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FOUR NEW GENERA OF BRACONINAE AND ROGADINAE FROM THE ORIENTAL REGION (HYMENOPTERA: BRACONIDAE)

by

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Three new genera of the Braconinae and one new genus of the Rogadinae (Braconidae) from the Oriental region are described and fully illustrated. *Acrocerilia* (type-species: *A. pachynervis* spec. nov. from the Philippines, parasite of cocoa-moth), *Cordibracon* (type-species: *C. setorae* spec. nov. from Sabah (Malaysia), parasite of Limacodidae on palms), *Zeuzerilia* (type-species: *Z. tricolor* spec. nov. from Sabah, parasite of Cossidae in cocoa-trees) and *Darnilia* (type-species: *D. flagellaris* spec. nov., parasite of Limacodidae on coconut and oil palms).

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INTRODUCTION

The new taxa described in this paper were reared from lepidopterous pests of cocoa, coconut and oil palms in Malaysia, Philippines and Indonesia. All may play an important role in the biological control or integrated pest management.

For the terminology used in this paper, see Van Achterberg (1979): 242-249).

DESCRIPTIONS

Subfamily Braconinae

***Acrocerilia* gen. nov.**

Type-species: *Acrocerilia pachynervis* spec. nov.

Etymology: from the genus name of the host “*Acrocercops*” and “*philia*”

(Greek for "fondness" because it prefers this host). Gender: feminine.

Diagnosis. — Head dorsally and mesosoma (largely) smooth; scapus robust, truncate apically (fig. 5); eyes glabrous and not emarginate, without depression behind eyes; clypeus without dorsal and ventral carinae (fig. 10); malar suture present, narrow (fig. 1); labio-maxillary complex not protruding; labrum rather flat; mesoscutum evenly setose; notauli impressed anteriorly and absent posteriorly (fig. 11), without medio-posterior depression; pleural and mesosternal sulci smooth; antescutal depression obsolescent (fig. 1); metapleural flange narrow (fig. 1); scutellar sulcus wide, deep and crenulate (fig. 11); scutellum with depression medio-anteriorly (fig. 11); metanotum with medial carina but absent posteriorly (fig. 11); propodeum with strong and complete median carina; propodeal spiracle round and situated submedially, above it with a distinct tubercle (fig. 1); angle between veins 1-SR and C + SC + R of fore wing about 60° (fig. 9); vein 1-SR + M of fore wing straight; vein cu-a of fore wing interstitial (fig. 4); vein 1-M of fore wing straight; vein CU1b of fore wing somewhat shorter than vein 3-CU1 (fig. 4); vein m-cu of fore wing short, antefurcal and converging to vein 1-M posteriorly (fig. 4); vein 1-R1 of fore wing much longer than pterostigma, ending at apex of fore wing and distad of level of apex of vein 3-M (fig. 4); vein 1-SR of fore wing normal (fig. 9); vein r of fore wing oblique and shorter than width of pterostigma (fig. 4); second submarginal cell of fore wing robust and parallel-sided anteriorly and posteriorly (fig. 4); vein 2-SC + R of hind wing transverse; posterior margin of hind wing slightly concave (fig. 4); vein 1r-m of hind wing shorter than vein SC + R1 and straight (fig. 4); vein 1-M of hind wing completely and evenly widened (fig. 4); marginal cell of hind wing narrowed apically; hind wing without thick bristles baso-anteriorly; tarsal claws setose and with small acute submedial lobe (fig. 7); fourth tarsal segments truncate apically, and their setae normal (fig. 7); fore tibia with one spur, 0.5 times fore basitarsus; fore tibia normally setose; dorso-lateral carinae of first metasomal tergite complete (fig. 1) and its dorsal carinae absent (fig. 12); first tergite deeply concave medio-basally (fig. 12) and movably joined to second tergite; second metasomal suture deep, wide and crenulate (fig. 1); second tergite without medio-basal area and with pair of converging sublateral depressions (fig. 12) third and fourth tergites without anterolateral grooves; fourth and fifth tergites with deep transverse groove in front of middle (fig. 1); second-fifth tergite with sharp lateral crease (fig. 1); length and shape of ovipositor unknown.

Distribution. — Oriental: one species.

Note. — Doubtlessly belongs to the *Plesiobracon*-group (Van Achterberg, 1983) because of the setose mesoscutum, presence of propodeal tubercles and

movably joined first and second metasomal tergites. Closely related to *Psilolobus* Van Achterberg (1985: 175), because of the presence of propodeal tubercles and wide scutellar sulcus. However, *Acrocerilia* can be separated from all similar genera by the evenly widened vein 1-M of hind wing (fig. 4). *Psilolobus* differs also by the glabrous mesoscutum anteriorly, third-fifth tergites with antero-lateral grooves, malar suture obsolescent, no distinct metapleural flange, first discal cell of fore wing less transverse, and second tergite with smooth area medio-anteriorly.

***Acrocerilia pachynervis* spec. nov.**
(figs. 1-12)

Material. — Holotype, ♂, (Rijksmuseum van Natuurlijke Historie, Leiden): "Philippines, Kidapawan, VIII.1983, No. 3", "ex prepupa of *Acrocercops cramerella* on rambutan", "C11, Hagonay, Qanao delfur".

Holotype, ♂, length of body 3.4 mm, of fore wing 2.7 mm.

Head. — Antennal segments 32, mm, length of third segment 1.2 times fourth segment, length of third, fourth and penultimate segments 2.7, 2.2 and 2.0 times their width, respectively (figs. 3, 5); length of maxillary palp 0.6 times height of head; length of eye in dorsal view 2.3 times temple (fig. 6); temple gradually narrowed posteriorly (fig. 6); OOL : diameter of ocellus : POL = 11 : 4 : 4; frons smooth, convex laterally, flat medially except for a median groove (fig. 6); face rather flat and granulate (fig. 10); clypeus flat and slightly microsculptured, its apical margin concave and hardly differentiated; length of malar space 1.5 times basal width of mandible.

