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RESEARCH ARTICLE

Kalimyia, a new genus of tachinid flies from the Oriental Region, with description of a new species (Diptera: Tachinidae)

Theo Zeegers

Abstract

The tachinid fly known as *Parapales sturmioides* (Mesnil, 1950), from Taiwan, does not fit the concept of the genus *Parapales* Mesnil, 1950. A new genus, *Kalimyia* **gen. n.**, is proposed to accommodate this species, as *Kalimyia sturmioides* (Mesnil, 1950), **comb. n.** *Kalimyia* seems more related to the genus *Blepharipa* Rondani, 1856 than to *Parapales*, and is tentatively placed in the tribe Goniini. A second species in this genus, *Kalimyia estherae* **sp. n.**, is described from Nepal. As a consequence, the genus *Parapales* is now endemic to Madagascar.

Keywords: Goniini, Madagascar, Nepal, new taxa, *Parapales*, taxonomy, Taiwan.

Zusammenfassung

Die Tachinide *Parapales sturmioides* (Mesnil, 1950) aus Taiwan weist nicht die Kriterien zur Einordnung in die Gattung *Parapales* Mesnil, 1950 auf. Eine neue Gattung, *Kalimyia* **gen. n.**, wird vorgeschlagen, um diese Art unter dem Namen *Kalimyia sturmioides* (Mesnil, 1950), **comb. n.** im System einzuordnen. *Kalimyia* erscheint mehr mit der Gattung *Blepharipa* Rondani, 1856 verwandt als mit *Parapales* und wird vorläufig in den Tribus Goniini gestellt. Eine zweite Art dieser Gattung, *Kalimyia estherae* **sp. n.** wird aus Nepal beschrieben. Demzufolge ist jetzt die Gattung *Parapales* endemisch für Madagaskar.

Introduction

Mesnil (1950) erected *Parapales* Mesnil as a subgenus of the genus *Ctenophorocera* Brauer & Bergenstamm, 1891, a junior synonym of *Pales* Robineau-Desvoidy, 1830 (Herting 1984), with type species *Ctenophora* (*Parapales*) *pallidula* Mesnil, 1950 from Madagascar. As a second species, he included *Ctenophorocera* (*Parapales*) *sturmioides* Mesnil, 1950 from Taiwan. All were placed by Mesnil (1950) in the tribe Sturmiini, which is no longer considered valid (O'Hara 2013). To *Parapales*, Mesnil (1963) added *Parapales erebiae* Mesnil, 1963 from Siberia. Mesnil (1977) explicitly raised *Parapales* to genus rank and placed it in the tribe Anacamptomyiini. This change of opinion on its systematic position was later supported independently by Zeegers (2014) and Cerretti et al. (2015) and accepted by O'Hara & Cerretti (2016). Mesnil (1977) transferred *erebiae* to the genus *Pseudoperichaeta* Brauer & Bergenstamm, 1889 and noted that *sturmioides* was better not placed in *Parapales*; he did not, however, propose a new placement.

In studying Anacamptomyiini from Madagascar (Zeegers 2014), doubts arose about the correct placement of *sturmioides* in the genus *Parapales*. Based on a study of the holotype of *sturmioides* and of a related new species from Nepal, I concur with Mesnil (1977) that *sturmioides* does not fit within *Parapales*. Though it seems more closely related to *Blepharipa* Rondani, 1856 than to *Parapales*, I argue herein that it does not fit that genus either, and propose a new genus, *Kalimyia* **gen. n.**, for both *sturmioides* and the new species from Nepal.

Material and methods

The terminology used follows Tschorsnig & Richter (1998) and Merz & Haenni (2000). Figs. 1, 2 were taken with a Nikon 105 mm macro lens with macro flashes. Figs. 9, 10, 15–17 were obtained using a separate phototube on an Olympus SZ61 stereomicroscope. Figs. 3–8, 11 were produced from stacked images captured using an EOS 5D SR digital camera with a MP-E 65 mm macro lens (Canon, Tokyo) mounted on a Stackshot Micro Rail Package (Traverse City, Michigan). Helicon Remote ver. 3.3.6 and Helicon Focus ver. 6.6.1 (Helicon Soft Ltd.) were used, respectively, for capturing and stacking the images. Photos of the slide-mounted terminalia of the holotype of *K. sturmioides* **comb. n.** (Figs. 12–14) were made using a Euromex CMEX 1.3 camera mounted on the separate phototube of a Euromex FE.2025 light microscope. Focal depth was enhanced for Figs. 9–10 and 12–14 by stacking several images using the software CombineZ (Hadley 2007). Label information for type specimens is given verbatim in quotation marks, with a semicolon separating different labels and forward slashes separating lines. Any comments regarding the labels are provided in square brackets. The abbreviation "SDEI" is used for the Deutsches Entomologisches Institut, Müncheberg, Germany.

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Taxonomy

Kalimyia gen. n.

Type species
Ctenophorocera (*Parapales*) *sturmioides* Mesnil, 1950.

