

Two new genera of the tribe Orgilini Ashmead (Hymenoptera: Braconidae: Orgilinae)

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Two new genera, *Podorgilus* from Brazil and Bolivia (type species: *Podorgilus brevitarsus* spec. nov.) and *Sulorgilus* from Indonesia (type species: *Sulorgilus reclineris* spec. nov.) are described and illustrated. A revised key to the genera of the subfamily Orgilinae is added.

Introduction

The genera of the subfamily Orgilinae Ashmead, 1900, were revised by van Achterberg (1987), with subsequent additions by van Achterberg & Quicke (1992) and van Achterberg (1992). Among material kindly made available by Dr D. Wahl (AEI, Gainesville) a new and very aberrant genus belonging to the tribe Orgilini Ashmead, 1900, was discovered. A few years ago, I collected an unknown genus from Central Sulawesi, belonging to the same tribe. Both genera are described and included in a revised version of the key published by van Achterberg (1987). The biology of the new genera is unknown, but the available data on the biology of species in the tribe Orgilini indicate that they are solitary koinobiont endoparasites of larvae of various Lepidoptera (Coleophoridae, Gelechiidae, Oecophoridae, Pyralidae, Psychidae, Gracillariidae, and Tortricidae).

For the identification of the subfamily Orgilinae, see van Achterberg (1990, 1993), and for the terminology used in this paper, see van Achterberg (1988, 1993).

Descriptions

Podorgilus gen. nov.

(figs 1-13)

Type species: *Podorgilus brevitarsus* spec. nov.

Etymology.— From “podos” (Greek for “foot”) and the generic name “*Orgilus*”, because the new genus is related to the genus *Orgilus* and has aberrant hind tarsi. Gender: masculine.

Diagnosis.— Antenna medium-sized (figs 1, 2), its length about 1.2 (♀) times fore wing; scapus ovoid, granulate, ventrally about as long as dorsally, and its outer apex concave (figs 2, 3); clypeus normal, straight ventrally; third labial palp segment very short and together with fourth segment inserted on second segment; occipital carina

medium-sized, widely interrupted dorsally, not protruding dorsally (fig. 3); epistomal suture shallow; frons distinctly convex sublaterally (fig. 6); malar suture absent; mandible slender basally, strongly twisted apically and outer tooth distinctly longer than inner tooth; occipital flange narrow, rectangularly connected to occipital carina (fig. 3); length of mesosoma about 1.4 times its height; dorsal pronope very wide and deep, slit-like (figs 3, 11, 13); lateral carina of mesoscutum largely absent; prepectal carina complete, angled ventrally and comparatively weak, not reaching anterior margin of mesopleuron (fig. 3); precoxal sulcus complete and narrowly crenulate (fig. 3); propleuron rather flat (fig. 3); mesopleuron rounded ventro-posteriorly (fig. 3); mesosternal sulcus medium-sized, narrowly crenulate; notauli complete, crenulate and narrow, posteriorly with a large depression (fig. 13); mesoscutum densely setose, strongly punctate; scutellum moderately convex, punctate, without medial depression (fig. 13), without medio-posterior depression; scutellar sulcus smooth; metanotum with very short median carina anteriorly (fig. 13); metapleural flange evenly curved, semi-circular, and rather narrow (fig. 3); propodeum without median carina anteriorly, and with medium-sized lamella posteriorly (fig. 3); propodeal spiracle round; vein 1-M of fore wing slightly curved (fig. 1); vein r-m of fore wing absent; vein cu-a of fore wing vertical, straight and slightly postfurcal (fig. 1); vein 1-SR of fore wing absent and first discal cell broadly sessile (fig. 1); vein 2-M of fore wing narrowly sclerotized (fig. 1); vein SR1 of fore wing straight; vein M+CU of hind wing longer than vein 1-M; plical lobe of hind wing very narrow; vein 1-M of hind wing somewhat widened (fig. 7); vein cu-a of hind wing strongly reclivous, sinuate (fig. 7); subbasal cell of hind wing glabrous (fig. 7); tarsal claws simple (fig. 8); outer face of hind tibia with two pegs apically (fig. 4); outer side of hind coxa punctate (fig. 3), coxa much enlarged (fig. 3); length of hind leg about 1.7 times length of fore wing; hind basitarsus strongly widened, with obtuse subventral keel on its outer side (fig. 9); length of first tergite 2.6-2.9 times its apical width (fig. 12), its dorsal carinae absent; second metasomal tergite smooth, and only antero-laterally shallowly depressed (fig. 12); third tergite without sharp lateral crease (fig. 3); ovipositor with distinct notch subapically; length of ovipositor sheath 0.9-1.0 times fore wing.

Distribution.— Neotropical (Brazil, Bolivia): one species.

Biology.— Unknown.

Podorgilus brevitarsus spec. nov.
(figs 1-13)

Material.— Holotype, ♀ (AEI), "Brazil, Campina Grande, nr. Curitiba, 17.ii.[19]66, H. & M. Townes". Paratypes (RMNH, AEI), 2 ♀♀: topotypic, but 19.ii.1966.

Holotype, ♀, length of body 7.7 mm, of fore wing 7.5 mm.

Head.— Antenna incomplete, antenna with 49 segments, length of third segment 1.2 times fourth segment, length of third, and fourth segments 3.8, and 3.2 times their width, respectively, subapical segments submoniliform (fig. 2); length of maxillary palp 0.8 times height of head; in dorsal view length of eye 1.3 times temple (fig. 6); temple directly narrowed posteriorly, its ventral 0.7 largely very finely granulate, mat; OOL:diameter of ocellus:POL = 14:7:10; frons smooth medially, coriaceous

anteriorly, and coarsely punctate dorsally, sparsely punctate posteriorly (fig. 6); vertex flattened and largely smooth near stemmaticum; face rather flat, densely and coarsely punctate medially and sparsely so laterally (fig. 10); clypeus convex and smooth; length of malar space 1.3 times basal width of mandible.

Mesosoma.— Side of pronotum smooth, except some micro-crenulae posteriorly (fig. 3); mesopleuron moderately punctate, but smooth near precoxal sulcus; metapleuron sparsely punctate; mesoscutum coarsely and rather densely punctate; middle lobe of mesoscutum without median carina (fig. 13); surface of propodeum largely smooth, but anteriorly and laterally sparsely punctate.

Wings.— Fore wing: $r:3\text{-SR}+\text{SR}1:2\text{-SR} = 17:53:13$; $1\text{-SR}+\text{M}$ slightly sinuate; subbasal cell setose; $1\text{-CU}1:2\text{-CU}1 = 1:17$; $\text{CU}1\text{b}$ much shorter than $3\text{-CU}1$ (fig. 1). Hind wing: membrane largely glabrous basally (fig. 7); $\text{M}+\text{CU}:1\text{-M} = 41:30$.

Legs.— Hind tarsus moderately long (fig. 9); length of femur, tibia and basitarsus (lateral aspect!) of hind leg 5.9, 8.4, and 4.4 times their width, respectively; length of hind tibial spurs 0.3 and 0.4 times hind basitarsus.

Metasoma.— Length of first tergite 2.9 times its apical width, its surface largely smooth, sparsely punctate, medially rather flat, posteriorly convex and its spiracles hardly protruding (fig. 12); laterope deep and rather large (fig. 3); second tergite largely smooth; second suture narrow, indistinct; length of ovipositor sheath 0.90 times fore wing.

Colour.— Black (including hind spurs); head (except frons (but antero-laterally yellowish)), temples dorsally, vertex and occiput, metapleuron ventrally, propodeum posteriorly, fore and middle legs (but telotarsi, middle coxa baso-ventrally, apex of middle tibia, spurs and apex of first tarsal segment, and second and third tarsal segments of middle tarsus infuscate), apex of hind coxa, basal 0.6 of hind tibia (but with dark brown basal band), prothorax, tegulae, first tergite (except apical quarter), brownish-yellow; hind trochantellus, hind femur and metasoma ventrally, brown; apical quarter of basitarsus, and second-fourth segments of hind tarsus, white; wing membrane subhyaline, but apically with dark brown spot (fig. 1); pterostigma, parastigma and veins, dark brown.

Variation.— Antennal segments of ♀ 49(1), apical segment of antenna with short spine; length of fore wing 6.7-7.5 mm, and of body 6.6-7.7 mm; length of first tergite 2.6-2.9 times its apical width; length of ovipositor sheath 0.90-0.98 times fore wing; fourth segment of middle tarsus may be yellowish or dark brown.

Note.— In AEI is also a male from Bolivia ("Dpto Sta. Cruz, Prov. Chignitos, Roboré, 300 m alt., xi[19]59, F.H. Walz"), which is very similar, but has the mesoscutum medio-posteriorly, scutellum, only basal half of first tergite, and mesopleuron (except below precoxal sulcus), yellowish; and only apical tenth of hind basitarsus whitish.

