acute apical lobe; gonostyles dilated basally with long slightly broadened truncate distal part and dark claw; basal spine of gonocoxites sinuous; tegmen bilobed, lobes finger-shaped; basal part of genital rod desclerotized; roots of gonocoxites long, convergent, with round emargination separating them.

Female unknown.

Genus *Asynapta* Loew, 1850

Loew, 1850: 39.

According to J. R. Parnell (1971), the genus *Asynapta* differs in the following characters: antennae variable in number of segments in males and females, consisting of 2+13 up to 2+25 segments; palpi with 1+4 segments; vein Rs in the same direction as R_1 and R_5, Cu simple. First tarsal segment with long, acute projection. Postabdomen of male and ovipositor of female usually curved upwards. Roots of gonocoxites fused in median structure. Lamellae of ovipositor 2-segmented; 1 sclerotized spermatheca.

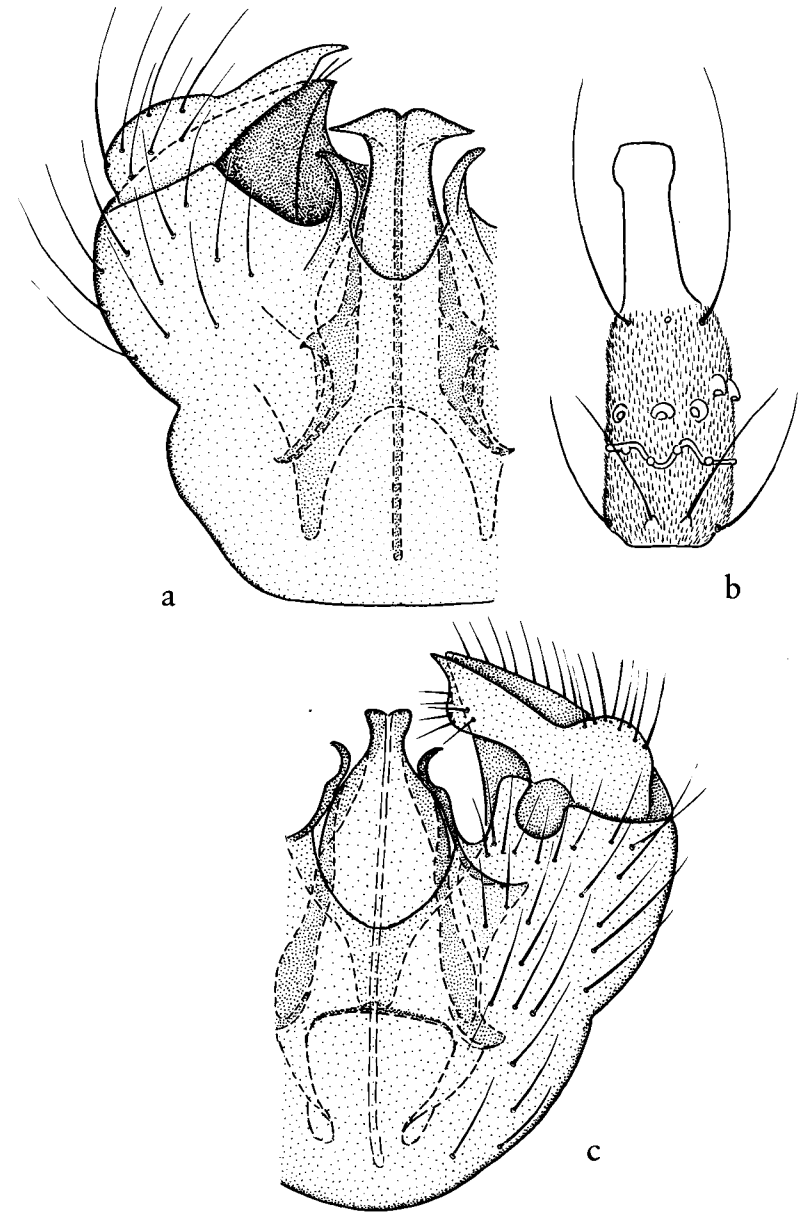

Fig. 1. *Zatsepinomyia* gen. n.: *a*, *b* — *Z. inopina* sp. n. (*a* — male postabdomen, ventral view, *b* — 7th flagellar segment); *c* — *Z. intercalaris* sp. n. (male postabdomen, ventral view).