Mesosoma. — Length of mesosoma 1.4 times its height; episternal scrobe narrow and connected to pleural sulcus (fig. 1); surface of propodeum smooth anteriorly, and rugulose posteriorly.

Wings. — Fore wing: $r : 3\text{-SR} : \text{SR1} = 8 : 16 : 36$; cu-a vertical (fig. 4); $2\text{-SR} : 3\text{-SR} : r\text{-m} = 7 : 17 : 9$.

Legs. — Hind coxa smooth and with medium-sized setae (fig. 8); length of femur, tibia and basitarsus of hind leg 9, 4 and 5 times their width, respectively; length of hind tibial spurs both 0.4 times hind basitarsus.

Metasoma. — Length of first tergite 0.4 times its apical width, its surface largely smooth, only coarsely rugose medio-posteriorly (fig. 12); second tergite irregularly rugose; third tergite regularly longitudinally rugose (fig. 1, 12); fourth and fifth tergites rugulose-coriaceous anteriorly and regularly longitudinally rugose posteriorly (fig. 1); sixth tergite smooth; apex of third tergite sinuate (fig. 1).

Colour. — Brownish-yellow; head, pronotum, tegulae, pterostigma and scutellum pale yellowish; wing membrane subhyaline.

Biology. — Parasite of the cocoa moth (*Acrocercops cramerella* Snellen; Gracillariidae), a serious pest of the cocoa pods. The emergence from the prepupa of the host is remarkable; it may indicate it is endoparasitic but precise data are lacking.

Cordibracon gen. nov.

Type-species: *Cordibracon setorae* spec. nov.

Etymology: from "cordis" (Latin for "heart") and the genus name "Bracon", because of the cordiform medial area of the second tergite. Gender: masculine.

Diagnosis. — Head dorsally (largely) and mesosoma smooth; scapus ovoid, truncate apically (fig. 15); eyes glabrous and not distinctly emarginate (fig. 26), without depression behind eyes; clypeus with dorsal carina and ventral margin cariniform; face with hemioval area above clypeus bordered by weak carinae and divided by median carina of face (fig. 26); malar suture distinct (fig. 26); labio-maxillary complex not protruding; labrum concave; mesoscutum glabrous (except for few setae); notauli impressed anteriorly, and absent posteriorly (fig. 25), without medio-posterior depression; pleural and mesosternal sulci narrow and smooth; antescutal depression absent; meta-pleural flange rather large (fig. 13); scutellar sulcus medium-sized, rather deep and crenulate (fig. 25); scutellum without depression medio-anteriorly; metanotum without medial carina; propodeum without median carina (fig. 25); propodeal spiracle large, elliptical and behind middle of propodeum (fig. 13); propodeum without tubercles; angle between veins 1-SR and C + SC + R of fore wing about 75° (fig. 22); vein 1-SR + M of fore wing straight; vein cu-a of fore wing just postfurcal (fig. 16); vein 1-M of fore wing straight; vein CU1b of fore wing distinctly shorter than vein 3-CU1 (fig. 16); vein m-cu of fore wing medium-sized, just antefurcal and somewhat converging to vein 1-M posteriorly (fig. 16); vein 1-R1 of fore wing much longer than pterostigma, ending in front of apex of fore wing, near level of apex of vein 3-M (fig. 16); vein 1-SR of fore wing slender (fig. 22); vein r of fore wing oblique and slightly shorter than width of pterostigma (fig. 16); second submarginal cell of fore wing slender and widened distally (fig. 16); posterior margin of hind wing largely straight basally (fig. 16); vein 1r-m of hind wing much shorter than vein SC + R1 and curved (fig. 16); marginal cell of hind wing absent apically; hind wing with one thick bristle baso-anteriorly (fig. 16); vein 1-M of hind

wing widened basally only, slender and curved apically (fig. 16); tarsal claws rather slender, with pale bristles basally and without lobe (fig. 19); fourth tarsal segments truncate apically and with normal setae (fig. 20); fore tibia with one spur, 0.5 times fore basitarsus; fore tibia normally setose; hind tibial spurs comparatively long (fig. 20); metasoma slender, with sixth and seventh tergite visible; dorso-lateral carinae of first metasomal tergite complete (fig. 13) and dorsal carinae present in apical third (fig. 23); first tergite deeply linearly impressed baso-medially (fig. 23); second metasomal suture deep, wide and crenulate (fig. 13); second tergite with cordiform medio-basal area and with pair of sublateral depressions converging posteriorly (fig. 23); third tergite with shallow antero-lateral grooves (fig. 23); following tergites without antero-lateral grooves; second-fourth (except apically) tergites with sharp lateral crease (fig. 13); length of ovipositor sheath about 0.6 times fore wing; apex of ovipositor normal, with pre-apical nodus and teeth (fig. 18); hypopygium large and apically acute (fig. 13).

Distribution. — Oriental: one species.

Note. — Runs in Quicke's key (1987) to the genus *Pycnobracon* Cameron, 1902, but *Pycnobracon* has the metasoma robust (in dorsal view sixth and following tergites very short or not visible), medio-basal area of second tergite narrow triangular, face without carinae, and eyes usually setose.

***Cordibracon setorae* spec. nov.**

(figs. 13-26)

Material. — Holotype, ♀, (Rijksmuseum van Natuurlijke Historie, Leiden): "Sabah, Malaysia, Dr G.T. Lim", "Larval parasite of *Setora nitens*, 11/6 [19]84", "QH [= Quoin Hill, Tawau] 229".

Holotype, ♀, length of body 9.1 mm, of fore wing 6.8 mm.

Head. — Antennal segments 53, length of third segment 1.3 times fourth segment, length of third, fourth and penultimate segments 2.0, 1.6 and 1.3 times their width, respectively (figs. 15, 21); length of maxillary palp 0.7 times height of head; length of eye in dorsal view 1.8 times temple (fig. 24); OOL : diameter of ocellus : POL = 11 : 5 : 3; frons flat, distinctly punctate and setose laterally, with groove, smooth and glabrous medially (fig. 24); face rather flat, dull and granulate, but medially shiny (fig. 26); clypeus flat, shiny and microsculptured, its apical margin concave and differentiated; length of malar space 0.8 times basal width of mandible.