***Sulorgilus* gen. nov.**

(figs 14-28)

Type species: *Sulorgilus reclinervis* spec. nov.

Etymology.— From "Sulawesi" and the generic name "*Orgilus*", because the new genus is related to the genus *Orgilus* and is only known from Sulawesi. Gender: masculine.

Diagnosis.— Head comparatively small (compared to mesosoma, fig. 17); antenna rather short, its length about 0.9 (♀) times fore wing (figs 14, 21); scapus ovoid, coarsely and densely punctate and long setose ventrally, and its outer apex rather concave (fig. 18); clypeus normal, truncate ventrally; third labial palp segment half as long as fourth segment and fourth segment inserted on third segment; occipital carina strong laterally, up to upper level of eye, widely interrupted dorsally, not protruding dorsally (fig. 22); epistomal suture shallow; frons deeply concave and largely smooth medially, coarsely reticulate-punctate, setose and convex sublaterally (figs 7, 22); malar suture absent; mandible slender basally, strongly twisted apically and outer tooth distinctly longer than inner tooth, robust; occipital flange narrow, rectangularly connected to occipital carina (fig. 17); mesosoma robust, its length of mesosoma about 1.2 times its height (fig. 17); dorsal pronope round, rather small and deep (fig. 23); lateral carina of mesoscutum largely absent; prepectal carina completely absent (fig. 17); precoxal sulcus not distinctly impressed, coarsely punctate, partly with confluent punctures and forming small grooves (fig. 17); propleuron convex, coarsely punctate; mesopleuron rounded ventro-posteriorly (fig. 17); mesosternal sulcus shallow, narrow, largely smooth; notauli complete, narrow, finely crenulate, posteriorly with narrow depression (fig. 23); mesoscutum densely setose, very densely and coarsely punctate, punctures nearly touching each other; scutellum strongly convex (fig. 17), coarsely punctate, without medial depression (fig. 23), without medio-posterior or median depression; scutellar sulcus without strong carinae, only its posterior half crenulate (fig. 23); metanotum without median carina anteriorly (fig. 23); metapleural flange wide, obtuse, thick (fig. 17); propodeum without median carina anteriorly, and with medium-sized lamella posteriorly (fig. 17); propodeal spiracle short elliptical (figs 17, 23); vein 1-M of fore wing straight; vein r-m of fore wing present; vein cu-a of fore wing largely vertical, posteriorly slightly curved basad, subinterstitial (fig. 14); vein 1-SR of fore wing absent and first discal cell sessile and robust (fig. 14); vein 2-M of fore wing medium-sized; vein SR1 of fore wing straight; vein M+CU of hind wing longer than vein 1-M; plical lobe of hind wing narrow (fig. 14); vein 1-M of hind wing somewhat widened (fig. 14); vein cu-a of hind wing strongly reclivous, straight (figs 14, 15); subbasal cell of hind wing glabrous (fig. 15); tarsal claws bifurcate (fig. 28); outer face of hind tibia bristly, with two pegs apically (fig. 24); outer side of hind coxa largely coarsely punctate (fig. 17), coxa rather enlarged; length of hind leg about 1.3 times length of fore wing; hind basitarsus normal (fig. 25); length of first tergite about 1.5 times its apical width (fig. 26), its dorsal carinae absent; second metasomal tergite largely smooth, without depressions; third tergite without sharp lateral crease (fig. 17); ovipositor with minute notch subapically; length of ovipositor sheath about 0.9 times fore wing.

Distribution.— Indo-Australian (Indonesia: Sulawesi): one species.

Biology.— Unknown.

Note.— Closely related to the Neotropical genus *Podorgilus* nov. because of the following synapomorphies: vein cu-a of hind wing long and strongly reclivous, vein 1-M of hind wing somewhat widened, vein 1-M of fore wing long and straight, subbasal cell of hind wing glabrous, head (compared to mesosoma) small, occipital carina rectangularly connected to hypostomal carina. It shares with the Afrotropical genus *Clotildea* Szépligeti, 1914 and the Australian *Declotila* van Achterberg & Quicke, 1992, the long vein 1r-m of hind wing, and with *Declotila* the reduction of the prepectal carina and the widened vein 1-M of hind wing.

Sulorgilus reclinerovis spec. nov.
(figs 14-28)

Material.— Holotype, ♀ (RMNH), "Indonesia: Sulawesi, nr Mamasa, Penannang, 1620 m, Mal. trap 20, 9-22.iv.1991, C. v. Achterberg".

Holotype, ♀, length of body 8.0 mm, of fore wing 8.9 mm.

Head.— Antenna with 48 segments, length of third segment 1.2 times fourth segment, length of third, fourth and penultimate segments 2.2, 1.9, and 1.1 times their width, respectively, subapical segments moniliform (figs 20, 21); length of maxillary palp equal to height of head; in dorsal view length of eye 1.6 times temple (fig. 22); temple directly narrowed posteriorly, coarsely punctate and coriaceous, mat; OOL: diameter of ocellus:POL = 16:7:16; frons largely smooth medially, coarsely reticulate-punctate laterally (fig. 22); vertex flattened and largely smooth near stemmaticum; face reticulate-punctate; clypeus convex and reticulate-punctate; length of malar space equal to basal width of mandible.

Mesosoma.— Side of pronotum smooth dorso-anteriorly, sparsely punctate ventro-anteriorly, and densely punctate posteriorly (fig. 17); mesopleuron coarse and very densely punctate, punctures partly touching each other, but smooth near speculum; metapleuron densely and coarsely punctate; mesoscutum coarsely and very densely punctate, punctures (nearly) touching each other; middle lobe of mesoscutum without median carina (fig. 23); surface of propodeum short (fig. 17), anteriorly with very minute microsculpture, largely smooth (except some striae) and glabrous posteriorly.

Wings.— Fore wing: $r:3\text{-SR}+\text{SR}1:2\text{-SR}:r\text{-m} = 11:46:14:10$; 1-SR+M slightly curved; subbasal cell largely glabrous anteriorly (fig. 16); cu-a subinterstitial; CU1b much shorter than 3-CU1 (fig. 14). Hind wing: membrane partly glabrous basally (fig. 15); $M+\text{CU}:1\text{-M} = 19:12$.

Legs.— Hind tarsus medium-sized (fig. 25); length of femur, tibia and basitarsus of hind leg 3.9, 7.6, and 6.7 times their width, respectively; length of hind tibial spurs 0.4 and 0.7 times hind basitarsus.

Metasoma.— Length of first tergite 1.5 times its apical width, its surface largely smooth, sparsely and very weakly microsculptured, shiny, medially rather flat, posteriorly convex and its spiracles hardly protruding (fig. 26); laterope deep and small (fig. 17); second tergite largely smooth; second suture narrow, superficial and smooth; length of ovipositor sheath about 0.9 times fore wing.

Colour.— Yellowish-brown, with middle and hind leg, and metasoma less pale than other parts; frons medially, vertex and occiput medially, stemmaticum, mesoscutum (except antero-laterally), metanotum, propodeum posteriorly, mesopleuron (except near speculum), mesosternum, metapleuron (except dorsally), middle coxa largely, hind coxa ventrally, first-fourth hind tarsal segments (but telotarsus whitish) first tergite basally, and second tergite narrowly basally, black; pterostigma, and veins of apical half of wing, yellowish-brown; remainder of veins largely dark brown; wing membrane yellowish.

