

SOME DRYINIDS FROM MALAYSIA (HYMENOPTERA)

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(Received November 1, 1978)

Abstract

Dryinids parasites of rice-feeding Cicadellidae: *Nephotettix nigropictus* (STÅL), *N. virescens* (DISTANT), *Recilia dorsalis* (MOTSCHULSKY) and Delphacidae: *Nilaparvata lugens* (STÅL), *Sogatella* sp. are listed hereunder along with some new species: *Chelogyne ephippiger* (DALMAN), *Pseudogonatopus hospes* PERKINS, *Ps. sarawaki* sp. n., *Ps. ponomarenkoi* sp. n. from Sarawak.

Dr. D. D. MUNROE, Agricultural Research Centre in Semongok (Sarawak), studied the parasites of Cicadellidae and Delphacidae living in rice and he also reared some Dryinid specimens. The latter were identified by me whose list follows together with hosts and other data.

Subfam. Anteoninae:

Chelogyne ephippiger (DALMAN), 1818

Gonatopus ephippiger DALMAN, 1818, K. Vetensk. Acad. Handl., 8 (4): 81 ♀

Chelogyne ephippiger: 1914, KIEFFER, Das Tierreich, 41: 179

Anteon (Chelogyne) ephippiger: 1939, RICHARDS, Trans. R. ent. Soc. Lond., 89 (8): 267 ♀ ♂

Chelogyne ephippiger: 1975, Ponomarenko, Ins. Mongolia, 3: 315

Specimens examined: Sarawak, 3^d Div., Ng. Tada, Sq. Kabah, 1. ii. 75 Hill. Padi leg.
D. D. MUNROE 2 ♀

Distribution: From Lapland to Germany, Malaysia, Mongolia.

Subfam. Gonatopodinae:

Pseudogonatopus hospes PERKINS, 1912

Pseudogonatopus hospes PERKINS, 1912, Bull. Rep. Expt. Sta. Hawaii Sugar Plntrs Ass., 11: 12 ♀

Specimen examined: Sarawak, 1st Div., Payah Paloh, 22—23. vii. 76, ex *Nilaparvata lugens* (STÅL) (Delphacidae), emerged 12. viii. 76, D. D. MUNROE 1 ♀

Distribution: China, Java, Malaysia.