Mesosoma. — Length of mesosoma 1.4 times its height; episternal scrobe indistinct and linear, connected to pleural sulcus (fig. 13); surface of pro-

podeum smooth except for some setiferous punctures and with radiate striation posteriorly (fig. 25).

Wings. — Fore wing : 3-SR : SR1 = 13 : 46: 66; cu-a vertical (fig. 16); 1-CU1 : 2-CU1 = 1 : 16; 2-SR : 3-SR : r-m = 19 : 46 : 20.

Legs. — Hind coxa punctulate and with medium-sized setae (fig. 20); length of femur, tibia and basitarsus of hind leg 3.7, 7.5 and 5 times their width, respectively; length of hind tibial spurs 0.7 and 0.5 times hind basitarsus.

Metasoma. — Length of first tergite 0.9 times its apical width, its surface largely smooth, with some depressions medio-posteriorly (fig. 23); second tergite striate laterally and around medio-basal area (fig. 23); third tergite striate laterally; remainder of metasoma smooth; apex of second tergite sinuate, of third tergite straight (fig. 23); length of ovipositor sheath 0.62 times fore wing.

Colour. — Yellowish-brown (including stemmaticum); antenna, ovipositor sheath, middle and hind telotarsi black; apex of vein C + SC + R of fore wing, parastigma, anterior and distal margin of pterostigma dark brown; remaining part of pterostigma and veins of apical half of fore wing brown; remaining veins yellowish; small patch below parastigma and narrow area below basal half of fore wing yellow; remainder of fore wing and apical third of hind wing slightly infuscated.

Biology. — First known parasite belonging to the Braconinae which is a (larval) parasite of *Setora nitens* (Walker) (Limacodidae). This species is a pest of coconut palms on the fronds of which the larvae feed; in addition it has adapted to oil palms and even cocoa trees. *Pycnobracon* is a parasite of pupal cases of cryptocephaline Chrysomelid beetles (Quicke, 1988), which are very similar to Limacodid pupal cases.

***Zeuserilia* gen. nov.**

Type-species: *Zeuserilia tricolor* spec. nov.

Etymology: from “*Zeuzera*” (a lepidopterous genus) and “*philia*” (Greek for fondness) because it prefers larvae of *Zeuzera*.

Diagnosis. — Head dorsally and mesosoma smooth; scapus ovoid, its apex slightly emarginate and dorsally longer than ventrally (fig. 28); eyes glabrous and moderately emarginate (fig. 31), without depression behind eyes; clypeus without dorsal carina and ventral margin weakly carinate (fig. 31); face normal (fig. 31); malar suture deep (fig. 27); labio-maxillary complex not protruding; labrum concave; mesoscutum largely glabrous; notauli obsolescent anteriorly and absent posteriorly (fig. 36), without medio-posterior depres-

sion; pleural and mesosternal sulci narrow and smooth; antescutal depression largely absent, despite pronotum is protruding over mesoscutum anteriorly (fig. 27); metapleural flange absent; scutellar sulcus narrow, and finely crenulate (fig. 36); scutellum with shallow groove anteriorly (fig. 36); metanotum without medial carina; propodeum without tubercles and median carina; propodeal spiracle medium-sized, round and at middle of propodeum; angle between veins 1-SR and C + SC + R about 70° (fig. 37); vein 1-SR + M of fore wing evenly curved basally (fig. 29); vein cu-a of fore wing interstitial and long (fig. 29); vein 1-M of fore wing straight; vein CU1b of fore wing distinctly shorter than vein 3-CU1 (fig. 29); vein m-cu of fore wing comparatively long, moderately antefurcal and converging to vein 1-M posteriorly (fig. 29); vein 1-R1 of fore wing much longer than pterostigma, ending near apex of fore wing, distad of level of apex of vein 3-M (fig. 29); vein 1-SR of fore wing slender (fig. 37); vein r of fore wing shorter than width of pterostigma and oblique (fig. 29); second submarginal cell of fore wing slender and widened distally (fig. 16); posterior margin of hind wing largely straight basally (fig. 29); vein 1r-m of hind wing distinctly longer than vein SC + R1 and slightly curved (fig. 29); vein 2-SR + R of hind wing longitudinal; marginal cell of hind wing absent apically; hind wing with seven subbasal bristles anteriorly (fig. 29); vein 2-M of hind wing curved and distinctly sclerotized basally (fig. 29); vein 1-M of hind wing widened basally and slender apically, nearly straight (fig. 29); tarsal claws rather robust, with dark brownish robust setae basally and no lobe (fig. 34); fore tibia with one spur, 0.6 times fore basitarsus; fore tibia spiny setose; hind tibial spurs normal (fig. 35); metasoma slender, with sixth-eighth tergites visible (fig. 27); dorso-lateral carinae of first metasomal tergite absent (fig. 27) and its dorsal carinae weakly developed in basal quarter of tergite (fig. 38); first tergite with deep oval depression baso-medially (fig. 38); second metasomal suture deep, smooth and straight (fig. 38); second tergite without medio-basal area, with two pairs of converging grooves laterally, and pair of diverging grooves submedially (fig. 38); third and fourth tergites with smooth and curved antero-lateral grooves (fig. 38); following tergites without grooves; basal width of third tergite about twice its medial length (fig. 38); second and third tergites with sharp lateral crease; length of ovipositor sheath about 0.4 times fore wing; apex of ovipositor simple, without nodus and teeth (fig. 32); hypopygium large and apically acute (fig. 27).

Distribution. — Oriental: one species.