Key to genera of the subfamily Orgilinae

1. Vein 1-SR of fore wing present (fig. 29); occipital flange strongly protruding posteriorly (fig. 30); occipital carina absent ventrally (fig. 30); pronope slit-shaped and anteriorly situated on pronotum (fig. 31); scutellum with distinct depression medio-posteriorly (fig. 32). Tribe Antestrigini van Achterberg; Neotropical
..... *Antestrix* van Achterberg, 1987
- Vein 1-SR of fore wing absent (figs 33, 37-39); occipital flange not protruding posteriorly (fig. 34); occipital carina usually present ventrally (figs 34, 41); pronope (if present) round (fig. 36), semicircular (figs 49, 52) or elliptical, if distinctly transverse or slit-like then situated near middle of pronotum (figs 13, 62); scutellum without depression medio-posteriorly (figs 23, 35) or only narrowly developed (fig. 36) 2
2. Vein M+CU of hind wing much shorter than vein 1-M (figs 37-39); first discal cell of fore wing slender (figs 38, 39), if robust (*Orgilonia*; fig. 37) then posterior margin of hind wing distinctly concave subbasally (fig. 37); hind wing comparatively long and narrow (figs 37-39); basal cell of hind wing very small (figs 37-39); vein cu-a of hind wing strongly reclivous (fig. 38). Tribe Mimagathidini Enderlein 3
- Vein M+CU of hind wing about as long as vein 1-M or longer (figs 42-45); first discal cell of fore wing comparatively robust (figs 42-45); posterior margin of hind wing convex, straight or slightly concave subbasally (figs 14, 42, 43); hind wing less slender (figs 42-45); basal cell of hind wing medium-sized or large (figs 1, 14, 42-45); vein cu-a of hind wing variable (figs 14, 42-45). Tribe Orgilini Ashmead 5
3. Occipital carina absent or only up to middle level of eyes (fig. 47); third and fourth metasomal tergites with sharp lateral crease (fig. 46); sclerotized part of vein 2-M of fore wing absent or nearly so (fig. 37); vein r-m of fore wing absent (fig. 37); first discal cell of fore wing comparatively robust (fig. 37). Palaeotropical
..... *Orgilonia* van Achterberg, 1987
- Occipital carina distinct, present up to near upper level of eyes (figs 34, 51); third and fourth tergites without sharp lateral crease (fig. 48); sclerotized part of vein 2-M of fore wing distinct (fig. 38); vein r-m of fore wing usually present (figs 38, 39); first discal cell of fore wing slender (figs 38, 39) 4
4. Scutellum with deep depression (fig. 52); mandible widened basally (fig. 41); mesopleuron angulate in front of middle coxa (fig. 50); mesoscutum with deep and large medio-posterior depression (fig. 52); dorsal apex of occipital carina angulate (fig. 51); propodeum with a high lamella apically (fig. 50); median carina of metanotum present anteriorly (fig. 52); median carina of propodeum strong (fig. 52); hind coxa coarsely transversely rugose (fig. 53). Neotropical
..... *Bentonia* van Achterberg, 1992
- Scutellum evenly convex (fig. 49); mandible normal basally; mesopleuron rounded in front of middle coxa (fig. 48); mesoscutum at most with a moderately deep and narrow depression medio-posteriorly (fig. 49); dorsal apex of occipital carina normal, not protruding at an angle (cf. fig. 34); propodeum without high apical lamella (fig. 48); median carina of metanotum absent or obsolescent (fig. 49); median carina of propodeum usually absent, if present then weakly developed; hind coxa without or with much weaker rugae (fig. 48), rarely strong. Circumtropical
..... *Stantonia* Ashmead, 1904

5. Length of fore wing more than 12 mm and its membrane largely dark brown; second metasomal tergite with pair of depressions (figs 55, 58); metapleuron not differentiated from propodeum (fig. 54); dorsal carinae of first tergite completely absent (figs 55, 58); scutellar (figs 56, 57) and pleural (fig. 54) sulci smooth; metapleural flange absent (fig. 54) 6
 - Length of fore wing less than 10 mm and its membrane largely hyaline, at most with apical dark spot (fig. 1) or slightly infusate; second tergite without depressions (figs 59-61); metapleuron differentiated from propodeum (fig. 63); dorsal carinae of first tergite nearly always present basally (figs 60, 61); pleural sulcus (fig. 63), and nearly always also scutellar sulcus (fig. 62) sculptured; metapleural flange present (fig. 63) 7
6. Occipital carina completely and main part of prepectal carina absent (fig. 69); second metasomal tergite only with a pair of diverging depressions (fig. 55); surroundings of stemmaticum normal, flat (fig. 70); notauli absent on mesoscutal disc (fig. 56); vein 2A of fore wing distinct (fig. 42); scapus truncate apically (fig. 64); Australian *Declotila* van Achterberg & Quicke, 1992
 - Occipital carina strong up to middle level of eye and complete prepectal carinae present (fig. 67); second metasomal tergite with X-shaped depression (fig. 58); stemmaticum situated in a wide depression (fig. 68); notauli present on mesoscutal disc (fig. 57); vein 2A of fore wing absent (fig. 66); scapus strongly oblique apically (fig. 65); Afrotropical *Clotildea* Szépligeti, 1914
7. Propleuron concave ventrally (fig. 73), and in lateral view with straight ventral margin (fig. 72); first metasomal tergite petiolate and flat basally (fig. 75); laterope absent (fig. 74); scutellum with narrow transverse depression medio-posteriorly (fig. 36). South Palaearctic *Petiorgilus* van Achterberg, 1987
 - Propleuron convex ventrally, and in lateral view usually with curved ventral margin (figs 17, 76, 77); first tergite (sub)sessile and usually concave medio-basally (figs 12, 60, 61, 79); laterope more or less developed (figs 3, 63, 78); scutellum without distinct depression medio-posteriorly (fig. 13, 62) 8
8. Clypeus with pair of upwardly bent tubercles dorsally (figs 80, 81); tarsal claws very slender (fig. 88); hind tarsus slender and long (fig. 82). Palaearctic
 - *Kerorgilus* van Achterberg, 1985
 - Clypeus without tubercles (figs 76, 84); tarsal claws less slender (figs 86, 87); hind tarsus usually less slender and shorter (fig. 83) 9
9. Hind basitarsus strongly widened (fig. 9); pronope very wide and deep, slit-like (figs 11, 13); vein cu-a of hind wing strongly reclivous and sinuate (fig. 7); prepectal carina present (fig. 3). Neotropical *Podorgilus* gen. nov.
 - Hind basitarsus normal (figs 25, 83); pronope absent, shallow, elliptical or round, and at most medium-sized (figs 23, 62); vein cu-a of hind wing vertical or slightly reclivous (figs 33, 43, 45), if strongly reclivous then vein cu-a straight (fig. 15) and prepectal carina absent (fig. 17) 10
10. Vein cu-a of hind wing strongly reclivous (figs 14, 15); vein 1-M of hind wing widened, and linearly connected to vein 1r-m, both veins about of equal length (fig. 20); vein r-m of fore wing present (fig. 14); tarsal claws bifurcate (fig. 28); scutellum strongly convex (fig. 17); first subbasal cell of hind wing comparatively wide (fig. 15); frons distinctly depressed medially (fig. 22); prepectal carina absent (fig. 17). Indo-Australian *Sulorgilus* gen. nov.

- Vein cu-a of hind wing vertical or slightly reclivous (figs 33, 43, 45); vein 1-M of hind wing slender and angled with vein 1r-m (figs 43, 45), and much longer than vein 1r-m; vein r-m of fore wing absent (fig. 45), at most with short remnant (fig. 43); tarsal claws simple (fig. 86, 87); scutellum slightly convex (fig. 78); first subbasal cell of hind wing narrower (fig. 43, 45); frons flat or slightly depressed medially; prepectal carina usually present (fig. 76). Cosmopolitan
 *Orgilus* Haliday, 1833

Acknowledgements and abbreviations

I wish to thank Dr D. Wahl (Gainesville) for the loan of the specimens, and Mr T. Huddleston (London) for his comments on the first draft. AEI stands for the American Entomological Institute, Gainesville, and RMNH for Nationaal Natuurhistorisch Museum, Leiden.