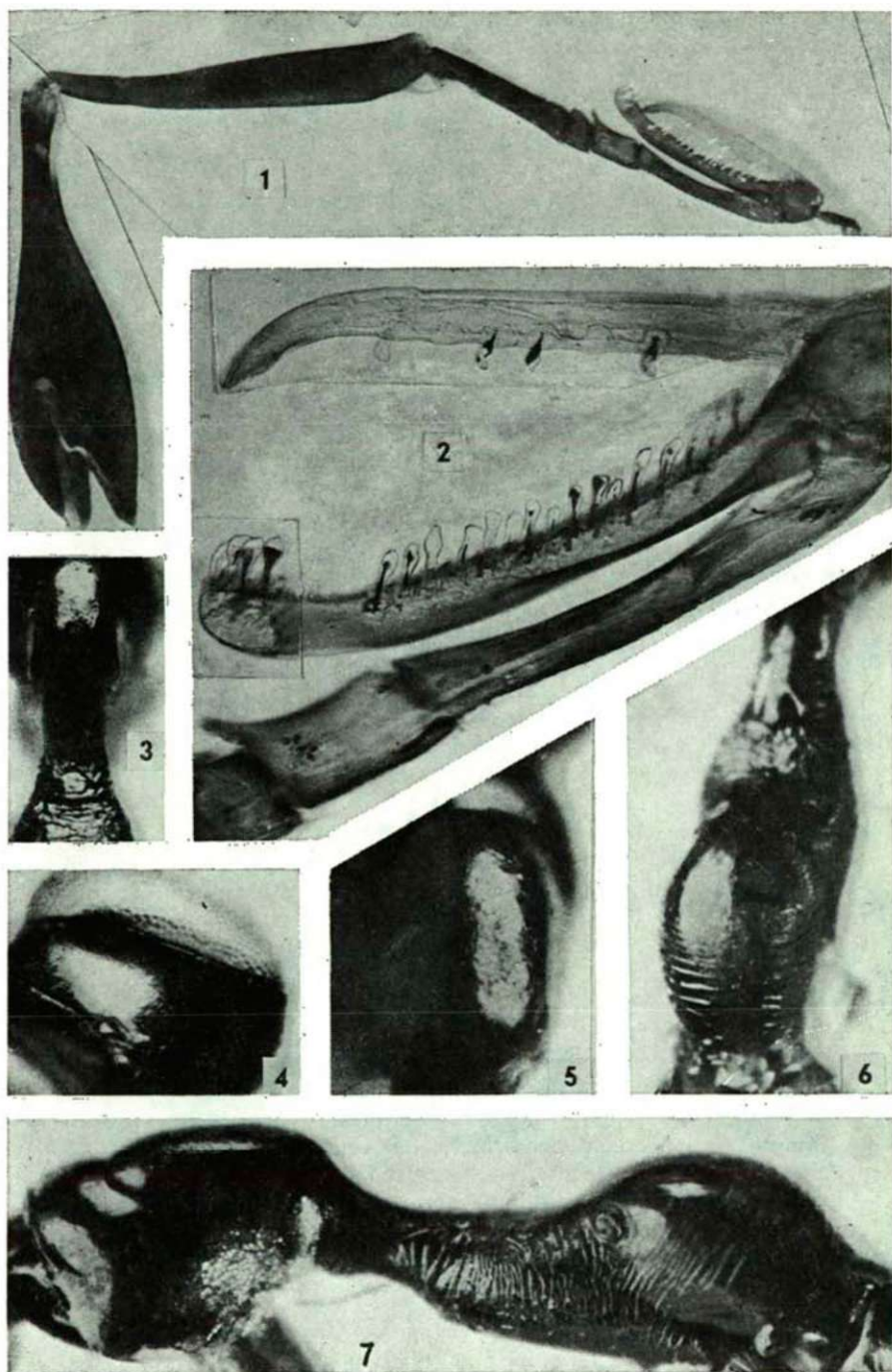
Pseudogonatopus sarawaki sp. n.

♀—Length 4 mm. Black; face around antennae, clypeus, mandibles, except red teeth, antennal joints 1—2, lateral margin of pronotum, fore coxae and trochanters, upper side of fore tibia, fore tarsal joints 2—3, apical part of joint 4, enlarged claw, middle and hind trochanters, as well as, tarsal joints, posterior margin of abdominal segments 5—6, an irregular transversal streak before posterior margin of segment 4 and last abdominal segments yellowish to yellowish red; flagellum brown; poste-

rior side of head, posterior part of pronotum, postnotum, propodeum, middle and hind coxa, femora, partly tibia, middle of abdominal segment 1, small spots on segments 2-4 dark red to reddish translucent. Body with trace of silvery short microscopic pubescence, ventral side of thorax and abdomen with sparse light hairs.