Etymology
The name is derived from the archetypical black Hindi goddess Kali, which is also the common Hindi word for the colour black. The name refers to the overall very dark appearance of the known species of the genus. Moreover, the holotype of *Kalimyia estherae* **sp. n.** was collected after visiting one of the major Kali temples of Nepal.

Diagnosis
Eye bare. Ocellar setae weak. Male with one strong reclinate orbital seta, female (only one specimen known) with two reclinate orbital setae. Lunula bare. Parafacial narrowed ventrally, at narrowest point distinctly narrower than width of first flagellomere. Facial ridge with small setulae restricted to lower half or less. Occiput with several rows of black hairs behind occipital row. Arista with short hairs on basal part (shorter than width of arista). Postpronotum with only three setae, arranged in a distinct but shallow triangle. First postsutural supra-alar seta strong, third about as strong, second much stronger. Prosternum densily setulose. Scutellum largely or completely black, with 5–6 marginal setae, the subapical ones relatively close together. 2–3 katepisternal setae. Katepimeron with several long setulae in anterior half. Mid tibia with 1 anterodorsal seta. Hind tibia with a regular row of slightly flattened anterodorsal setae, all of the same length except for one, slightly longer one; less regular in female. Hind coxa bare on dorsal surface. Alula enlarged. Inner margin of lower calypter concave, at an abrupt angle with posterior margin. Costal spine absent. Cell r_{4+5} open at wing margin. Male with ventral sides of tergites 3 and 4 covered by patches of specialized setulae (Fig. 9). Fifth sternite with basal margin distinctly convex, with central apical incision very deep and lateral arms apically converging (Fig. 14), and lacking sensilla trichodea.

Male terminalia. Cercus, in lateral view, without an inner tooth; apices of cerci, in dorsal view, close together, nearly touching. Distiphallus with both ventral and dorsal plates narrow and strongly sclerotized, without extensions; ventral plate angularly connected to basal part of dorsal plate (Fig. 13).

Comparison with similar genera
The association of *sturmioides* with *Parapales* has been "unfortunate from the beginning", to quote Mesnil (1977). Unlike in typical *Parapales*, the setulae on the facial ridge are small and reach much less far up the ridge. Other obvious differences are the presence of several rows of black hairs on the lower half of the occiput, the presence of short hairs on the basal part of the arista and the bare eyes. Whereas all known species of *Parapales* are generally of yellow colouration, the species herein included in *Kalimyia* **gen. n.** are overall black. The patches of specialized setulae on the ventral side of tergites 3 and 4 of the male are much more distinctive in *Parapales* than in *Kalimyia* **gen. n.** According to Cerretti et al. (2015), there are structural differences between these types of patches in different species.

In its general habitus, *Kalimyia* **gen. n.** resembles *Sturmia* Robineau-Desvoidy, 1830 and especially *Blepharipa*; it agrees with these two genera in the shape of the head and lower calypter, the chaetotaxy of the head, thorax and abdomen, and especially the dense regular row of anterodorsal setae on the hind tibia. In the male, patches of specialized hairs are present in all three genera on the ventral side of tergite 4. All three genera have the lateral arms of the fifth sternite apically converging, which is otherwise rarely seen in the Goniini (Tschorsnig 1985). The low number of katepisternal setae (less than 4), the long hairs on the katepimeron, and especially the close-set subapical marginal setae on the scutellum, agree with *Blepharipa* only.

Kalimyia **gen. n.** differs from *Blepharipa* mainly in the following features, many of which already mentioned by Crosskey (1976): parafacial narrowed ventrally, at narrowest point distinctly narrower than width of first flagellomere; postpronotum with only 3 setae, arranged in a shallow triangle; scutellum largely or completely black; male with ventral sides of tergites 3 and 4 covered by patches of specialized setulae, though not very distinctive; basal margin of fifth sternite distinctly convex; apices of cerci close together in dorsal view, nearly touching (Fig. 15); male terminalia: distiphallus with a narrow, strongly sclerotized ventral plate. In *Blepharipa*, these characters are as follows: parafacial broader than first flagellomere at its narrowest point; postpronotum with 4 setae, the basal three arranged in a straight line; patches of specialized setulae of male restricted to ventral side of tergite 4 and quite distinctive; as a rule of thumb, ground colour of scutellum largely yellow or reddish. The male terminalia of only two species of *Blepharipa* could be fully studied: those of *B. pratensis* (Meigen, 1824) and those of *B. schineri* (Mesnil, 1939), but a dorsal view of the cerci and surstyli was provided by Mesnil (1970) for *B. carbonata* (Mesnil, 1970) and *B. nigrina* (Mesnil, 1970). Based on this information, the apices of the cerci are widely separated in dorsal view in *Blepharipa* (Fig. 17), the distiphallus has a much broader ventral plate (see Tschorsnig 1985, fig. 197), and the fifth sternite has a concave basal margin (Fig. 16).