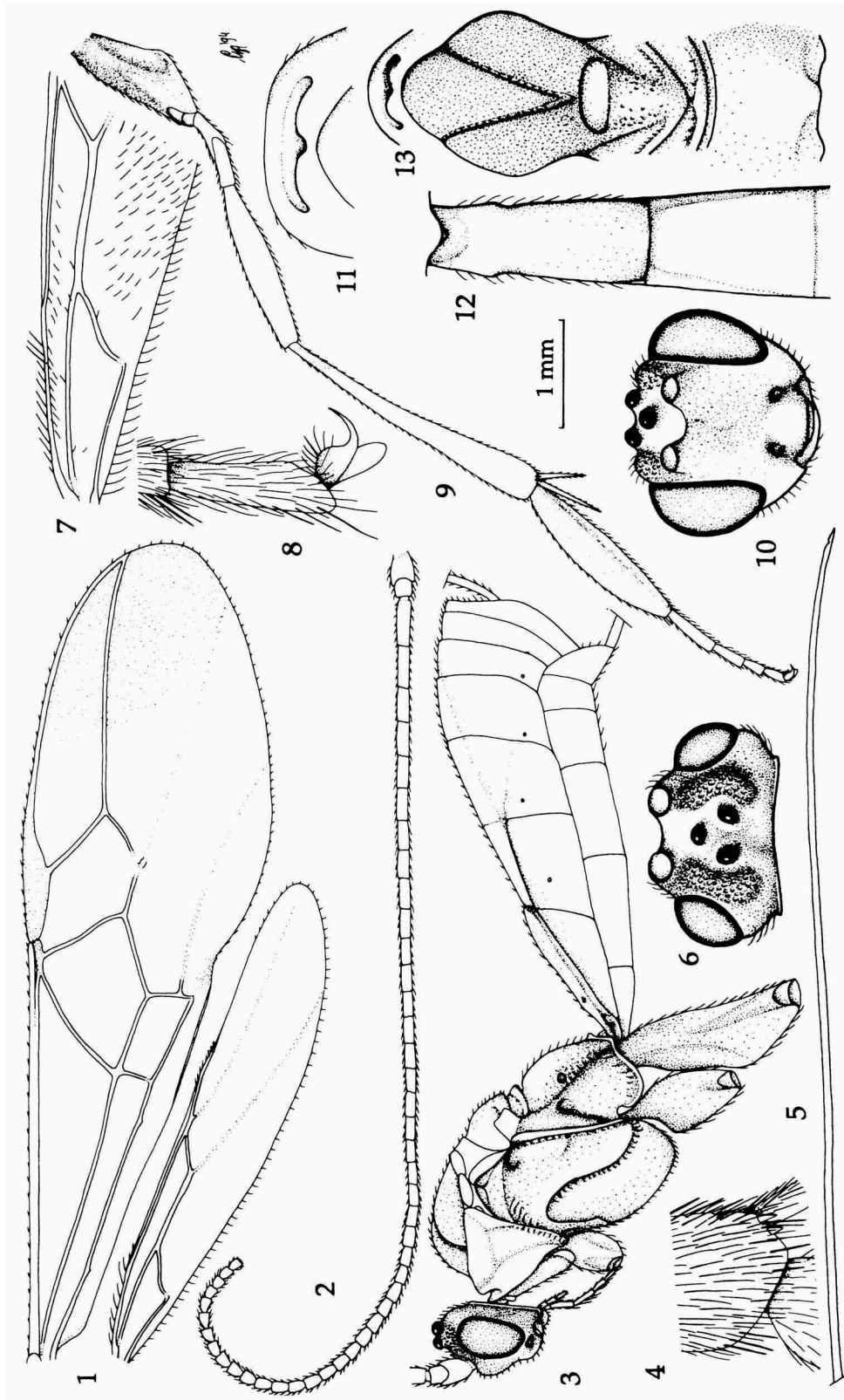
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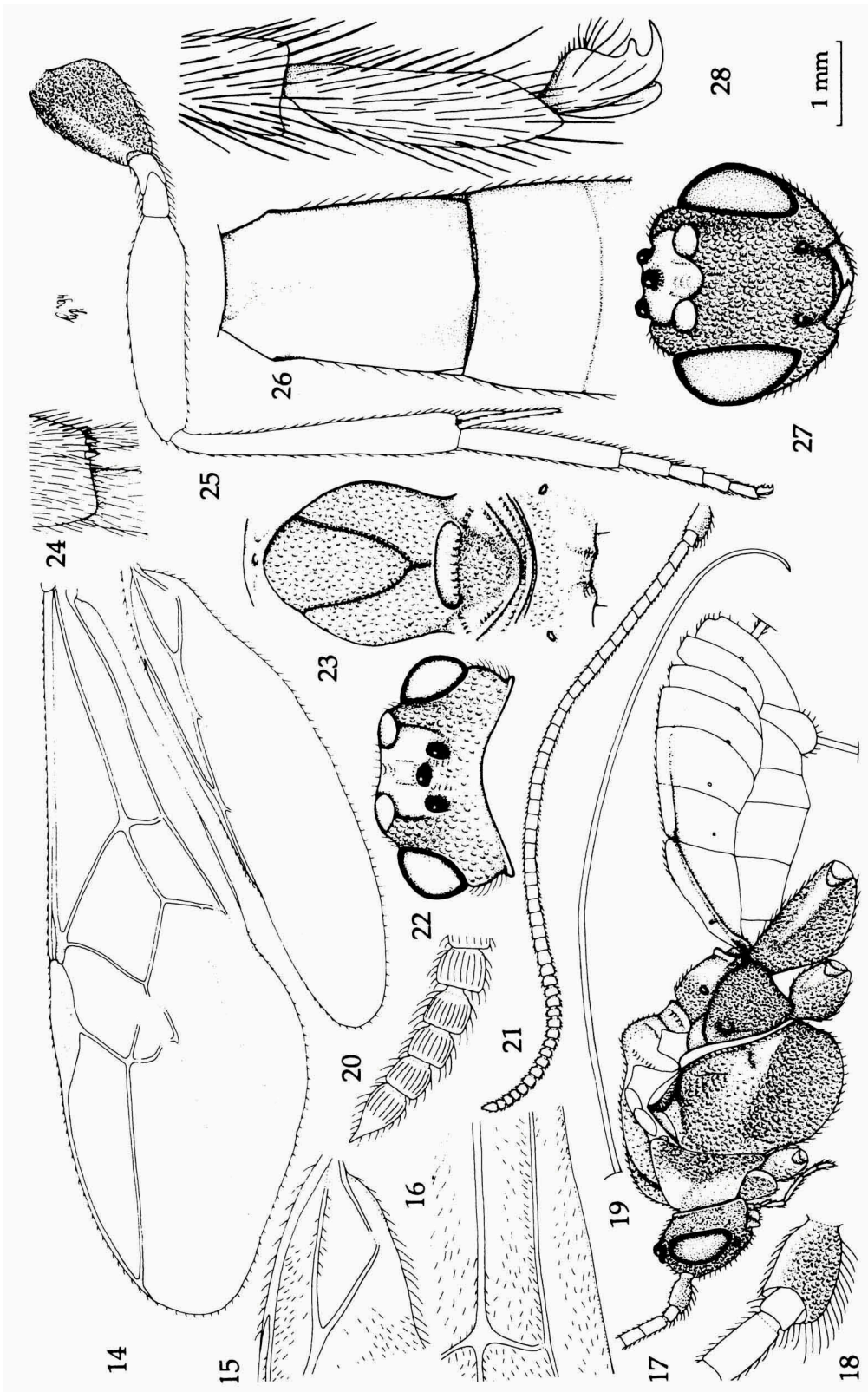
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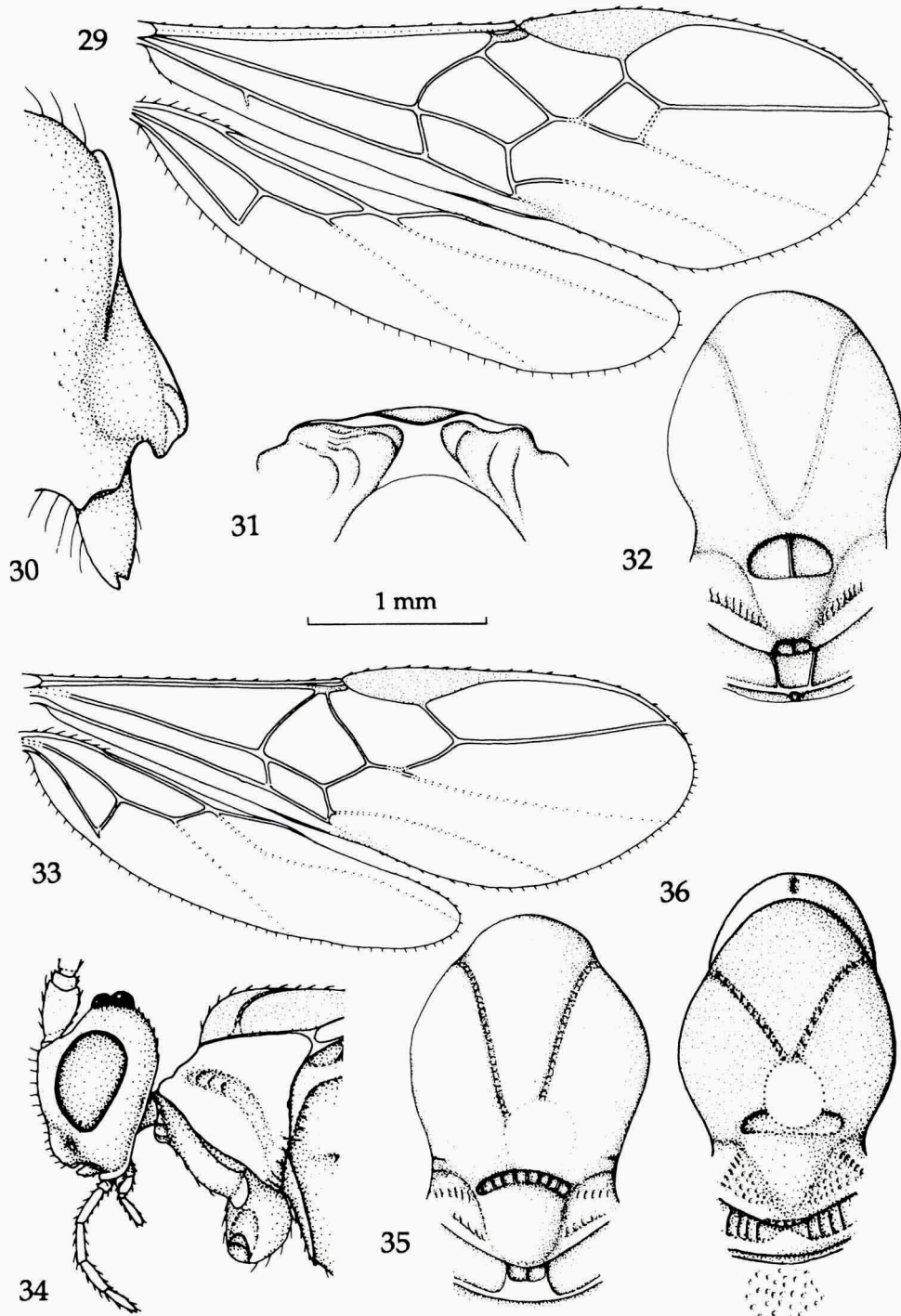
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Figs 1-13. *Podorgilus brevitarsus* gen. nov. & spec. nov., ♀, holotype. 1, wings; 2, habitus, lateral aspect; 3, habitus, lateral aspect; 4, apex of hind tibia, outer aspect; 5, ovipositor; 6, head, dorsal aspect; 7, head, dorsal aspect; 8, base of hind wing; 9, inner hind leg; 10, head, frontal aspect; 11, anterior part of pronotum, dorsal aspect; 12, first and second metasomal tergites, dorsal aspect; 13, mesosoma, dorsal aspect. 1-3: 1 × scale-line; 4: 3.5 ×; 5: 1 × scale-line; 6: 3.5 ×; 7, 10: 2 ×; 8: 5 ×; 9: 0.7 ×; 11: 2.8 ×; 12, 13: 1.5 ×.