Head including eyes, in frontal view, about two-thirds as long medially as broad (15:23), widely excavated posteriorly, temples strongly broadened, largest diameter of eye and temple, in lateral view = 9:5. Frons with a short and a narrow keel beginning at fore ocellus, surface finely alutaceous, shining (Fig. 4), frons steeply bent towards clypeus, deeply impressed between eyes. Half frons distinctly narrower than eye, width of half frons at fore ocellus: width of eye (viewed from above) = 4:7. Eyes conspicuously converging towards clypeus. Ocelli in an acute angle, anterior one touching keel, POL:OOL = 1:3.5. Clypeus triangular, sharply protruding. Mandibles with four teeth, lower one about twice as long as broad at base. Maxillary palp with 4(2+2), labial palp with 2 joints. Malar space as long as length of the antennal joint 2. Antennal joint 1 (scape) little bent, more than twice as long as 2, thicker than joint 3, which being the narrowest joint, joint 3 twice as long as scape. further joints gradually thickened to last joint, penultimate joint more than 15, times as long as broad, length and breadth proportions of antennal joints 1-11 = 5(2):3(1.5):10(1):4.5(1.5):4.5(1.5):4.5(1.5):3.5(1.5):3.5(1.5):3.5(2):3.5(2):5(2.) Length proportions of pronotum:mesonotum:scutellum:metanotum:propodeum (viewed from above) = 15:5:3:4:16. Pronotum with a conspicuous transverse furrow at about anterior third, clearly dividing an anterior area from a tumescent posterior area (Fig. 7), nearly quadrate, almost as broad as long (14:15), and nearly as long as propodeum; pronotal collar and disc shining, with scattered very fine punctures, only just at base of disc and pronotal collar laterally, before posterior margin densely punctured (Fig. 5). Mesonotum quadrate, as long as broad before scutellum (Fig. 3), finely shagreened medially and laterally, with some transversal wrinkles towards lateral side of scutellum (Fig. 7). Scutellum not sharply defined especially in front, with some punctures, shining only medially. Upper surface of metanotum shagreened and wrinkled medially (Fig. 3), densely and rather deeply transversally wrinkled laterally (Fig. 7), continuing stronger and denser on mesopleuron. Propodeum nearly two-thirds as broad as long (10:16), in dorsal view, sides equally converging in front as behind, in profile rising to a point about two-thirds of its length (Fig. 7), then sinking to orifice, rising distinctly higher than pronotum, dorsal surface shining, anterior part unsculptured, laterally deeply and densely wrinkled, posterior surface, also declivous part sparsely and transversally wrinkled (Fig. 6). Fore coxae thick, more than twice as long as broad (13:6); fore trochanters as long as coxae, distinctly less thickened distally, length:breadth of trochanter = 13:3.5, thin proximal stalk as long as distal thickened part; fore femora (Fig. 1) strongly thickened and clavate basally, thickest part of femora nearly one-quarter of its length (7:27); fore tarsi with joints 1-4 together as long as tibia (9+2+3+9=23), joint 1 (basitarsus) and 4 of equal length, joint 3 a little longer than 2, joint 3 produced into a strong proximal anterior (inner) hook (Fig. 1); articulated (mobile) part (Fig. 2) distinctly longer than enlarged claw (13:11),

Fig. 1-7. *Pseudogonatopus sarawaki* sp. n., 1: fore leg, 2: chela, 3: pronotum-scutellum, 4: frons, 5: pronotal disc, 6: propodeum, 7: thorax in lateral view. (Orig.)



articulated part with two rows of 13 lamellae, latter expanded at the tip and with a distal group of about 8 lamellae; enlarged claw with 6 large lamellae (Fig. 2), with one bristle in front and with a subapical tooth. Middle and hind femora strongly thickened on its proximal two-thirds. Abdomen finely alutaceous, weakly shining, last abdominal segment compressed laterally.

Specimen examined: "Sarawak 1st div., Payah Paloh, 23. vii. 76", "ex *Nilaparvata lugens* (Stål) 22. vii. 76, S. KUEH" 1 ♀ holotype Hym. Typ. No. 3658 Budapest.