Based on the general features and the male terminalia, the new genus is tentatively placed in the tribe Goniini. In the key to Palearctic genera of Tachinidae

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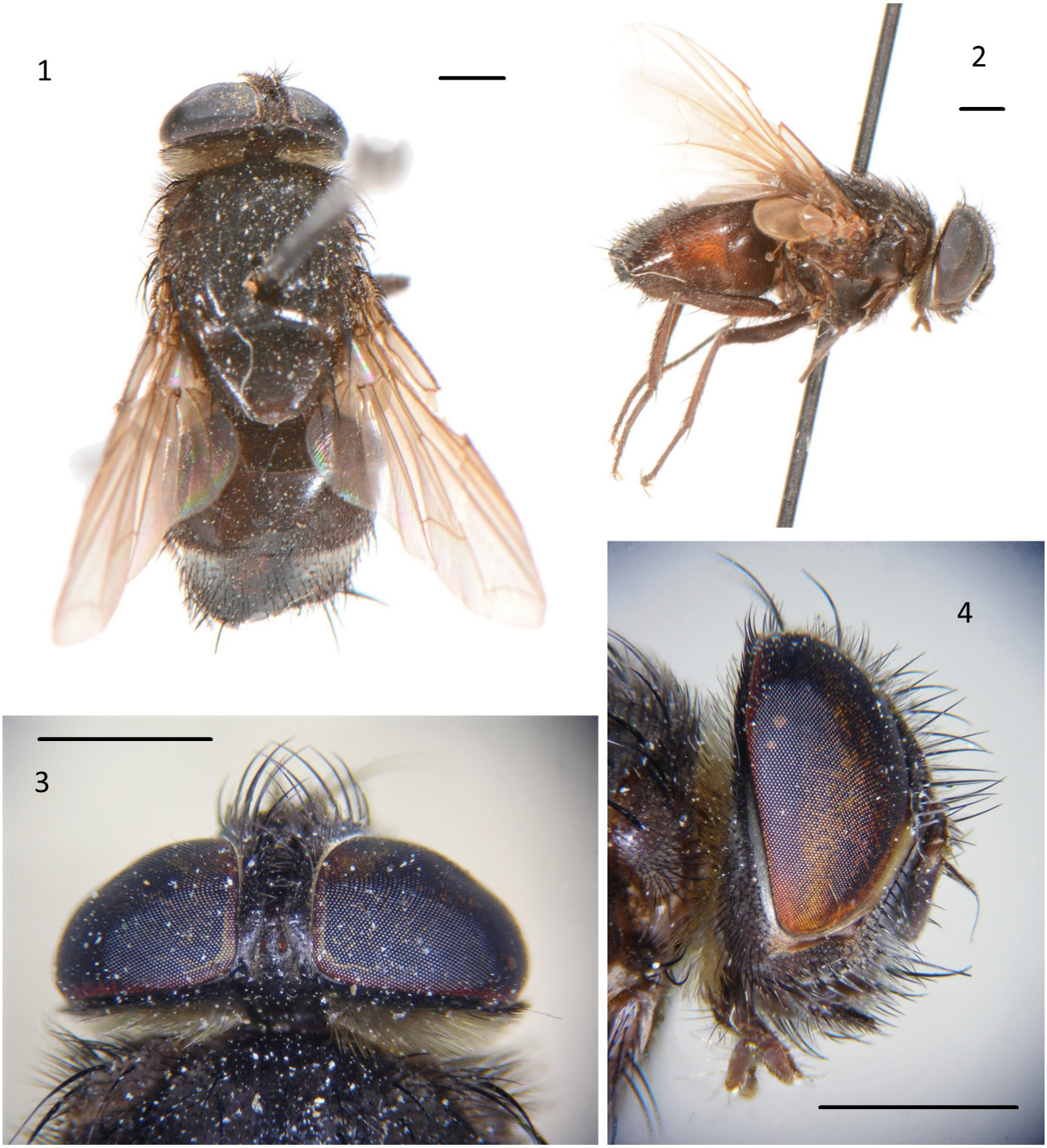

Figs. 1–4. *Kalimyia sturmioides* (Mesnil, 1950), **comb. n.**; holotype ♂ (SDEI). **1**. Habitus, dorsal view. **2**. Habitus, lateral view. **3**. Head, dorsal view. **4**. Head, lateral view. Scale bars: 1 mm.

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by Tschorsnig & Richter (1998), *Kalimyia* **gen. n.** runs to couplet 522, which separates *Arama* Richter, 1972 from the genera discussed above. According to the original description (Richter 1972), *Arama* is quite black as well, but has strong ocellar setae, wing with a strong costal spine, cell r_{4+5} closed at wing margin, inner margin of lower calypter not strongly concave, and hind tibia lacking a regular row of anterodorsal setae.

Kalimyia sturmioides **(Mesnil, 1950), comb. n.**
(Figs. 1–4, 12–14)

Prosopaea sturmioides Baranoff [manuscript name]: Hennig (1941: 196).
Ctenophorocera (*Parapales*) *sturmioides* Mesnil, 1950: 123, 126, pl. VII.
Ctenophorocera sturmioides Mesnil: Sabrosky & Crosskey (1969: 55).
Parapales sturmioides (Mesnil): Crosskey (1976: 131, 241); O'Hara et al. (2009: 75).
sturmioides (Mesnil), unplaced (not *Parapales*): Mesnil (1977: 192).