Figs 14-28. *Sulorgilus reclinatoris* gen. nov. & spec. nov., ♀, holotype. 14, wings; 15, base of hind wing; 16, apical third of subbasal cell of fore wing; 17, habitus, lateral aspect; 18, detail of scapus and pedicellus, lateral aspect; 19, ovipositor; 20, apex of antenna; 21, antenna; 22, head, dorsal aspect; 23, mesosoma, dorsal aspect; 24, apex of hind tibia, outer aspect; 25, hind leg; 26, first and second metasomal tergites, dorsal aspect; 27, head, frontal aspect; 28, outer hind claw. 14, 17, 19, 21, 25: 1 × scale-line; 15, 16: 2 ×; 18, 24: 3 ×; 22, 26, 27: 1.8 ×; 23: 1.5 ×; 28: 8.3 ×.



Figs 29-32, *Antestrix bicolor* van Achterberg, ♀, holotype; figs 33-35, *Orgilus columbianus* (Enderlein), ♀, holotype; fig. 36, *Petiorgilus schmiedeknechti* van Achterberg, ♀, holotype. 29, 33, wings; 30, detail of occipital flange; 31, pronotum, antero-dorsal aspect; 32, 35, 36, thorax, dorsal aspect; 34, head and anterior part of mesosoma, lateral aspect. 29, 33: 1 × scale-line; 30: 3.5 ×; 31: 2.5 ×; 32, 35: 1.7 ×; 34: 1.4 ×;

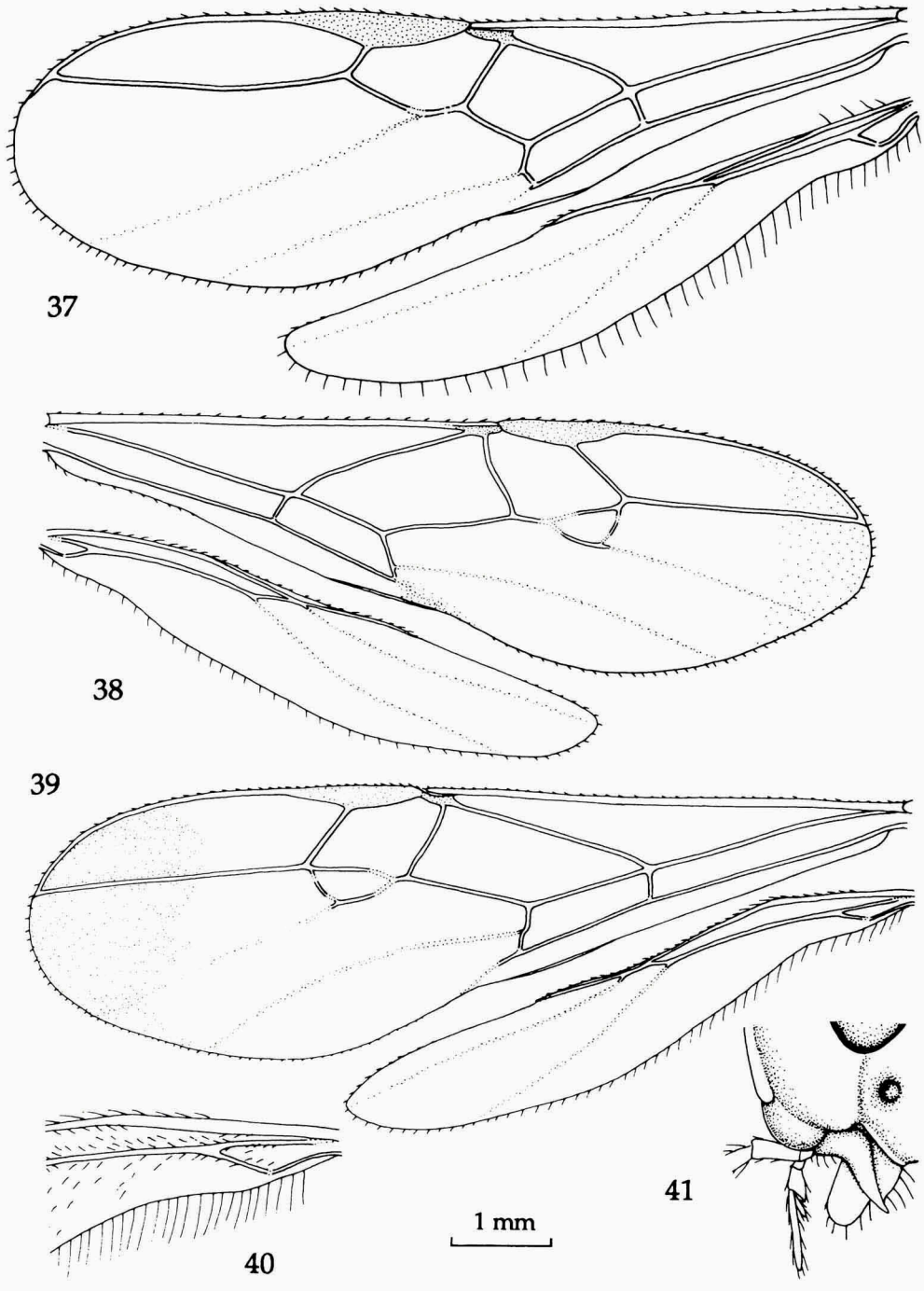


Fig. 37, *Orgilonia vechti* van Achterberg, ♀, holotype; fig. 38, *Stantonia nigristernum* van Achterberg, ♀, holotype; figs 39–41, *Bentonia longicornis* van Achterberg, ♀, holotype. 37–39: wings; 40, base of hind wing; 41, detail of occipital flange and mandible, lateral aspect. 37: 1.4 × scale-line; 38: 1 ×; 39: 1.4 ×; 40: 2.9 ×; 41: 3.2 ×.