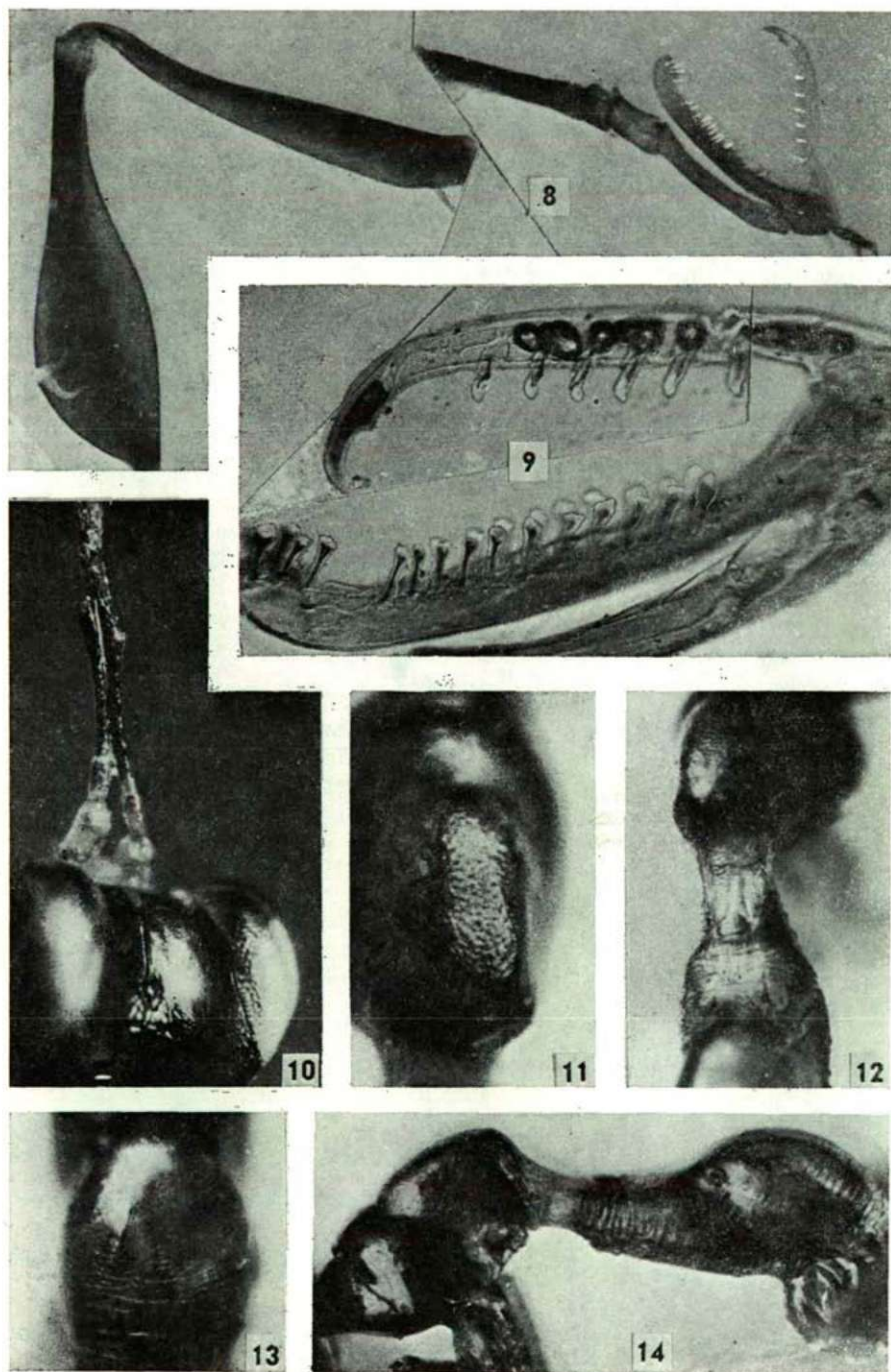
This species is related to *Ps. nudus* PERKINS, 1912, but differs especially by its larger size, not 2.75 mm, by the colour, by the sculpture of pronotum. It differs from *Ps. dichromus* PERKINS, 1905, by the length proportions of the antennal joints, namely, the third joint is distinctly longer than scape, by the sculpture of head, by the distinct and dense punctures of pronotum.