Type material

Holotype ♂ (SDEI): "Sokutsu / Formosa / H. Sauter, VI.1912"; "Prosopaea / sturmioides / n.sp. / N. Baranoff"; "TYPE" [red]; "Parapales / sturmioides / Mesn." [in Mesnil's handwriting, *teste* Sabrosky & Crosskey (1969)]; "Parapales / sturmioides (Mesnil) / det R.W. Crosskey, 1974"; "Holotypus" [red]; "Holotype m# / of Ctenophorocera / sturmioides Mesn. / examined 1974 / R.W. Crosskey." and "DEI Müncheberg / Dip - 00187" [green].

Remarks. The month on the original label is "VI" and not "V" as given by Mesnil (1950), as already noted by Sabrosky & Crosskey (1969); the "i" is drawn with ink over the printed dot. Holotype in generally good condition, but with tip of abdomen and terminalia missing.

Paratype, 1 ♀ (SDEI): "Toa Tsui Kutsu (Form) / H. Sauter v.1914"; "Prosopaea / sturmioides / n.sp. / N. Baranoff" and "DEI Müncheberg / Dip – 00189" [green].

Other material examined

Hennig (1941) mentioned a third specimen present in SDEI, one without data. It is still present in SDEI. It is a male in overall good condition, but lacks the tip of the abdomen and terminalia, and is labelled "Formosa I / Sauter [2 unreadible letters]" [in Baranoff's writing?]; "coll. Oldenburg"; "Prosopaea / sturmioides / n.sp. / N. Baranoff" and "DEI Müncheberg / Dip – 00188" [green]. This specimen is not mentioned in the original description, hence it is not a (para)type.

In the SDEI collection there is also a slide with male terminalia and sternite 5, labelled "*Prosopaea* / *sturmioides* / n.sp. / N. Baranoff" and "DEI Müncheberg / Dip – 00186". The terminalia and sternite 5 are compressed and secured on the slide and could therefore be studied from one angle only (Figs. 12–14). It is unclear with which male these parts are associated, but they are included in the redescription of the species.

Type locality

The type locality "Sokutsu" cannot be found on modern maps. According to Esaki (1941), the correct spelling of the name is "Sokutu". He located it in the Takao prefecture on current Taiwan at approximately 23º00'N 120º30'E. According to O'Hara et al. (2009), the current name is Chiahshien Hsiang, located in Kaohsiung Hsien at 23º07'N 120º37'E. The toponym of the female paratype could not be located and was not mentioned by Esaki (1941).

Redescription

Male (Figs. 1–4, 12–14). Body length: 7 mm.

Colouration. Fronto-orbital plate dark in ground colour, silvery under some angles of light. Parafacial silvery. Antenna, palpus, and frontal vitta black. Thorax black, without distinct vittae. Postpronotum reddish. Scutellum black with reddish apex. Abdomen predominantly black, tergite 3 slightly brownish at sides, tergite 4 with an interrupted silvery band occupying anterior half of tergite. Legs black. Wing slightly brownish, especially on basal half (holotype), or transparent (second male); epaulette and basicosta black. Lower calypter completely yellowish-grey, its inner margin darkened. Halter yellow, with (holotype) or without (second male) darkened knob.

Head (Figs. 3–4). Vertex narrow, about one third of width of eye (holotype: 0.37x). Eye bare. Ocellar setae present but very weak, hair-like, more or less parallel. Inner vertical setae divergent, outer vertical seta lacking. Frontal vitta as broad as fronto-orbital plate, distinctly converging towards ocelli (nearly three times narrower than width at lunula). Fronto-orbital plate with a row of frontal setae, one reclinate orbital seta and 2–3 rows of setulae between eye and frontal setae. Lunula bare. Postocular setulae short, nearly straight. Occiput with dark yellow hairs behind occipital row, with several rows of black hairs on lower half. Facial ridge straight, covered with small but distinct recumbent setae on lower half. Parafacial narrow, narrowed ventrally, at narrowest point distinctly narrower than width of first flagellomere; bare below lowest frontal seta. Gena narrow, about 1/5 of height of eye, with a strong genal dilation. First flagellomere 3.5 times as long as broad, 2.5 times as long as pedicel. Arista thickened on basal 1/3–2/5, short plumose, longest hairs shorter than width of arista at base. Second aristomere only slightly longer than broad.