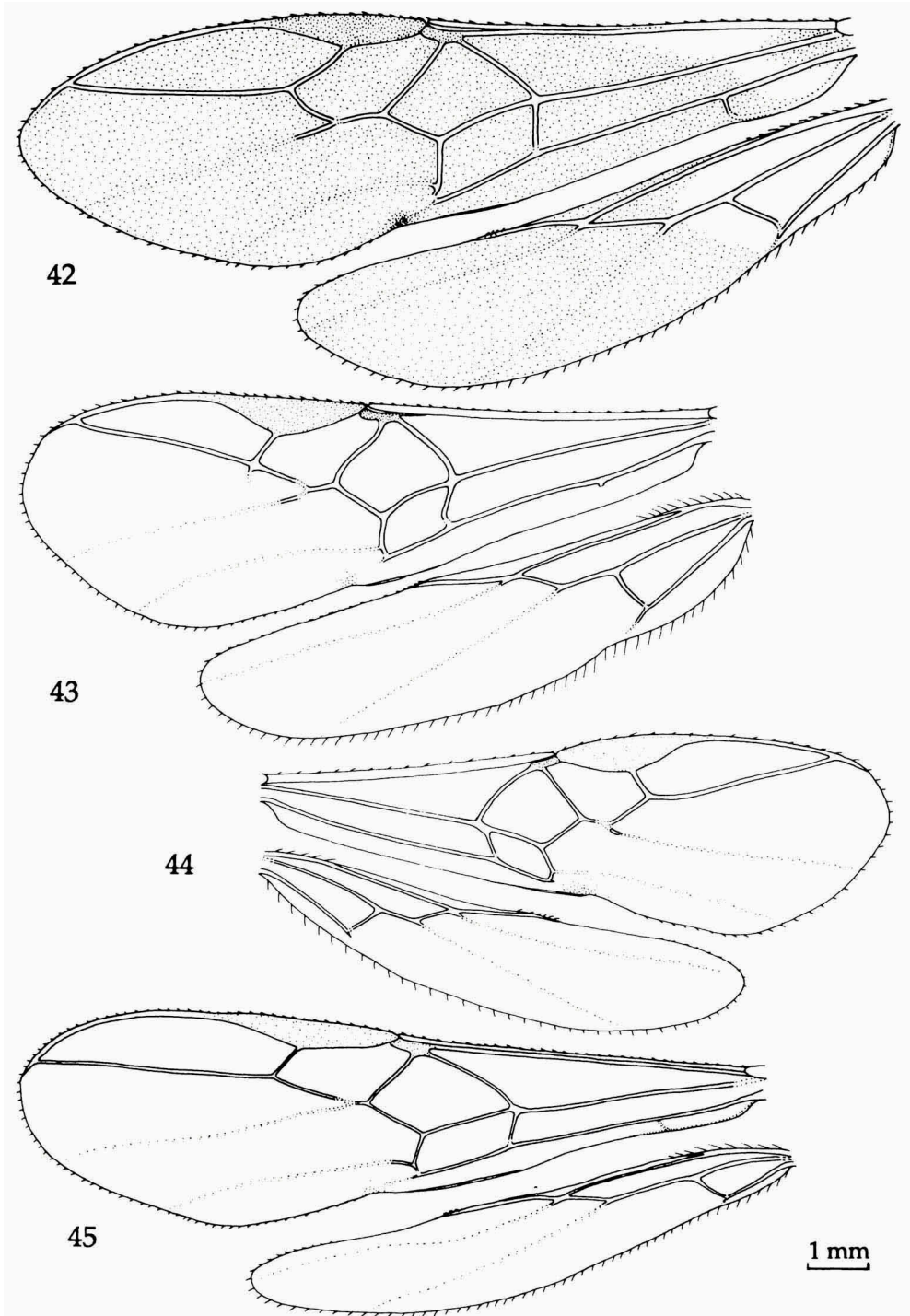
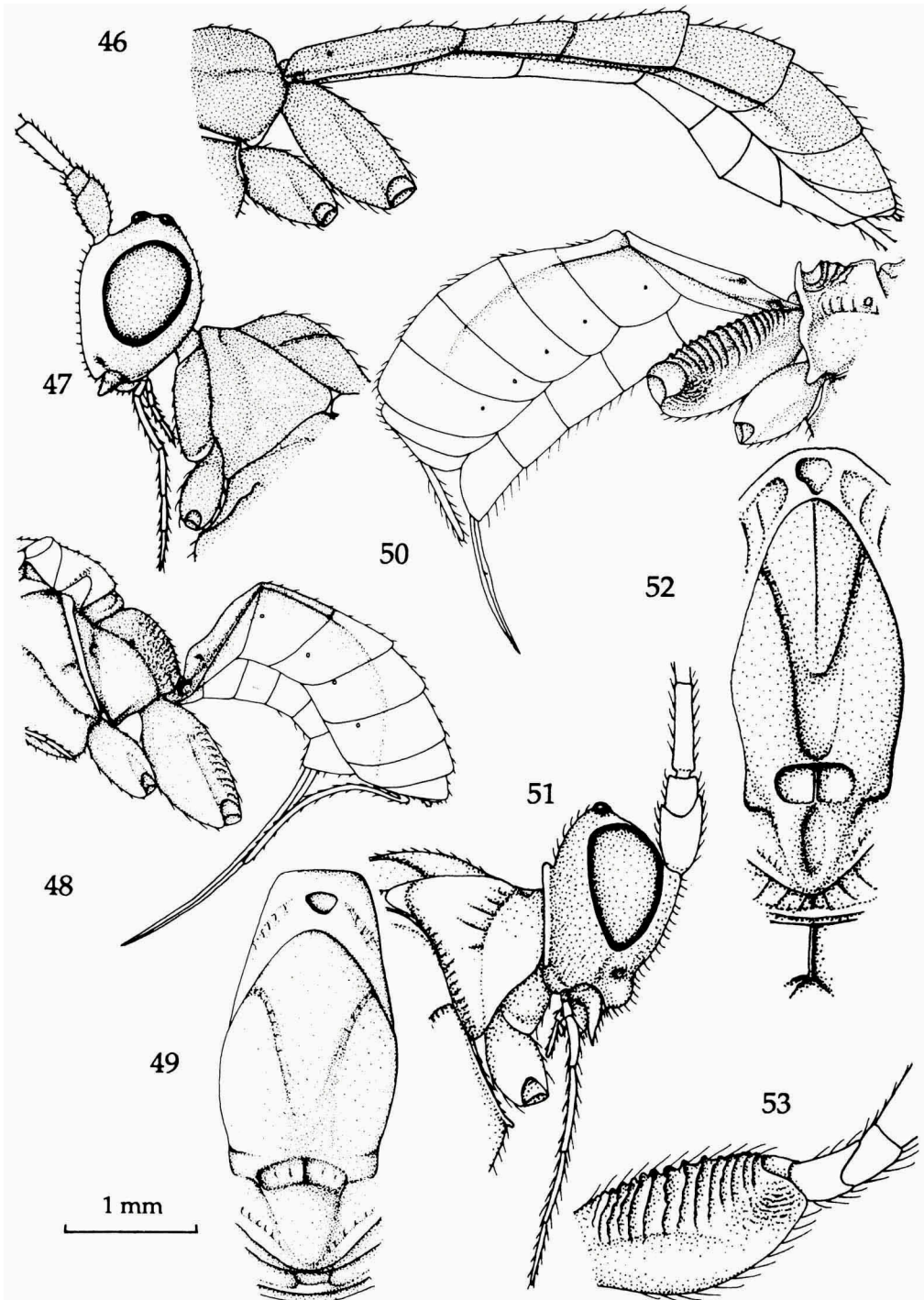
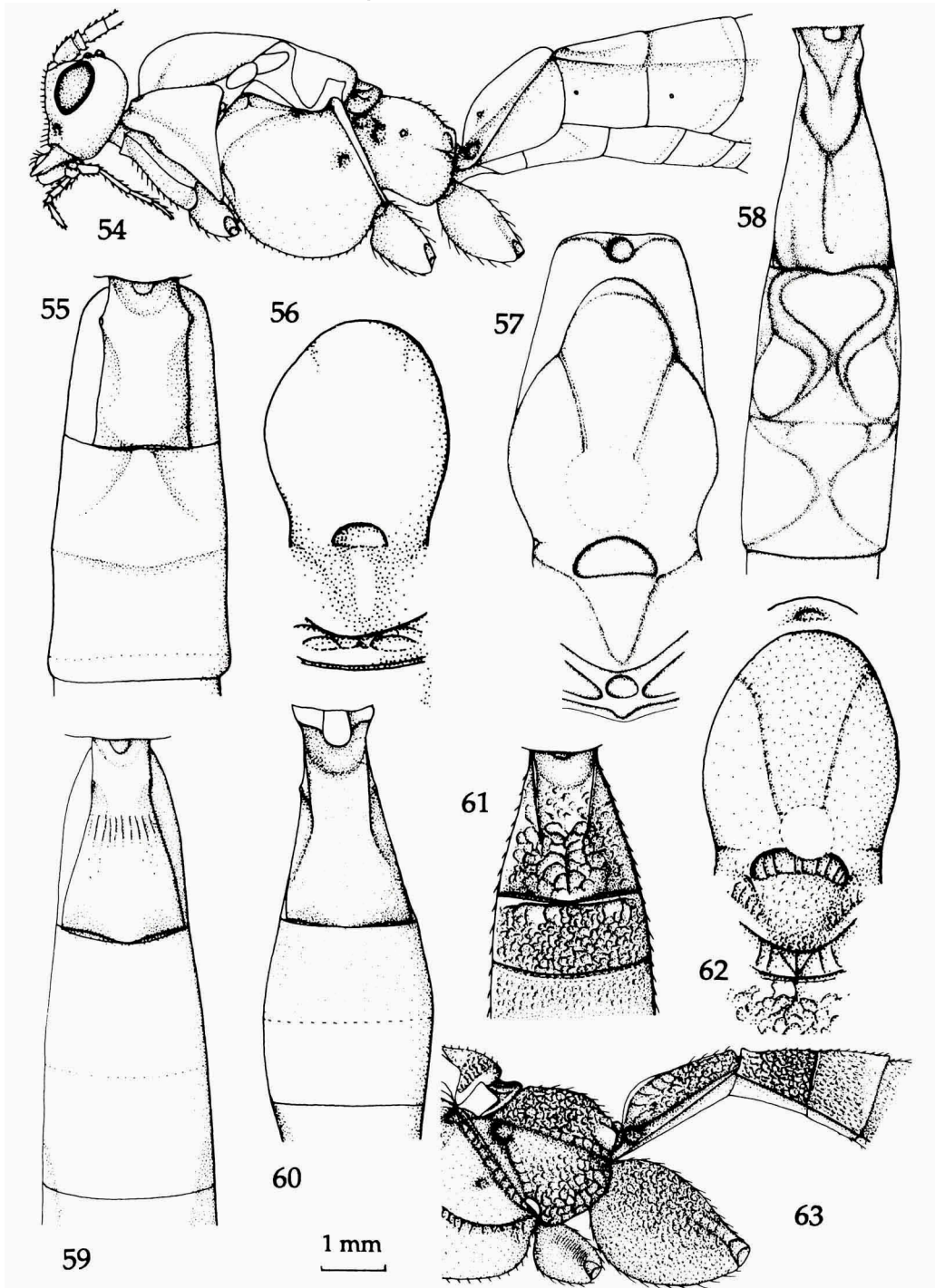