***Pseudogonatopus ponomarenkoi* sp. n.**

♀-Length 3.8 mm. Head, abdomen largely black, thorax almost entirely yellowish brown. Lower face of head and scape (Fig. 10) yellowish; occiput, posterior side of head and antennal joint 2 yellowish red. Anterior margin narrowly, as well as, postero-lateral margin of pronotum black (the whole pronotal collar dark brown on paratype); postero-lateral part of mesonotum, scutellum and mesopleuron darker brown to black (or black together with small basal ring on paratype). Legs largely yellowish brown; lower side of fore coxae, as well as tibia and basitarsus, middle and hind trochanters entirely light yellowish; lower side of fore trochanters, fore femora, upper side of fore tibia and metatarsus, as well as posterior ends of middle and hind femora, a long streak on hind tibia more or less darker brown. Middle of abdominal segment 1, last segments partly (as well as a narrow streak on tergites 2-4 of paratype), yellowish red. Body with some scattered silvery short hairs.

Head deeply excavated and strongly emarginate behind, two-thirds as long as broad including eyes (in frontal view 14:21), temples strongly broadened, largest diameter of eye and temple in lateral view = 9:5; eyes strongly converging towards clypeus; surface of frons shining, finely alutaceous, with a weak central keel beginning at fore ocellus (Fig. 10), vertex and declivous part of frons towards clypeus finely shagreened, only moderately shining. Clypeus convex, semicircularly protruding. Mandibles with four teeth, lower one about twice as long as broad at base, 1st very small. Maxillary palp with 4(2+2) joints, labial palp with 2 joints. Malar space as broad as length of scape (5) or twice and a half longer than width of mandible basally. Antenna rather short, scape and pedicel thicker, joint 3 the slenderest (Fig. 10), flagellum moderately thickened beginning with joint 4, all joints at least twice as long as broad except penultimate one, last joint clavate, nearly as broad as scape, scape little bent, distinctly shorter than twice length of joint 2 (pedicel), joint 2 longer than its twice width, joint 3 twice as long as scape, joints 4-6 as long as joint 2, last joint as long as scape, length (and breadth) proportions of antennal joints 1-11 = 5(2): 3.5(1.5): 10(1): 3.5(1.2): 3.5(1.3): 3.5(1.3): 3.5(1.5): 3.5(1.5):

Fig. 8-14. *Pseudogonatopus ponomarenkoi* sp. n., 8: fore leg (tibia separated from tarsal joints), 9: chela, 10: head (view from above) with first antennal joints, 11: pronotal disc, 12: pronotum-scutellum, 13: propodeum, 14: thorax in lateral view. (Orig.)



3.5(1.5):2.5(1.7):5(1.7). Pronotum shorter than propodeum and distinctly broader in front than its length medially, length (and breadth) proportions of pronotum: mesonotum: scutellum: metanotum: propodeum (viewed from above) = 12(15): 5(5 basally):1.5:5:14(9.5). Pronotum with a conspicuous transverse furrow at about its anterior third, clearly dividing an anterior area from a tumescent posterior area (Fig. 14), pronotal collar smooth shining, with some scattered punctures laterally, disc densely distinctly punctured (Fig. 11), only weakly shining on its upper surface, finely punctured and striated laterally. Mesonotum granulated and with about 6 distinct transversal wrinkles laterally (Fig. 14). Scutellum rather well distinct, anterior margin semicircularly rounded (Fig. 12); mesopleuron densely transversally wrinkled (Fig. 14); base of propodeum smooth, weakly shining (Fig. 13) only very finely punctured. Upper side of metanotum (Fig. 12) as well as declivous part of propodeum partly striated, partly finely wrinkled (Fig. 13), posterior part of propodeum, lateral part in front more distinctly transversally wrinkled (Fig. 14). Fore coxae thick nearly along its whole length, about three times as long as broad (14:5); fore trochanters almost as long as coxae and only distally thickened about one-third of its length (4:13); fore femora strongly thickened and clavate basally, (Fig. 8), thickest part of femora nearly one-quarter of its length (6:24); fore tibia hardly longer than fore tarsal joints 1-4(23:9+1.5+2.5+8), joint 1 hardly longer than joint 4(9:8), joint 2 nearly as long as broad (1.5:2); joint 3 nearly twice as long as joint 2(2.5:1.5), produced into a strong proximal anterior (inner) hook

(Fig. 8); articulated (mobile) part longer than enlarged claw (13: 12), articulated part with two rows of 11 lamellae (Fig. 9), latter expanded at the tip and with a distal group of about 5 lamellae; enlarged claw with 6 large lamellae (Fig. 9) and with a subapical tooth. Middle and hind femora conspicuously thickened on its proximal two-thirds. Abdominal tergites smooth, finely alutaceous, only weakly shining, last segment compressed laterally.