† *Asynapta communis* Mamaev & Zaitzev, sp. n.

(fig. 2, *a*)

Material. Holotype ♂, Somalia, Hargeysa, 8.III.1970, Zatsepin leg. (coll. B. Mamaev). Paratypes, 12 ♂, same locality, 1–30.III.1970, 27.IX.1971, Zatsepin leg. (B. Mamaev and A. Zaitzev collections).

Male. Pale brown, body length 1.3–1.7 mm. Eye bridge 11 ommatidia broad. Antennae with 2+13–2+16 segments; stem of flagellar segments slightly shorter than basal enlargement. Empodium rudimentary. Gonocoxites with long acute apical lobe, gonostyles removed subapically, with dilated lobe and black pectinate claw; parameres long, thin, curved; genital rod with sclerotized basal part; roots of gonocoxites fused in broad median plate.

Female unknown.

Asynapta mira Mamaev & Zaitzev, sp. n.

(fig. 2, *b*)

Material. Holotype ♂, Somalia, Hargeysa, 2. IX. 1971, leg. Zatsepin (coll. B. Mamaev).

Male. Pale brown, body length 1.5 mm. Eye bridge 11 ommatidia broad. Terminal parts of antennae missing; stem of flagellar segments 0.7 as long as basal enlargement. Empodium well developed, strongly longer than claw. Gonocoxites with round median lobe, covered with short spines apically; gonostyles slender, tapering to apex, with black terminal claw; parameres in form of broad plates with long and thin lateral projections; genital rod desclerotized; roots of gonocoxites fused in long and narrow median plate.

Female unknown.

† *Asynapta simplex* Mamaev & Zaitzev, sp. n.

(fig. 2, *c*)

Material. Holotype ♂, Somalia, Hargeysa, 15.VII.1970, Zatsepin leg. Paratypes 2 ♂, same locality, 15.IV.1970, Zatsepin leg. (coll. B. Mamaev).

Male. Pale brown, body length 1.5 mm. Eye bridge 11–12 ommatidia broad. Antennae consist of 12+16–2+18 segments; stem of flagellar segments shorter than basal enlargement; terminal segment with long finger-shaped projection. Empodium rudimentary. Gonocoxites with large round apical lobe; gonostyles curved, tapering to apex in distal third, with long black claw and subapical lobe; parameres short, needle-shaped, curved inwards; genital rod very short with bifurcated proximal part; roots of gonocoxites fused in variable median plate.

Female unknown.

† *Asynapta lacunosa* Mamaev & Zaitzev, sp. n.

(fig. 2, *d*)

Material. Holotype ♂, Somalia, Hargeysa, 11.IX.1971, Zatsepin leg. (coll. B. Mamaev). Paratypes 6 ♂, same locality, 1–30.IV.1970, Zatsepin leg. (B. Mamaev and A. Zaitzev collection).

Male. Pale brown, body length 1.5–1.8 mm. Eye bridge 11 ommatidia broad. Antennae with 2+17–2+18 segments; stem of flagellar segments 0.7