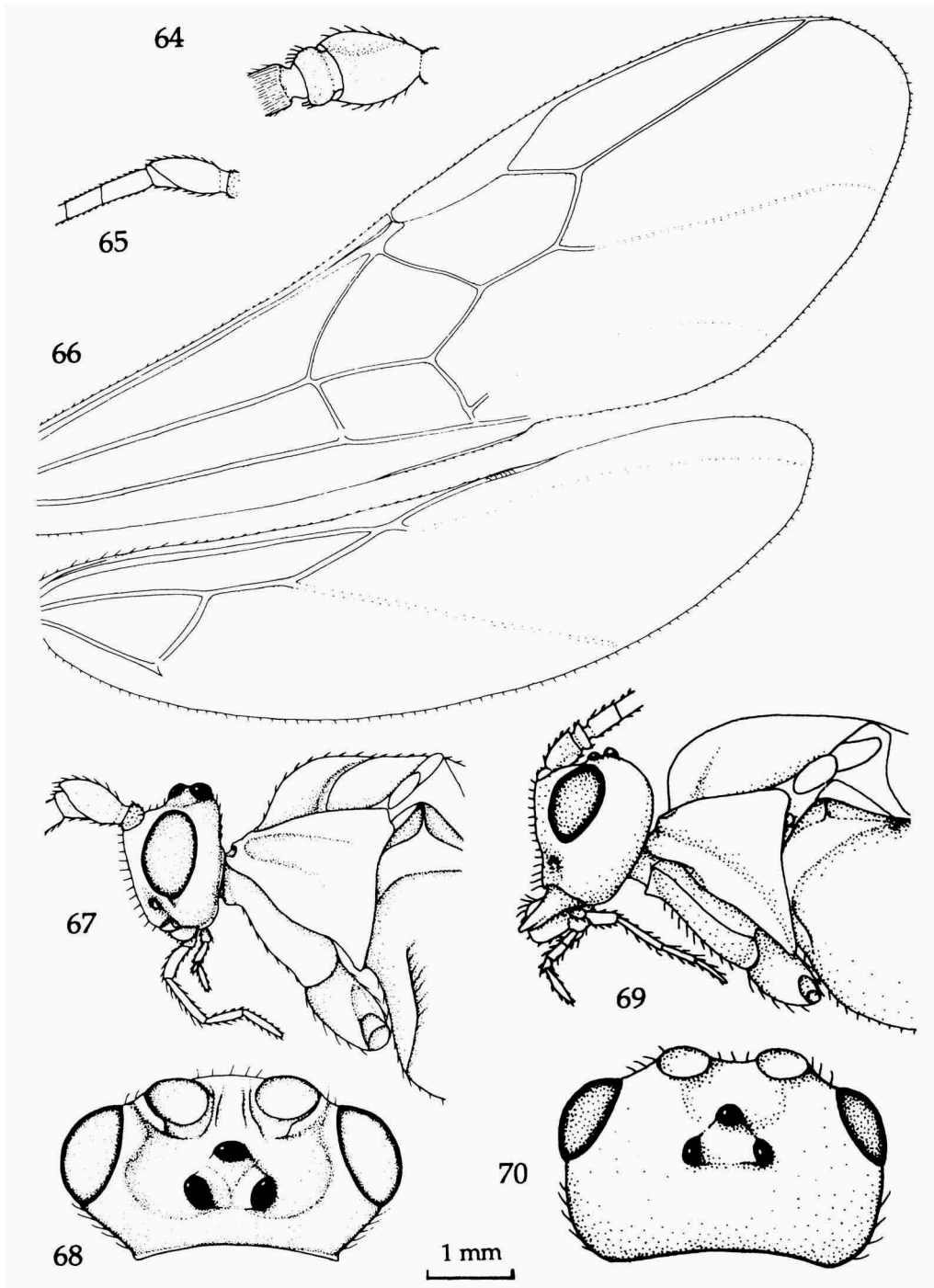
Fig. 42, *Declotila albomarginata* van Achterberg & Quicke, ♀, holotype; fig. 43, *Orgilus rugosus* (Nees), ♀, Germany, Rheingau; fig. 44, *Kerorgilus longicaudis* van Achterberg, ♀, holotype; fig. 54, *Orgilus westermanni* (Enderlein), ♀, holotype. 42-45, wings. 42: 1 × scale-line; 43: 3.2 ×; 44: 2.6 ×; 45: 2.2 ×.



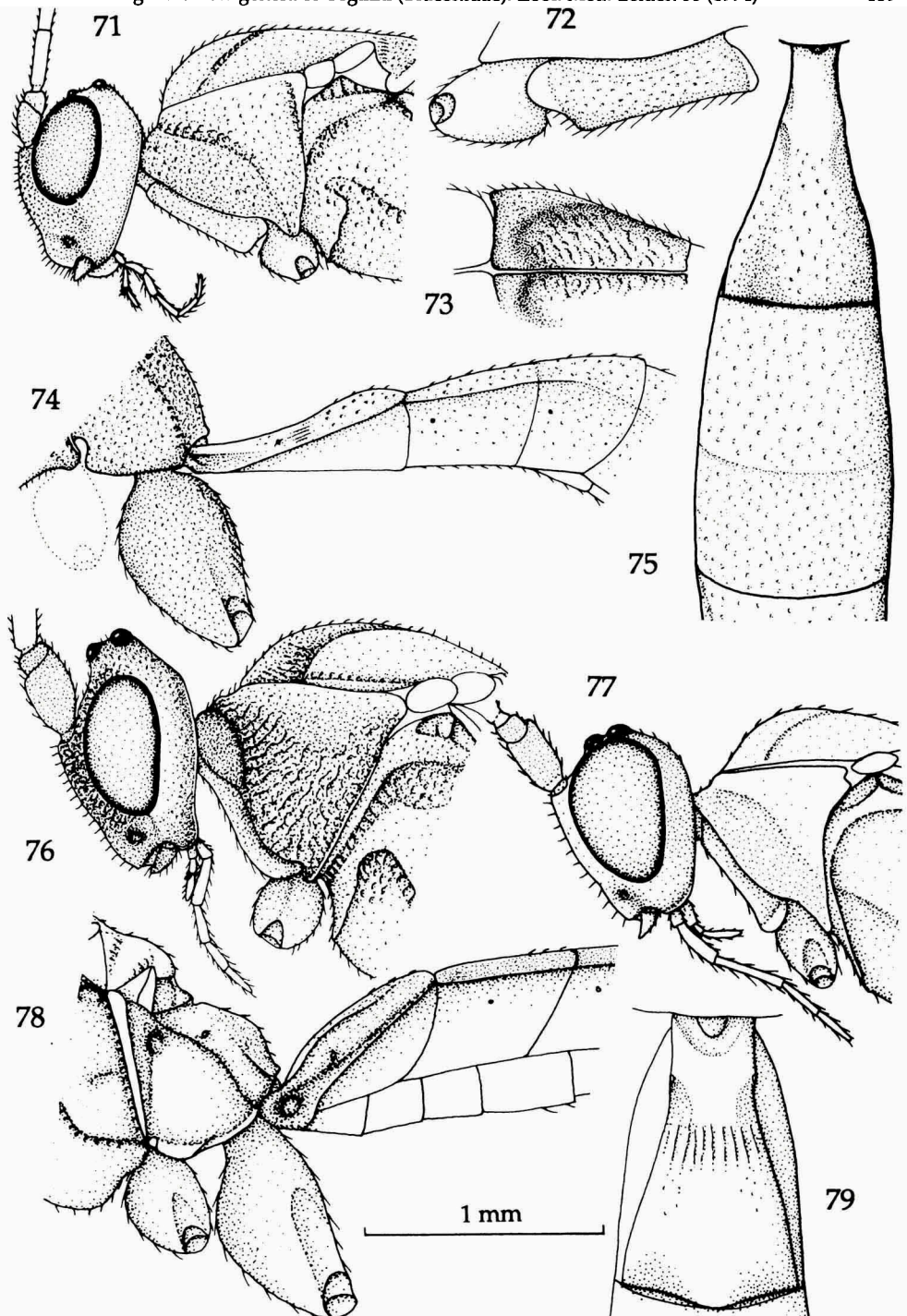
Figs 46, 47, *Orgilonia vechti* van Achterberg, ♀, holotype; figs 48, 49, *Stantonia flava* Ashmead, ♀, holotype; figs 50-53, *Bentonia longicornis* van Achterberg, ♀, holotype. 46, 48, 50, metasoma, lateral aspect; 47, 51, head and anterior part of mesosoma, lateral aspect; 49, 52, thorax, dorsal aspect; 53, hind coxa, lateral aspect. 46, 47: 2.5 × scale-line; 48: 1.3 ×; 49: 2.2 ×; 50: 1 ×; 51, 53: 1.4 ×; 52: 1.7 ×.