Specimens examined: "Sarawak 1st Div., Payah Paloh, 14. xii. 76", "ex *Sogatella* sp. 15. xii. 76 D. D. MUNROE" (=Delphacidae) (Fig. 15) 1 ♀ holotype Hym. Typ. No. 3659 Budapest; "Sarawak 1st Div., Payah Paloh, 12. viii. 76", "Probably ex *Nephotettix nigropictus* (STÅL), S. KUEH", (=Cicadellidae), 1 ♀ paratype Hym. Typ. No. 3660 Budapest.

I have named this species in honour of the Dryinids specialist Dr. N. G. PONOMARENKO of Moscow, who kindly took part in the separation of the new species.

This species is related to *Ps. dichromus* PERKINS, 1905, but differs from it by the length proportions of the antennal joints, since joint 3

Fig. 15. *Sogatella* sp. (Delphacidae) with *P. ponomarenkoi* sp. n. pupa (Orig.)

is remarkably longer than scape; by the colour, by the densely punctured pronotum, by the not smooth and shining metathorax, etc.

It also differs from *Ps. ortholabis* KIEFFER, 1906, by the less dense transversal wrinkles of the lateral side of mesonotum, mesopleuron and propodeum, by the lack of the longitudinal shallow furrow on the propodeal disc, by the less densely punctured propodeal disc, by the enlarged claw, by the lighter colour, etc.

It further differs from *sarawaki* sp.n. by the sculpture of the pronotal disc, by the wrinkles of the mesopleuron and by the much finer wrinkles of the propodeum, by the fore tarsal joints, by the colour, etc.

Neogonatopus lunatus (KLUG), 1810

Gonatopus lunatus KLUG, 1810, Beitr. Naturh., 2: 164 ♀

Neogonatopus lunatus: 1939, RICHARDS, Trans. R. ent. Soc. Lond., 89 (8): 216 ♀

Neogonatopus lunatus: 1965, MÓCZÁR, Ann. Hist.-nat. Mus. Nat. Hung., 57: 401

Neogonatopus lunatus: 1975, OLMÍ & CURRADO, Boll. Mus. Civ. Venezia, 27: 58 ♀

Neogonatopus lunatus: 1975, PONOMARENKO, Ins. Mongolia 3: 316

Specimens examined: Sarawak, 1st Div., Payah Paloh = vii. 76, ex *Nephotettix nigropictus* (STÅL), 14. ix. 76, S. KUEH, 1 ♀; 23. viii. 76, ex *N. nigropictus*, nymph, 13. ix. 76, S. KUEH, 10 ♀; 4. viii. 76, ex *N. nigropictus*, S. KUEH 1 ♀; as above except 8. viii. 76, 1 ♀; 20. vii. 76, swept from padi with *N. nigropictus*, S. KUEH 1 ♀; 6. x. 76, B. H. VOON 1 ♀; x. 76, ex *Recilia dorsalis* (MOTSCHULSKY) B. H. VOON 2 ♀; as above except 1. x. 76, 1 ♀; 23. viii. 76, ex *Recilia dorsalis* 12. ix. 76, S. KUEH 1 ♀; 4. viii. 76, ex *N. virescens* nymph, 25. viii. 76, S. KUEH 1 ♀; as above except 25. viii. 76 and 13. ix. 76, 3 ♀; as above except 28. viii. 76, and 15. ix. 76, 1 ♀; as above except 25. viii. 76 and 14. ix. 76, 1 ♀; as above except 25. viii. 76 and 23. ix. 76, 1 ♀.

Distribution: Europe, Central Asia, Mongolia.

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