Note. — Runs in the key by Quicke (1987) to *Pycnobracon* Cameron, 1902, but the type species of *Pycnobracon* is not closely related. It has the ovipositor with distinct pre-apical notch and with ventral serrations, vein 1r-m of hind

wing shorter, vein 1-SR + M of fore wing straight, the eyes usually setose and the metasoma robust. Actually it seems to be closely related to *Sobrinarchibracon* Quicke, 1985, but this genus has a medial carina on the first tergite, the scapus ventrally about as long as dorsally and distinctly emarginate, the ovipositor slightly expanded pre-apically, the second metasomal tergite with pair of oblique submedial grooves and with long smooth medio-basal triangular area, the second suture crenulate, and the first tergite more than 1.7 times longer than its apical width. The depressions of the second metasomal tergite are rather similar to those of *Iphiaulax* Foerster, 1862. However, *Iphiaulax* has the upper valve of the ovipositor more expanded, the scapus ventrally distinctly longer than dorsally, the vein 1r-m of hind wing straight and about as long as veins SC + R1 or somewhat longer, the fourth and fifth tergites with antero-lateral grooves and the second submarginal cell of fore wing parallel-sided.

***Zeuserilia tricolor* spec. nov.**

Material. — Holotype, ♀, (Rijksmuseum van Natuurlijke Historie, Leiden): "Sabah, Malaysia, Dr G.T. Lim", "pupal parasite of *Zeuzera* sp., 7/3/[19]84", "QH [= Quoin Hill, Tawau] 238". Paratypes: 3 ♀♀; 1 ♀, (British Museum (Natural History), London): "North Borneo, Quoin Hill, Tawau, Cocoa Res. Sta., G.R. Conway, B. 1389", "Host: *Zeuzera* sp. on cocoa, viii. 62. Em. Oct. '62 C.I.E. Coll. No. 19356", "*Iphiaulax* sp., R.D. Eady, det. 1964"; 2 ♀♀, (Rijksmuseum van Natuurlijke Historie, Leiden): Indonesia, E. Java: 1 ♀, "17 Juni 1935", "Waterval, Baoeng, res. Pasoer[oe]an, 1200 feet"; 1 ♀, "Baoeng, 5.XII.(19)34".

Holotype, ♀, length of body 15.6 mm, of fore wing 14.5 mm.

Head. — Remaining antennal segments 66, length of third segment 1.4 times fourth segment; length of third and fourth segments 1.1 and 0.8 times their width, respectively; medial antennal segments transverse (fig. 27); maxillary palp broken off; length of eye in dorsal view twice temple (fig. 30); OOL : diameter of ocellus : POL = 15 : 4 : 8; frons rather flat, largely glabrous and smooth; face rather flat, punctate laterally and microsculptured medially, rather dull; clypeus flat (but somewhat elevated), and coriaceous with some punctures, its apical margin concave and cariniform; length of malar space 0.9 times basal width of mandible.

Mesosoma. — Length of mesosoma 1.7 times its height; episternal scrobe round, rather deep and separated from pleural sulcus (fig. 27); surface of propodeum punctate and long setose laterally, remainder smooth (fig. 36).

Wings. — Fore wing: r : 3-SR : SR1 = 11 : 55 : 61; cu-a vertical (fig. 29); 2-SR : 3-SR : r-m = 22 : 55 : 27.

Legs. — Hind coxa punctulate, with medium-sized setae (fig. 35); length of femur, tibia and basitarsus of hind leg 4.4, 10.0 and 6.7 times their width, respectively; length of hind tibial spurs 0.35 and 0.5 times hind basitarsus.

Metasoma. — Length of first tergite 1.2 times its apical width, its surface largely smooth, with some rugulae medio-posteriorly and grooves crenulate (fig. 38); second tergite sparsely and finely punctate laterally, finely and densely rugulose medially (fig. 38); third and following tergites smooth; length of ovipositor sheath 0.38 times fore wing.

Colour. — Yellowish-brown; antenna, apices of mandible, tiny spot on face medially, stemmaticum, frons and vertex medially, middle mesoscutal lobe (except posteriorly and laterally), lateral mesoscutal lobes (except laterally), hind femur, tibia (including spurs) and tarsus, metasoma dorsally (but depressed parts paler), ovipositor sheath, pterostigma (except yellowish patch basally), part of parastigma and apex of veins C + SC + R and 1-R1 black; apical half of wings (except two patches below base of pterostigma) and its veins, middle tarsus, outer face of hind coxa largely and patch on its inner face, and hind trochantellus partly dark brown; outer side of hind coxa partly infuscated; remainder of head pale yellowish; basal half of wings and its veins yellow; metasoma laterally and ventrally (including main part of hypopygium) ivory.

Variation. — Antennal segments 96 (1), length of penultimate segment 1.5 times its width, and apical segment with acute apex and normally setose; length of fore wing 9.7-14.5 mm, of body 9.8-15.6 mm; ovipositor may be somewhat more curved than figured; length of ovipositor sheath 0.35–0.38 times fore wing; length of first tergite 1.2-1.3 times its apical width; head (except black patches) may be brownish-yellow.

Note. — In the British Museum (Natural History) is a ♂-specimen from peninsular Malaysia with 89 antennal segments, scapus more protruding ventrally and wings similarly banded and reared from *Zeuzera coffae* Nietn. It has the second-fourth metasomal tergites costate and belongs to the genus *Iphiaulax* Foerster.

Biology. — Parasite of *Zeuzera* spec. (Cossidae) in branches of cocoa tree. Emergence from pupa of host, which may indicate endoparasitism; only very few rearings are known of Braconinae from the lepidopterous pupa and most are (as far known) ectoparasites. According to information kindly provided by Dr Lim in Sabah there are three Cossid species of which the larvae are branch borers in cocoa trees, viz. *Zeuzera roricyanea* Walker, *Z. coffae* Nietn. and a third unnamed *Zeuzera* species from which the parasite was reared. The newly-hatched larvae of *Zeuzera* are very active, dispersing by crawling down or by dropping on silk threads, and carried away by aircur-

rents. The duration of the generations examined was about 120-150 days, with overlap of the generations. Nevertheless peaks of the branch borers were found in March-April and in August-September. Cossidae are not common hosts in the Braconinae; known of *Zeuzerilia*, *Iphiaulax* (see above), *Virgulibracon* Quicke (Cossidae in *Eucalyptus*: Quicke 1988) and possibly *Myosoma* Brullé (Shenefelt, 1978).