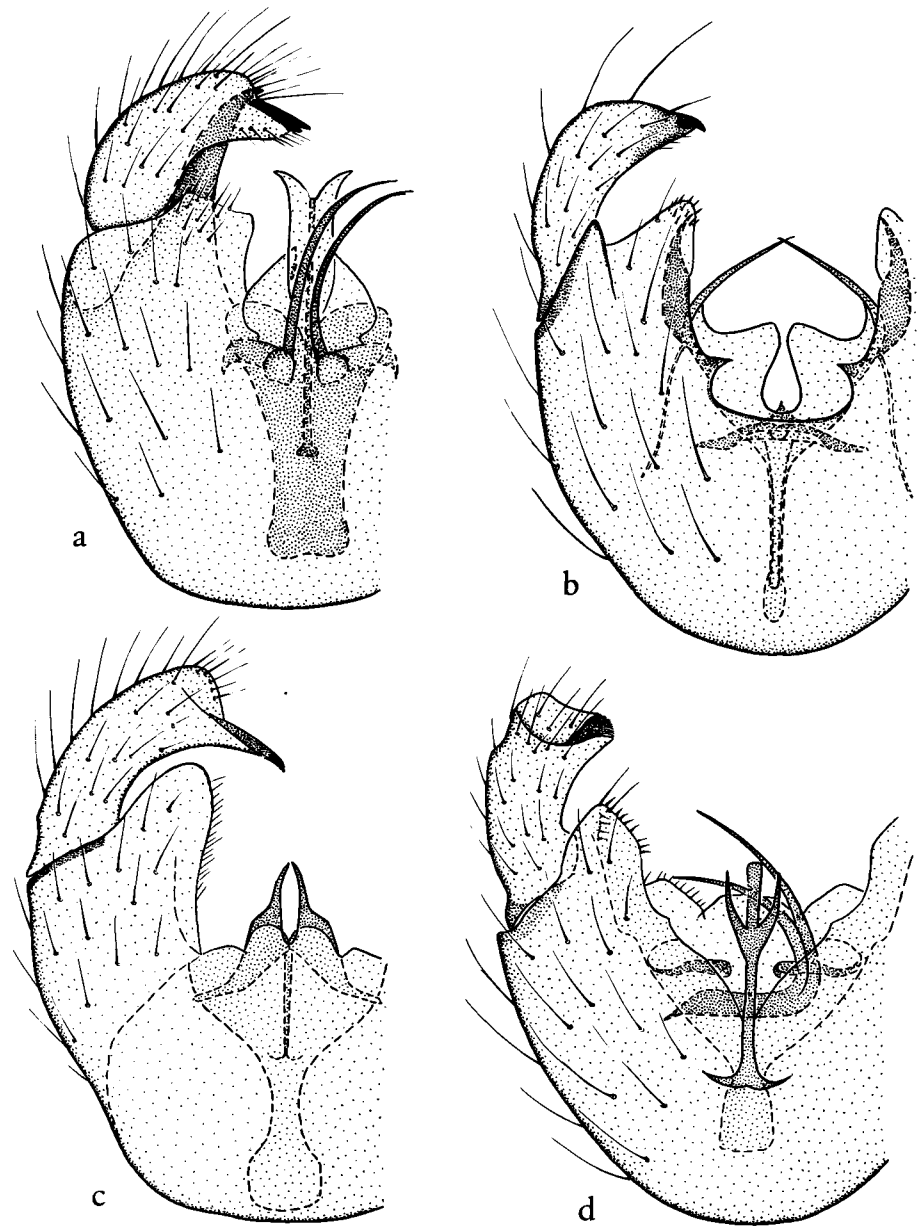

Fig. 2. *Asynapta* Loew, male postabdomen, ventral view: *a* — *A. communis* sp. n., *b* — *A. mira* sp. n., *c* — *A. simplex* sp. n., *d* — *A. lacunosa* sp. n.

times as long as basal enlargement, terminal segment sessile, with long finger-shaped apical projection. Empodium rudimentary. Gonocoxites with round inner apical lobe covered with macrotrichia and short acute spines; gonostyles curved, with slightly dilated and invaginated apical part bearing few long setae and black pectinate claw; parameres very long, thin, evenly curved; genital rod well sclerotized, sickle-shaped, proximally with 2 short sclerotized needle-shaped projections in apical third; roots of gonocoxites fused in median plate.

Female unknown.

Asynapta laminata Mamaev & Zaitzev, sp. n.

(fig. 3, *a*)

Material. Holotype ♂, Somalia, Hargeysa, 13.IV.1970, Zatsepin leg. (coll. B. Mamaev).

Male. Yellowish-brown, body length 1.0 mm. Eye bridge 11 ommati dia broad. Antennae with 2+19 segments; stem of flagellar segments 0.8 as long as basal enlargement. Empodium rudimentary. Gonocoxites with large apical lobe, partly covered with short acute spines. Gonostyles slender, elongated with large subapical lobe and black pectinate claw; parameres long, thin, sickle-shaped, well sclerotized; genital rod with well sclerotized basal part, sickle-shaped structure proximally and 2 long thin sclerotized median projections. Roots of gonocoxites fused in median plate with deep emargination.

Female unknown.

Remark. Afrotropical species of *Asynapta* with the exception of *A. mira* sp. n. with rudimentary empodium.