Thorax. Scutum with 3+3 acrostichal setae, 3+4 dorsocentral setae, 1+3 intra-alar setae, 3 strong supra-alar setae, and 2–3 katepisternal setae (2 in holotype); first supra-alar seta virtually as strong as third, second distinctly stronger. Postpronotum with three setae arranged in a shallow triangle (angle: 120 degrees), shallower in second male. Proepimeral and proepisternal setae strong, curved upwards; proepimeral seta accompanied by a secondary one. Anepimeral seta accompagnied by a smaller second seta and by smaller setulae. Katepimeron fully setulose (holotype) or with only a few setulae anteriorly (second male). Prosternum densely setulose. Scutellum with five pairs of large, horizontal marginal setae; apical setae crossed, horizontal; subapical setae strong, set close together; distance between subapical and basal setae on

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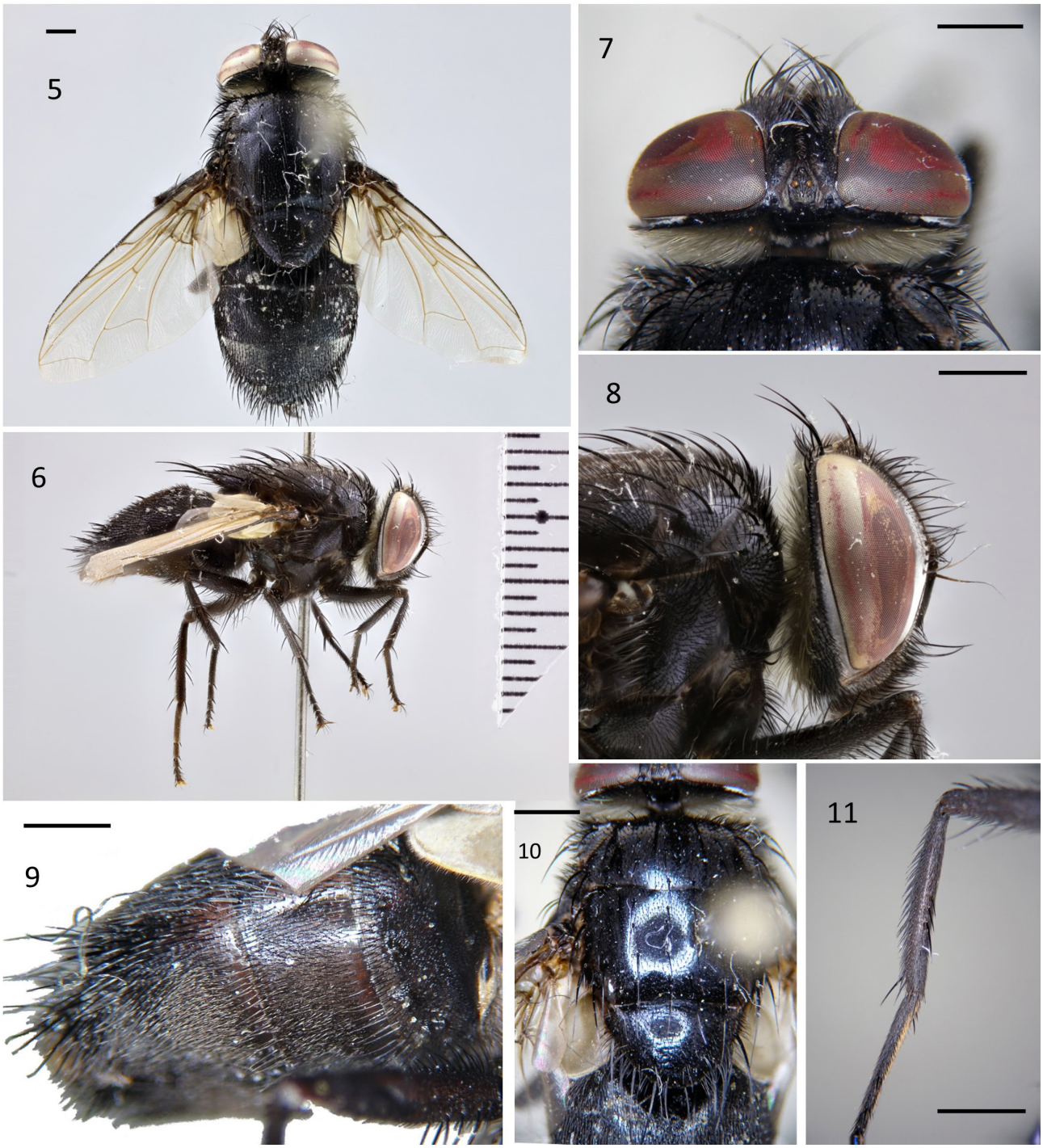

Figs. 5–11. *Kalimyia estherae* **sp. n.**; holotype ♂ (Naturalis Biodiversity Center, Leiden, The Netherlands). **5**. Habitus, dorsal view. **6**. Habitus, lateral view. **7**. Head, dorsal view. **8**. Head, lateral view. **9**. Abdomen, lateral view, showing patches of specialized hairs on ventral sides of tergites 3 and 4. **10**. Thorax, dorsal view. **11**. Hind tibia, anterior view. Scale bars: 1 mm.