Subfamily Rogadinae

Darnilia gen. nov.

Type-species: *Darnilia flagellaris* spec. nov.

Etymology: from "Darna" (a lepidopterous genus) and "philia" (Greek for "fondness") because it prefers larvae of *Darna*.

Diagnosis. — Antennal segments 58-59; apical segment without spine (fig. 43); pedicellus small (fig. 39); maxillary and labial palpi with six and four segments, respectively, of normal length and shape (fig. 39); hypostomal carina about joining occipital carina (but latter is weak ventrally) about width of mandibular base above mandible; occipital carina nearly complete, with narrow interruption medio-dorsally; vertex aciculate; mandible rather slender and apically twisted (fig. 47); malar suture present (fig. 47); labrum concave, not slanted backwards; eyes glabrous and distinctly emarginate; pronotum not protruding antero-laterally, without pronope or antescutal depression rather wide and deep (fig. 39); prepectal carina complete; precoxal sulcus present (except anteriorly) and largely smooth (fig. 39); notauli narrow and complete (fig. 46); median carina of metanotum absent posteriorly (fig. 46); surface of propodeum granulate, its posterior half with rugae, and with complete median carina (fig. 46); propodeal tubercles and areola absent; propodeal spiracle round (fig. 39); vein 1-SR of fore wing short (fig. 41); vein m-cu of fore wing curved and just antefurcal, converging to (the also curved) vein 1-M posteriorly (fig. 41); second submarginal cell of fore wing slender (fig. 41); vein M + CU1 of fore wing straight; vein CU1b of fore wing reclivous and shorter than vein 3-CU1 (fig. 41); vein 1-M of hind wing about twice length of vein M + CU (fig. 41); vein 1r-m of hind wing oblique and slightly curved (fig. 41); tarsal claws with conspicuous, rather acute and setose lobe (fig. 48); apex of hind tibia with distinct comb at inner side; first metasomal tergite movably joined to second tergite, without dorsope and laterope, its dorsal carinae united subbasally (fig. 44); second tergite without smooth medio-basal triangular area and no medio-longitudinal carina (fig. 44); medial length of second tergite about 1.8 times medial length of third tergite (fig. 39); spiracle

of second tergite in its notum; metasoma sculptured; second-sixth tergites with sharp lateral crease; length of ovipositor sheath about 0.2 times fore wing (fig. 39); hypopygium of female rather large and apically truncate (fig. 39).

Distribution. — Oriental: one species.

Note. — Closely related to the genus *Triraphis* Ruthe stat. nov., but *Triraphis* has vein M + CU of hind wing about as long as vein 1-M, dorsople of first tergite distinct, vein 1-M of fore wing long, and vertex smooth. This genus is listed by Austin (1987: 163) as "gen. & sp. indet."

***Darnilia flagellaris* spec. nov.**

(figs. 39-49)

Material. — Holotype, ♀, (Rijksmuseum van Natuurlijke Historie, Leiden): "Indonesia, S. Sumatra, Bergen", "ex larva Darna trima on coconut", "Coll. 14.IV.1980, R. Désmier de Chenon", "85/252". Paratypes: 3 ♀♀, (id., and British Museum (Natural History), London); 2 ♀♀ with same label-data as holotype; 1 ♀: "Betung [= Indonesia, Sumatra], Lampung, i. Elaeis, Rhogas ex chenille Darna sordida, 3.II.[19]82, R. Désmier de Chenon".

Holotype, ♀, length of body 4.8 mm, of fore wing 4.6 mm.

Head. — Antennal segments 59, length of third segment 1.2 times fourth segment, length of third, fourth and penultimate segments 2.7, 2.2 and 2.8 times its width, respectively (figs. 42, 43); length of maxillary palp 1.3 times height of head; length of eye in dorsal view 11 times temple (fig. 42); temples strongly narrowed behind eyes (fig. 42); OOL : diameter of ocellus : POL = 7 : 8 : 4; frons rugulose laterally, and smooth medially, rather flat (fig. 42); vertex behind stemmaticum aciculate (fig. 42); face finely transversely (and medially obliquely) striate (fig. 47); clypeus aciculate and microsculptured; length of malar space equal to basal width of mandible.

Mesosoma. — Length of mesosoma 1.4 times its height; side of pronotum crenulate medially, dorsally and posteriorly with some rugulae, and remaining part superficially shiny aciculate; mesosternal sulcus smooth; prepectal carina reaches anterior margin of mesopleuron (fig. 39); area below precoxal sulcus aciculate; remainder of mesopleuron smooth; pleural sulcus largely smooth; mesoscutum evenly setose and smooth; scutellum rather flat and with indistinct microsculpture; scutellum anteriorly with part of lateral carina (fig. 46); surface of propodeum distinctly granulate (fig. 39).

Wings. — Fore wing: $r : 3-SR : SR1 = 5 : 15 : 27$; $1-SR + M$ straight; cu-a vertical; $1-CU1 : 2-CU1 = 1 : 16$; $2-SR : 3-SR : r-m = 9 : 15 : 7$. Hind wing: marginal cell absent apically; SR unsclerotized basally; cu-a reclivous, rather curved (fig. 41).

Legs. — Hind coxa smooth; length of femur, tibia and basitarsus of hind

leg 5.1, 8.8 and 9 times their width, respectively; length of hind tibial spurs 0.25 and 0.30 times hind basitarsus.

Metasoma. — Length of first tergite 1.1 times its apical width, its surface rather dull, granulate, and its apical half with additional longitudinal rugae (fig. 44), its dorsal carinae present in basal 0.3 and its spiracles distinctly protruding (fig. 44); second and third tergites largely longitudinally rugose and granulate; second suture deep, evenly curved and crenulate (fig. 44); fourth-sixth tergites granulate, and with few rugae anteriorly (fig. 39); ovipositor straight, without notch or teeth; length of ovipositor sheath 0.16 times fore wing.