A key to Afrotropical species of the genus *Asynapta*

1. Empodium well developed, slightly longer than claw ..... *A. mira* sp. n.
— Empodium rudimentary 2
2. Male postabdomen with short acute convergent parameres (fig. 2, *c*) ... *A. simplex* sp. n.
— Male postabdomen with 2 long, thin, sickle-shaped parameres (fig. 2, *a*, *d*; 3, *a*) 3
3. Gonostyles with large subapical lobe. Roots of gonocoxites separated (fig. 3, *a*) ..... *A. laminata* sp. n.
— Gonostyles without subapical lobe. Roots of gonocoxites fusedian median plate 4
4. Gonostyles with terminal invagination. Genital rod with 2 acute divergent projection proximally (fig. 2, *d*) ..... *A. lacunosa* sp. n.
— Gonostyles without terminal invagination. Genital rod simple proximally (fig. 2, *a*) .... *A. communis* sp. n.

Genus *Pseudocamptomyia* Parnell

Parnell, 1971, 7: 304.

The genus *Pseudocamptomyia* Parn. is monotypic and includes a single Nearctic species, *P. photophila* (Felt). It differs in following characters. Head with 6–11 ommatidia-broad eye bridge. Antennae with variable number of segments; scape with a tuft of strong setae mediodistally; circumfila on all except terminal flagellar segments, usually ring-shaped, a few short distal extension from the circumfilar rings occur on the basal flagellar segments.

Palpi with 1+4 or 1+2 segments. Wing 2.5 times as long as broad; Rs in the same direction as R_1 and R_5; rm+M strongly curved, S-shaped forming almost a right angle with R_5; M_{1+2} and M_{3+4} reduced, Cu present. First tarsal segment with sharply pointed distal projection. Tarsal claws unidentate or simple; empodium short or rudimentary. 9th tergite of male postabdomen with distinct margin; anteriorly projecting parts of gonocoxite roots shorter than the distance between them; tegmen forming complex ventral structure with roots of gonocoxites.

Pseudocamptomyia (Asycampta) palpata Mamaev & Zaitzev subgen. et sp. n.

(fig. 3, *b*)

Material. Holotype ♂, Somalia, Hargeysa, 8.III.1970, Zatsepin leg. Paratype ♂, same label data (coll. B. M. Mamaev).

The subgenus *Asycampta* Mamaev et Zaitzev, subgen. n. (type species *Pseudocamptomyia palpata* sp. n.) is established as based on the following characters: palpi short with 2 segments; tarsal claws simple; Cu distinct, evanescent distally. The type species of the genus *Pseudocamptomyia P. photophila* (Felt) with 4-segmented palpi, unidentate claws and indistinct Cu.

Male. Yellowish brown, body length 1.5 mm. Eye bridge 9 ommatidia-broad. Antennae with 2+23 segments; stem of flagellar segments slightly shorter than basal enlargement, circumfila ring-shaped. Palpi short, consist of 2 segments. Cu distinct in basal part. Claws simple; empodium rudimentary. Gonocoxites thick with inner subapical lobe; gonostyles thick tapering to apex; parameres needle-shaped with large curved basal spine and 2 strongly sclerotized divergent projections; roots of gonocoxites thick.

Female unknown.

Pseudocamptomyia (Pseudocamptomyia) africana Mamaev & Zaitzev, sp. n.

(fig. 3, *c*)

Material. Holotype, ♂, Somalia, Hargeysa, 8. III. 1970, Zatsepin leg. (coll. B. Mamaev).

Male. Yellowish brown, body length 1.5 mm. Eye bridge 11 ommatidia-broad. Antennae with 2+23 segments; stem of flagellar segments 0.5 as long as basal enlargement; circumfila sinuous. Palpi covered with long hairs basally, 4th segment truncate with 2 long terminal setae. Tarsal claws unidentate, empodium rudimentary. Cu evanescent distally. Gonocoxites slender with short apical lobe; gonostyles with round apex; tegmen bifid with acute projections as long as gonocoxites; roots of tegmen with sclerotized transverse bridge; genital rod short; 2 needle-shaped parameres; roots of gonocoxites thin, weakly sclerotized.

Female unknown.