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the same side 1.5 x distance between subapical setae; basal seta strong; 2 lateral setae less strong; scutellum with one pair of discal setae. Legs. Fore tibia with two posterior setae. Mid tibia with one anterodorsal seta, one ventral, and two posterior setae. Hind tibia with a regular row of not too dense anterodorsal setae, all of the same length except for one slightly longer one. Hind coxa bare on dorsal surface. Pulvilli as long as last tarsal segment, claws longer. Wing. Fourth costal section with setulae up to halfway; costa without a costal spine. Sixth costal section half as long as fourth. Base of vein R_{4+5} with 2–3 small setulae, the basalmost one strongest. Cell r_{4+5} open. Bend of vein M without an appendix and situated relatively close to wing margin (distance to crossvein DM-Cu more than three times as much). Apical section of vein M concave, only slightly longer than section between DM-Cu and bend. Lower calypter large, inner margin concave, inner posterior angle well developed.

Abdomen. Syntergite 1+2 without strong setae, with excavation reaching hind margin. Tergite 3 with a pair of small marginal setae and 1–2 pairs of strong lateromarginal setae, with short adpressed hairs, erect in middle of tergite. Tergite 4 with a row of marginal setae and no discal setae, with erect hairs. Other tergites missing. Ventral side of tergite 4 with a large patch of not densely set, specialized setulae. A similar patch is present on tergite 3, but it is even less prominent. Fifth sternite with a distinct transverse incision. Basal margin of fifth sternite distinctly convex. Apical arms of fifth sternite square, converging, each with 2 strong setae apically and a row of small setulae along inner margin; sensilla trichodea absent. Terminalia (Figs. 12–14). Cercus [only visible in lateral and slightly dorsal views]: somewhat clavate in apical quarter, which is bent ventrally; apices of cerci close together. Aedeagus: both ventral and dorsal plates of distiphallus narrow and strongly sclerotized, without extensions ("loben" of Tschorsnig [1985]); ventral plate angularly connected to basal part of dorsal plate (as usual in the Goniini; Tschorsnig [1985]).

Female (see Mesnil 1950: 126, pl. VII). Differs from male as follows: silvery band on tergite 4 less conspicuous. Vertex narrow, about half of width of eye. Outer vertical seta slightly stronger than postocular setae. Frontal vitta distinctly narrower than fronto-orbital plate, hardly converging towards ocelli. Fronto-orbital plate with two equally strong reclinate orbital setae and two proclinate orbital setae. Katepisternum with 3 strong setae. Katepimeron with only a few setulae anteriorly. Row of anterodorsal setae on hind tibia less dense and less regular. Claws and pulvilli short. Hairs on tergites 3–4 adpressed. Tergite 5 short, only 2/3 the length of tergite 4, with irregular rows of discal and marginal setae and erect hairs (status for male unknown). Ventral side of tergites without specialized setulae.

Note

Mesnil (1950) stated (p. 126) or implied (p. 101) that the eye of his *Ctenophorocera* (*Parapales*) *sturmioides* was "very hairy". However, in his fig. 50 (pl. VII) the eye is bare. This inconsistency was already pointed out by Crosskey (1976). Both the cerci and sternite 5 are flattened on the microscope slide and could therefore be slightly deformed.

***Kalimyia estherae* sp. n.**

(Figs. 5–11, 15)

Parapales sturmioides (Mesnil): Zeegers (2000: 7; misidentification).

Type material

Holotype ♂, labelled "Nepal: Pr.[ovince] Gandaki / Arughat Bazar / alt. 600 m."; "leg Th.Zeegers / 29.ix.1998 / on camping mattress"; "HOLOTYPE male / Kalimyia estherae / det Th. Zeegers 2024" (Naturalis Biodiversity Center, Leiden, The Netherlands).

Type locality

The type locality is located at approximately 28º3′N 84º49′E. It is at low altitude south of the Himalayas, and has a hot and humid climate It is situated in the Oriental Region.

Etymology

This species is dedicated to my wife Esther, who introduced me to Nepal and accompanied me on many field trips.

Description

Male (Figs. 5–11, 15). Body length: 11 mm.

Colouration. Fronto-orbital plate dark in ground colour, with silvery pruinosity visible from some angles. Parafacial silvery. Antenna, palpus, and frontal vitta black. Thorax shiny black, with very thin greyish pruinescence leaving 5 deep black vittae, more clearcut anterior to suture; central vitta broad, sublateral vitta very narrow. Postpronotum black in ground colour, with silvery dusting. Scutellum black. Abdomen predominantly black, tergite 4 with an interrupted silvery band occupying anterior half of tergite in dorsal view, more pronounced towards lateral margin of tergite and broader in lateral view. Legs black. Wing transparent, tegula and basicosta black. Lower calypter brownish-yellow, brown towards inner margin, inner margin black. Halter yellow.