Colour. — Yellowish-brown (including ovipositor sheath): stemmaticum, occiput partly, pronotum dorsally, mesopleuron dorsally, metanotum laterally, propodeum largely, first tergite (except postero-laterally), second-fourth tergites (except laterally), fifth tergite basally and telotarsi dark brown; parastigma, vein 1-M, apex of vein C+SC+R of fore wing, and base of pterostigma yellow; apex of pterostigma partly pale brown; veins and remainder of pterostigma rather dark brown; wing membrane subhyaline; area near vein CU1a of fore wing slightly infuscated; hind tibia slightly infuscated dorsally.

Variation. — Length of fore wing 4.4-4.7 mm, of body 4.8-5.1 mm; antennal segments of female 58 (2) or 59 (1); length of ovipositor sheath 0.14-0.16 times for wing; telotarsi may be largely yellowish-brown; mesopleuron largely or only ventrally microsculptured; vein 1-M of fore wing rather short (fig. 41) to medium-sized.

Biology. — The type-series is reared from *Darna trima* (Moore) (on coconut) and *D. sordida* (Snellen) (on oil palm). In the collection of the Bogor Institute for Research on Food Crops I found a specimen reared from mummified larvae of *Phyllopteryx elongata* Snellen (Drepanidae) which most likely belongs to this genus. I have not seen the parasitized larva of the *Darna* spp., but most likely they are also mummified, which is typical for members of the Rogadini.

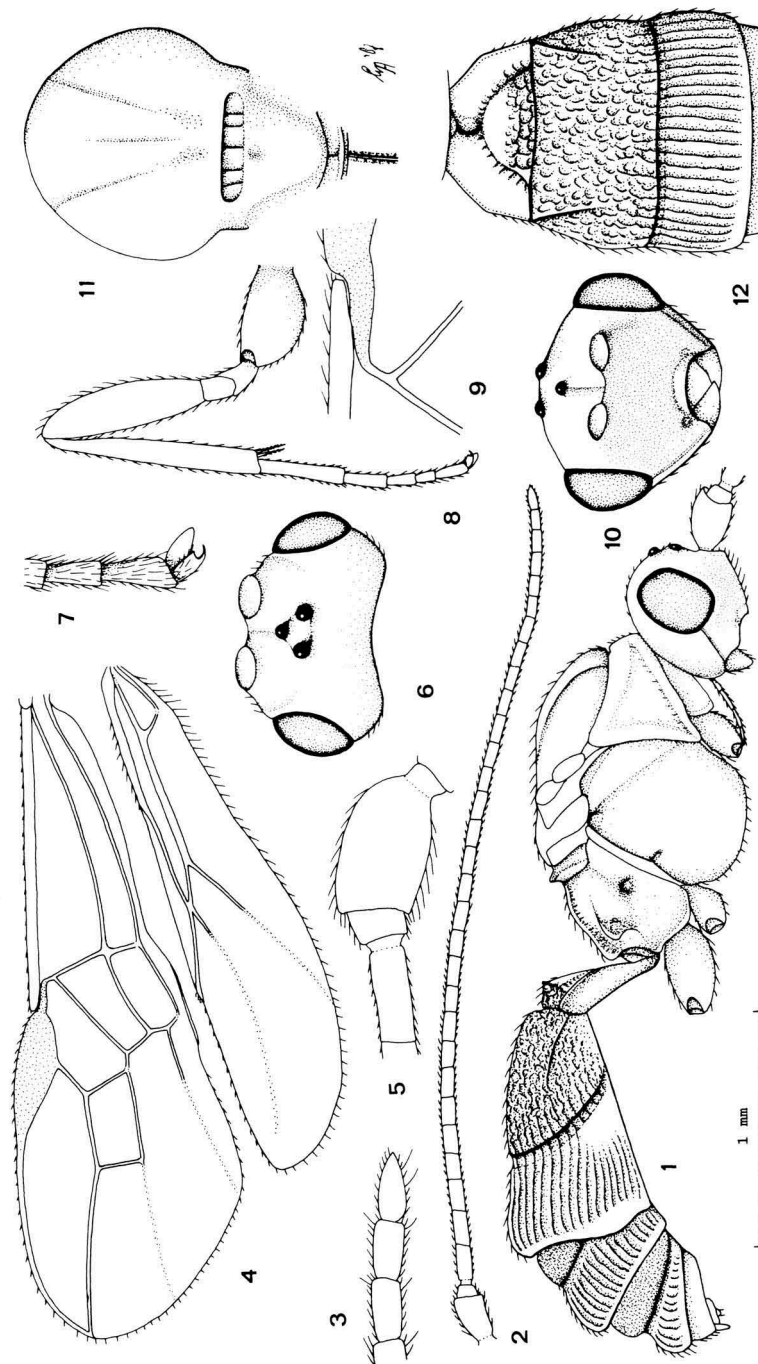
Note. — Resembles *Pseudogyron neuron javanus* (Fullaway, 1919), but this species has two large semicircular areolae basally on propodeum, the propodeum is rugose, the vertex with medial groove and the metasomal tergites only basally dark brown.