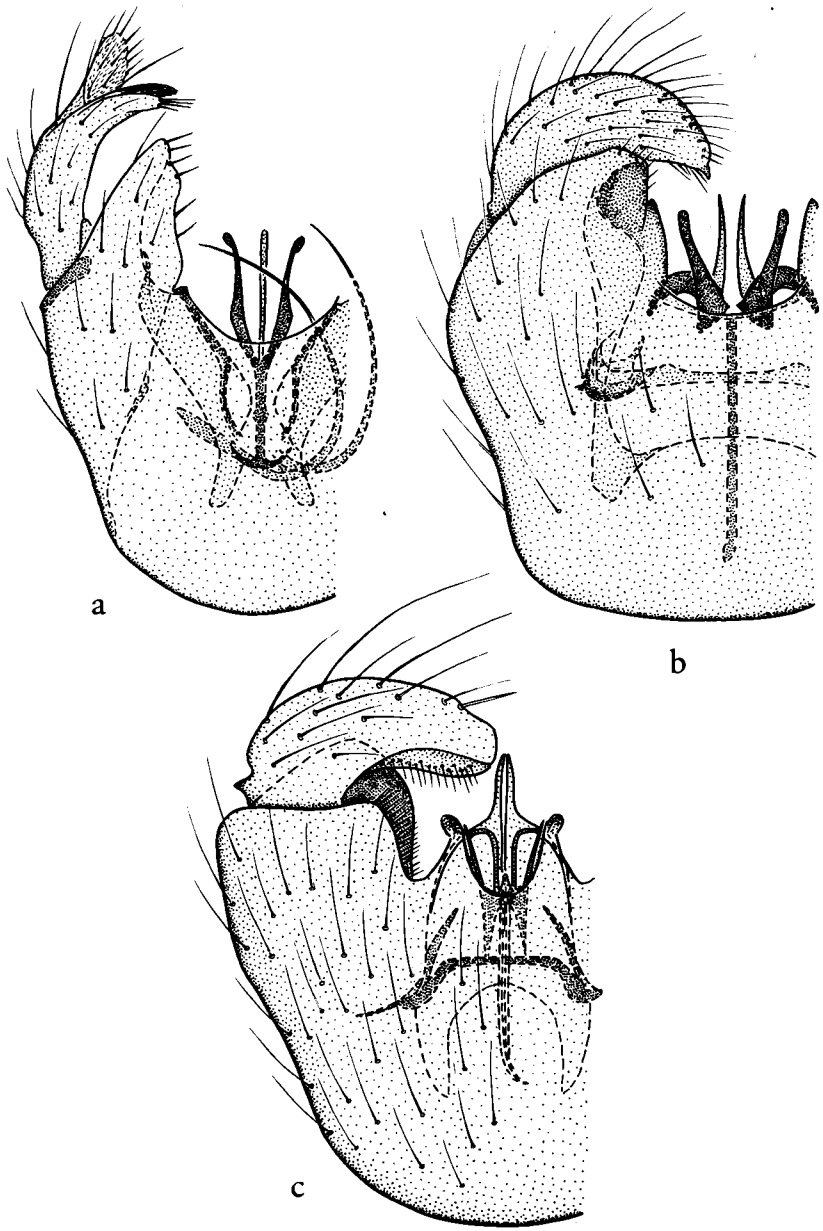

Fig. 3. *Asynapta* Loew, *Pseudocamptomyia* Parnell, male postabdomen, ventral view: *a* — *A. laminata* sp. n., *b* — *P. palpata* sp. n., *c* — *P. africana* sp. n.

A key to species of the genus *Pseudocamptomyia*

1. Palpi short, consisting of 2 segments. Tarsal claws simple. Somalia. Subgen. *Asycampta*, subgen. n. ..... *P.* (*A.*) *palpata*, sp. n.
— Palpi long, consisting of 4 segments. Tarsal claws unidentate. Subgen. *Pseudocamptomyia* s. str. 2
2. Antennae of male with 2+26 segments. Head with 6–8 ommatidia-broad eye bridge. Gonostyles pointed apically with a ventral ridge of strong short setae. USA .... *P. photophyla* (Felt)
— Antennae of male with 2+23 segments. Head with 11 ommatidia-broad eye bridge. Gonostyles rounded apically without strong short setae (fig. 3, *c*). Somalia .... *P. africana* sp. n.

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