Head (Figs. 7, 8). Vertex narrow, half as broad as one eye in dorsal view. Eye bare. Ocellar setae very weak, hair-like, proclinate and crossed [artifact?]. Inner vertical setae parallel, reclinate; outer vertical seta lacking. Frontal vitta slightly narrower than fronto-orbital plate, about 3/4 of width of fronto-orbital plate just before anterior ocellus, broadening anteriorly (almost twice as broad as width before ocelli). Fronto-orbital plates with many crossed frontal setae and 3–4 rows of dense setulae laterad to these. One reclinate orbital seta, no proclinate orbital setae. Lunula bare. Postocular setulae slender, curved

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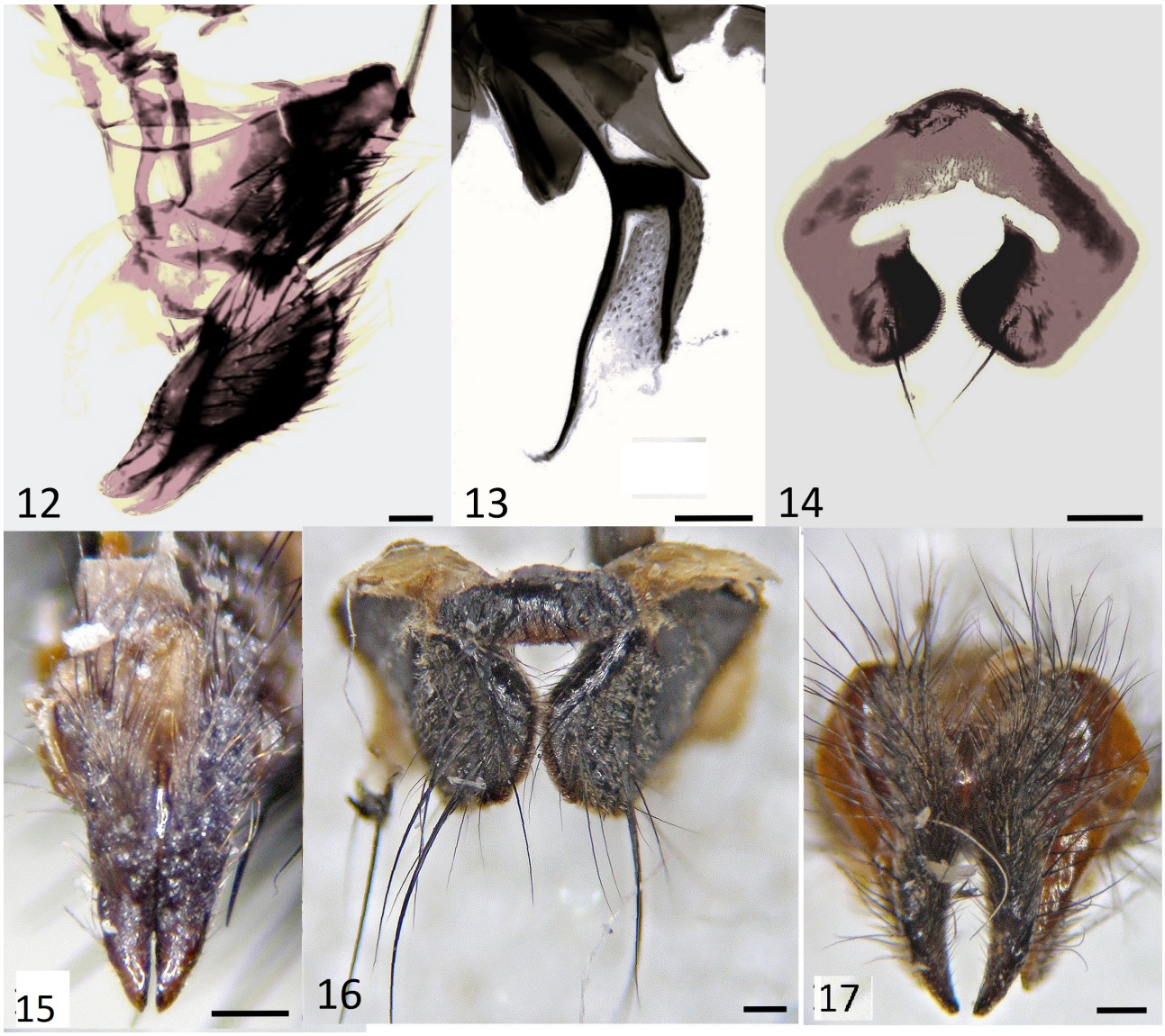

Figs. 12–17. Male terminalia. **12–14.** *Kalimyia sturmioides* (Mesnil, 1950), **comb. n.**, terminalia (source specimen uncertain) mounted on microscope slide in SDEI. – **12**. Postabdomen, lateral view, slightly tilted dorsally; scale bar: 0.2 mm. **13**. Distiphallus, lateral view; scale bar: 0.1 mm. **14**. Fifth sternite, ventral view; scale bar: 0.2 mm. **15**. *Kalimyia estherae* **sp. n.**, cerci in dorsal view; scale bar: 0.2 mm. **16–17.** *Blepharipa pratensis* (Meigen, 1824); scale bars: 0.2 mm. – **16**. Fifth sternite. **17**. Cerci and surstyli, dorsal view.

forward. Occiput behind occipital row with yellow setulae on upper half and several of rows of black setulae on lower half. Facial ridge straight, with small but distinct recumbent setae on lower half. Oral margin hardly projecting, vibrissa slightly raised above oral margin, facial ridge with setulae of decreasing size up to halfway. Parafacial bare below lowest frontal seta, narrowed ventrally, at narrowest point distinctly narrower than width of first flagellomere; bare below lowest frontal seta. Gena about 1/4 of larger eye diameter; genal dilation strong, very densely covered with black hairs. First flagellomere 3.5 times as long as wide, 2.5 times as long as pedicel. Arista thickened on basal 1/5, short plumose on basal 1/3, longest hairs on upper side slightly longer than width of arista at base, those on lower side shorter; second aristomere not longer than broad.