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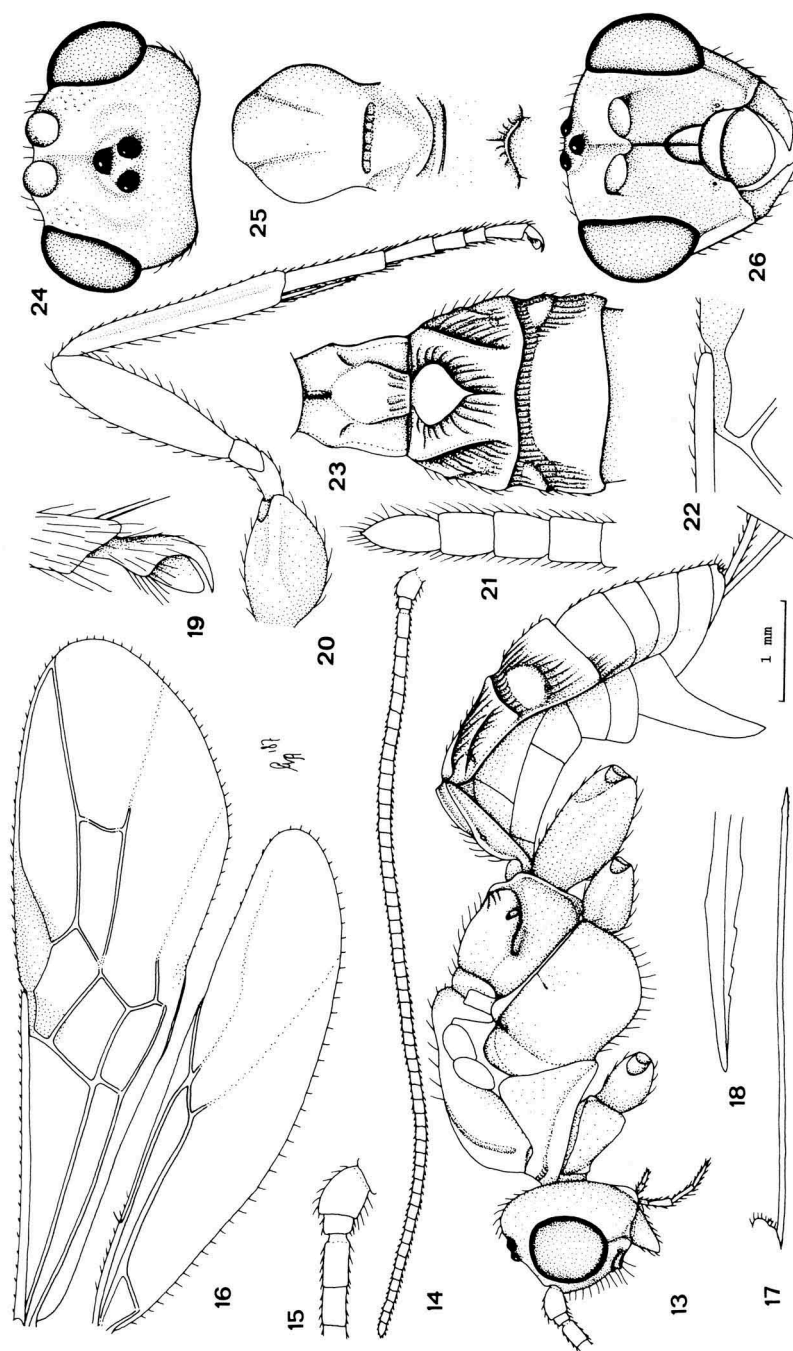
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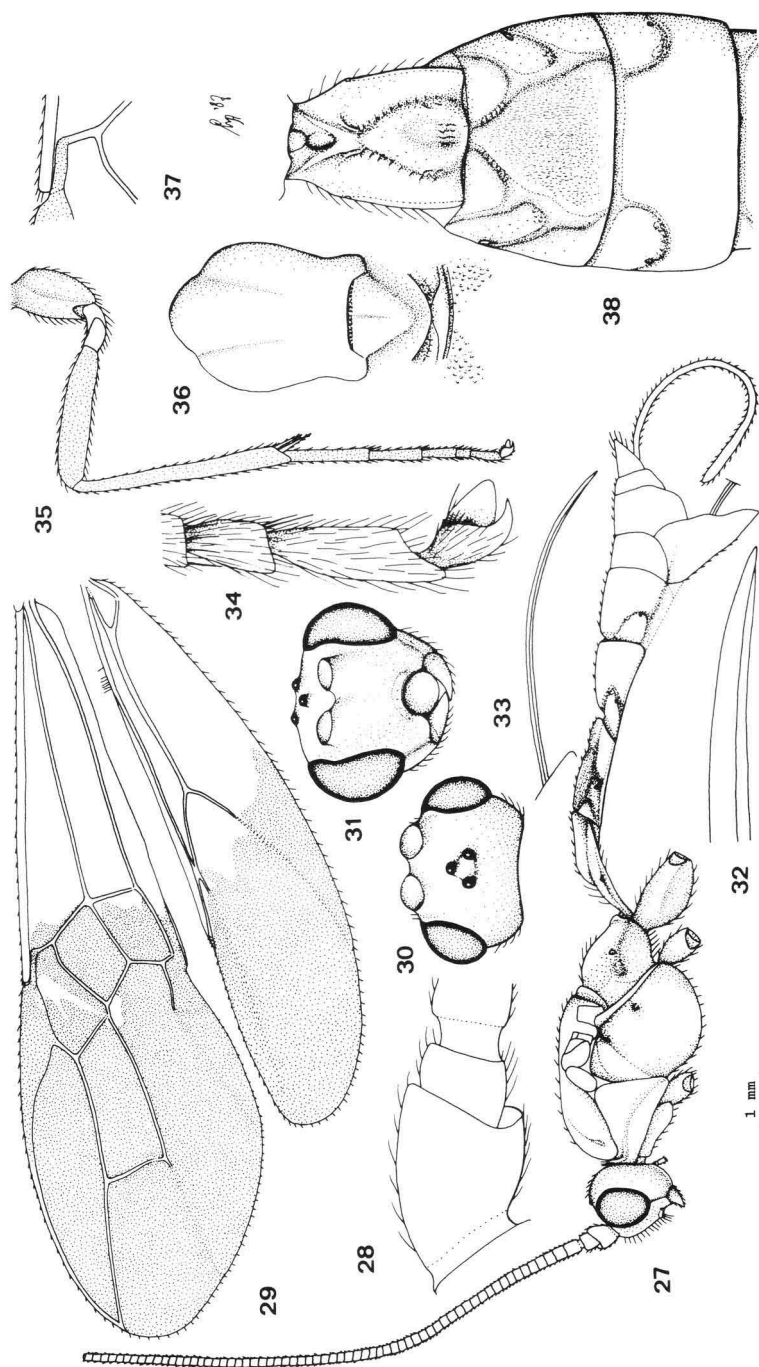
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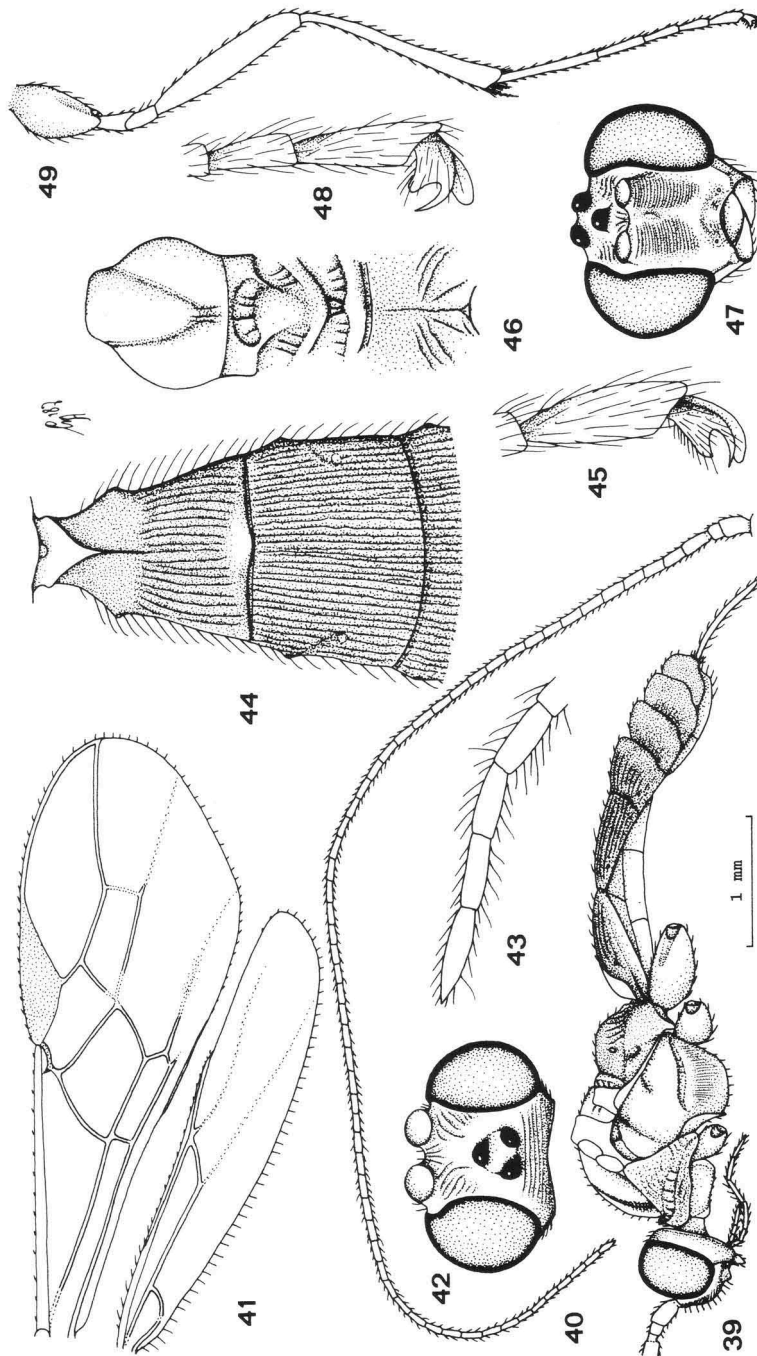
Figs. 1-12, *Acrocerilia pachynervis* gen. et. spec. nov., holotype, ♂. 1, habitus, lateral aspect; 2, antenna; 3, apex of antenna; 4, wings; 5, scapus, outer lateral aspect; 6, head, dorsal aspect; 7, hind tarsal claw; 8, hind leg; 9, detail of vein 1-SR of fore wing; 10, head, frontal aspect; 11, mesosoma, dorsal aspect; 12, first-third metasomal tergites, dorsal aspect. 1, 2, 4, 8, 12: scale-line (= 1 ×); 3, 5, 7, 9: 2.5 ×; 6, 10, 11: 1.3 ×.