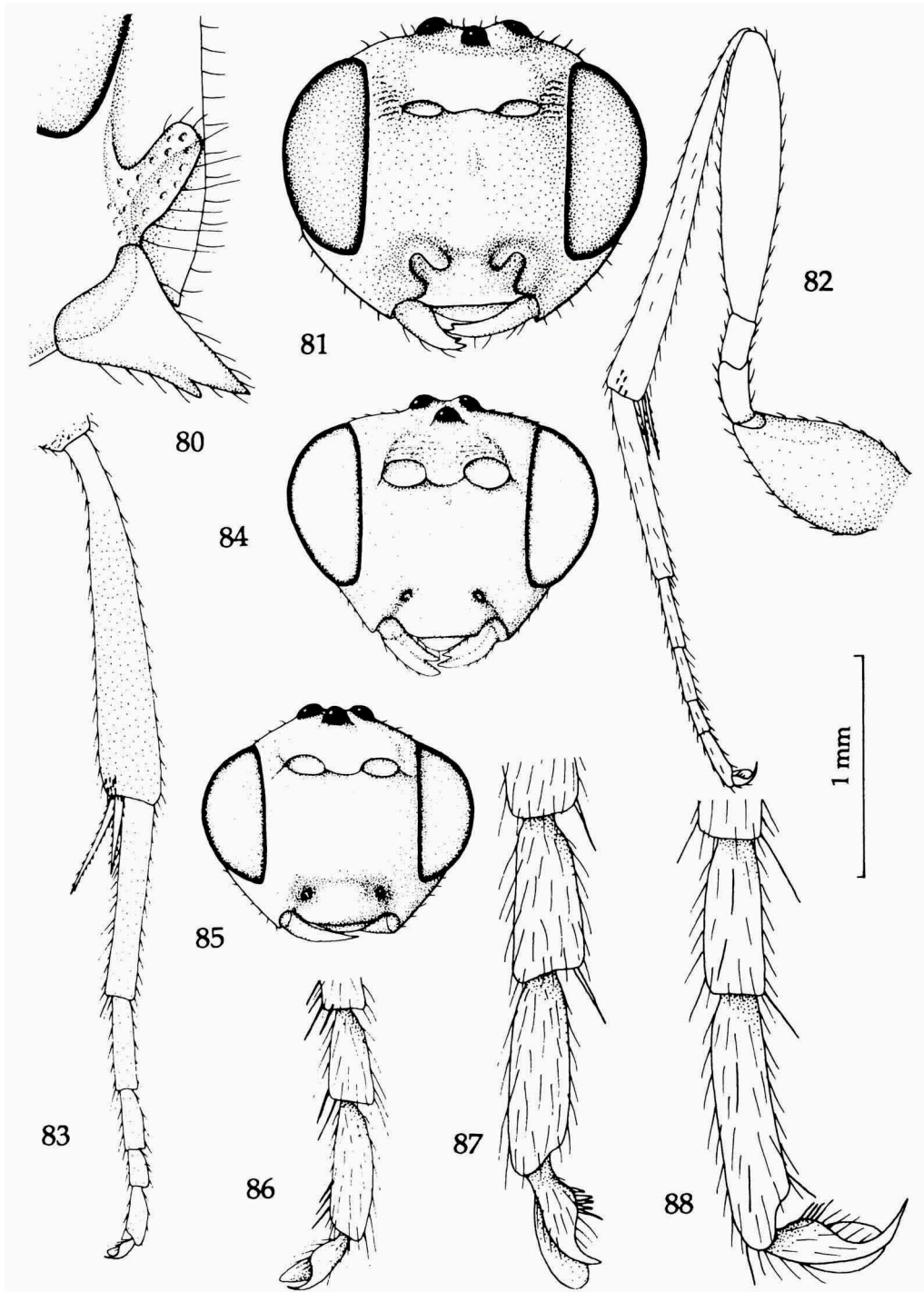
Figs 54-56, *Declotila albomarginata* van Achterberg & Quicke, ♀, holotype; figs 57, 58, *Clotildea lutea* Szépligeti, ♀, holotype; fig. 59, *Kerorigilus longicaudis* van Achterberg, ♀, holotype; fig. 60, *Orgilus immarginatus* Muesebeck, ♀, holotype; figs 61-63, *Orgilus rugosus* (Nees), ♀, Germany, Rheingau. 54, habitus (except posterior half of metasoma), lateral aspect; 55, 58-61, first-third metasomal tergite, dorsal aspect; 56, 57, 62, thorax, dorsal aspect; 63, posterior half of mesosoma and anterior half of metasoma, lateral aspect. 54: 1 × scale-line; 55: 1.5 ×; 56: 2 ×; 57: 2.2 ×; 58: 1.7 ×; 59: 3.8 ×; 60: 5 ×; 61, 63: 3.2 ×; 62: 4.6 ×.



Figs 64, 69, 70, *Declotila albomarginata* van Achterberg & Quicke, ♀, holotype; figs 65-68, *Clotildea lucida* Szépligeti, ♀, holotype. 64, 65, scapus, lateral aspect; 66, wings; 67, 69, head and anterior part of mesosoma, lateral aspect; 68, 70, head, dorsal aspect. 64: 3.6 × scale-line; 65, 67: 1.1 ×; 66: 0.8 ×; 68: 2.2 ×; 69: 1 ×; 70: 2 ×.



Figs 71-75, *Petiorgilus schmiedeknechti* van Achterberg, ♀, holotype; fig. 76, *Orgilus rugosus* (Nees), ♀, Germany, Rheingau; fig. 77, *Orgilus immarginatus* Muesebeck, ♀, holotype; fig. 78, *O. columbianus* (Enderlein), ♀, holotype; fig. 79, *Kerorgilus longicaudis* van Achterberg, ♀, holotype. 71, 76, 77, head and anterior part of mesosoma, lateral aspect; 72, propleuron, lateral aspect; 73, propleuron, ventral aspect; 74, 78, posterior part of mesosoma and anterior part of metasoma, lateral aspect; 75, first-third metasomal tergites, dorsal aspect; 79, first metasomal tergite, dorsal aspect. 71, 75: 1 × scale-line; 72, 73: 2 ×; 74, 76, 77: 1.2 ×; 78: 1.1 ×; 79: 1.4 ×.



Figs 80-82, 88, *Kerorgilus longicaudis* van Achterberg, ♀, holotype; fig. 83, *Orgilus rugosus* (Nees), ♀, Germany, Rheingau; fig. 84, 86, *O. westermanni* (Enderlein), ♀, holotype; figs 85, 87, *O. columbianus* (Enderlein), ♀, holotype. 80, clypeus, lateral aspect; 81, 84, 85, head, frontal aspect; 82, hind leg; 83, hind tibia and tarsus; 86-88, hind claw. 80: 5 × scale-line; 81: 2 ×; 82: 1 ×; 83, 84: 1.2 ×; 85: 1.3 ×; 86: 3 ×; 87: 4 ×; 88: 5 ×.