Thorax (Fig. 10). Scutum with 3+4 acrostichal setae, the first two behind the suture close together [aberration?], 3+4 dorsocentral setae, 1+3 intra-alar setae, 3 strong supra-alar setae, and 2 katepisternal setae; first supra-alar seta virtually as strong as third, second distinctly stronger.

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Postpronotum with only three setae, forming a shallow triangle. Proepimeral and proepisternal setae both strong, though the latter weaker; proepimeral seta accompanied by a secondary one. Anepimeral seta accompanied by a second, smaller seta and a bunch of weaker setulae. Katepimeron completely covered with long setulae. Prosternum densely setulose. Scutellum with six pairs of strong horizontal marginal setae and one pair of discal setae; apical marginal setae crossed, subapical setae parallel, close together: distance between subapicals only half of distance between subapical and basal seta from the same side. Legs. Fore tibia with 2 posterior setae. Mid tibia with one strong, isolated anterodorsal seta, one equally strong ventral seta, and two smaller posterior setae. Hind tibia with a dense and regular row of rather short anterodorsal setae, all of the same length (Fig. 11). Hind coxa bare on dorsal surface. Pulvilli as long as apical tarsal segment, claws 1.5 times as long as pulvilli. Wing. Costa with setulae reaching halfway along fourth costal section; costal spine absent. Sixth costal section half as long as fourth. Base of vein R_{4+5} with 2–3 small setulae. Cell r_{4+5} open. Bend of vein M without an appendix and situated relatively close to wing margin (distance to DM-Cu twice as large). Apical section of vein M concave, 1.3 times as long as section between DM-Cu and bend. Lower calypter large, inner margin concave, inner posterior angle well developed.

Abdomen broad, short. Excavation of syntergite 1+2 reaching hind margin; syntergite 1+2 without marginal setae. Tergite 3 with a pair of weak marginal setae and a pair of weak lateromarginal setae; tergite 4 with a row of marginal setae. Setulae on dorsal side of tergites 2–4 dense, short and adpressed, only slightly erect along central axis; setulae on tergite 3 distinctly denser than on tergite 4. Tergite 5 with a double row of erect marginal setae and erect setulae. Ventral side of tergite 4 largely covered with very dense and quite long specialized setulae, forming a diffuse sexual patch; ventral side of tergite 3 similar, but patch less conspicuous (Fig. 9). Terminalia [only cerci visible in situ (Fig. 15)]. Cerci close together and largely parallel in dorsal view. In lateral view, apical 1/5 of cercus slightly clavate and bent ventrally (quite similar to *K. sturmioides*).

Female. Unknown.

Key to species of *Kalimyia* gen. n.

1 Lower calypter uniformly yellowish-grey, only the inner margin darkened. Postpronotum, apex of scutellum, and lateral area of tergite 3 slightly brownish-red. Arista thickened on basal third or more. Male: width of vertex less than 2/5 of width of an eye in dorsal view ..... ***sturmioides*** **Mesnil**

– Lower calypter brownish-yellow, browner towards inner margin, inner margin itself black. Postpronotum, apex of scutellum, and tergite 3 completely black. Arista thickened on basal 1/5. Male: vertex 1/2 of width of an eye in dorsal view ..... ***estherae*** **sp. n.**

Discussion

Based on external features and on the male terminalia, *Kalimyia* **gen. n.** can be placed in either of the tribes Goniini or Eryciini. Information on the reproduction strategy and egg size would be needed for a definitive placement (Herting 1960; Wood 1987). Unfortunately, the male terminalia and fifth sternite are not fully informative: based on the male terminalia, only probability statements can be made about the correct tribal placement (Tschorsnig 1985). Most features of *Kalimyia* **gen. n.** (lack of sensilla trichodea, cercus without an inner tooth, ventral plate of distiphallus without extensions, apical incision of fifth sternite very deep) agree with the tribe Goniini, while only the convex basal margin of the fifth sternite would suggest Eryciini. Given the evidence at hand and the general resemblance with the genus *Blepharipa*, *Kalimyia* **gen. n.** is tentatively placed in the tribe Goniini and is no longer considered to belong to the tribe Anacamptomyiini.

The new genus, *Kalimyia* **gen. n.**, occurs in the Oriental Region and is apparently very rare (or at least little collected). With the exclusion of *sturmioides* from the genus *Parapales*, the distribution of *Parapales* is now restricted to Madagascar.

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