Figs. 13-26, *Cordibracon setorae* gen. et spec. nov., holotype, ♀. 13, habitus, lateral aspect; 14, antenna; 15, scapus, outer lateral aspect; 16, wings; 17, ovipositor; 18, apex of ovipositor; 19, hind tarsal claw; 20, hind leg; 21, apex of antenna; 22, detail of vein 1-SR of fore wing; 23, first-third metasomal tergites, dorsal aspect; 24, head, dorsal aspect; 25, mesosoma, dorsal aspect; 26, head, frontal aspect. 13, 14, 16, 17, 20, 23, 25: scale-line (= 1 ×); 15, 22: 2 ×; 18, 19, 21: 5 ×; 24, 26: 1.5 ×.



Figs. 27-38. *Zeuzerilia tricolor* gen. et spec. nov., holotype, ♀. 27, habitus, lateral aspect; 28, scapus, outer lateral aspect; 29, habitus, lateral aspect; 30, head, dorsal aspect; 31, head, frontal aspect; 32, apex of ovipositor; 33, ovipositor; 34, hind tarsal claw; 35, hind leg; 36, mesosoma, dorsal aspect; 37, detail of vein 1-SR of fore wing; 38, first-third metasomal tergites, dorsal aspect. 27, 29, 33, 35: scale-line (= 1 ×); 28, 32, 34: 6 ×; 30, 31, 36, 37: 2 ×; 38: 1.5 ×.



Figs. 39-49, *Darnilia flagellaris* gen. et spec. nov., holotype, ♀. 39, habitus, lateral aspect; 40, antenna; 41, wings; 42, head, dorsal aspect; 43, apex of antenna; 44, first and second metasomal tergites, dorsal aspect; 45, hind tarsal claw; 46, mesosoma, dorsal aspect; 47, head, frontal aspect; 48, middle tarsal claw; 49, hind leg. 39-41, 49: scale-line (= 1 ×); 42, 44, 46, 47: 2 ×; 43, 45, 48: 5 ×.