

New or lesser known species of the genus *Pilophorus* Hhn. (Het., Miridae)

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1. *Pilophorus setulosus* Hv.

♂ Length 3.5–4 mm. Head blackish brown, tinged with rufous in lower part. Pronotum and scutellum blackish, the latter with 3 groups of silvery hairs. 1st and 2nd antennal joints light reddish brown, the apical third of the latter black, other joints whitish. Elytra dull cinnamon, with apex of clavus and of exocorium shining; with 2 transverse bands of silvery hairs, the posterior band straight; also base of cuneus with silvery hairs; membrane brownish smoky, becoming lighter apically. Under surface blackish; abdomen with an oblique band of silvery hairs on either side. Legs reddish brown, coxae apically whitish.

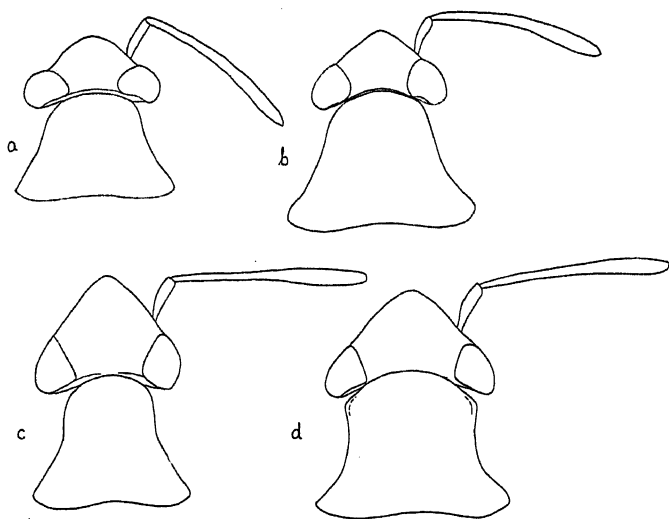


Fig. 1. *Pilophorus setulosus* Hv.: a head and pronotum. — *P. erraticus* n. sp.: b same. — *P. sinuaticollis* Rr.: c same. — *P. ponderosus* n. sp.: d same. — Orig.

Fig. 1 a. Body elongate, $3.6 \times$ as long as broad. Crown $1.86 \times$ as broad as eye. Proportions between antennal joints $9 + 40 + 17 + 13$ (1 unit = 0.033 mm.); 2nd joint $1.14 \times$ as long as basal width of pronotum, relatively thin and only slightly thickening apically; 3rd joint $0.43 \times$ as long as 2nd. Pronotum $1.67 \times$ as broad as long, strongly tapering anteriorly, lateral margins moderately

insinuated, disk relatively shining. Hair covering of upper surface brownish, long and erect; elytra also provided with smooth lighter hairs. Rostrum extending to hind coxae.

Material studied: Japan: Honshu, Karuizawa, Shinano, 1 spec., 3-7. VIII. 1959, M. MIYAMOTO; Kyushu, Misaki, some spec., 27. VII. 1917, ROŠKOVSKI. - Endemic to Japan.

Affinities: *P. confusus* KB. is considerably robuster, with body broadening considerably caudad, with narrower pronotum (almost parallel-sided in anterior two-thirds) and with hair covering of upper surface longer and denser. *P. angustulus* RT. is shorter and robuster, with elytra entirely dark brown behind the posterior silvery band and with antennae appreciably shorter.

✓ 2. *P. erraticus* n. sp.

Fig. 1 b. ♂, ♀. Length 4 mm. As *P. setulosus*, but vertex $1.57 \times$ as broad as eye; proportions between antennal joints $7 + 37 + 13 + 11$, 2nd joint distinctly thickening apicad, 3rd joint $0.35 \times$ as long as 2nd; pronotum longer and narrower, $1.4 \times$ as broad basally as long, with lateral margins more strongly insinuated and disk relatively opaque, and with hair covering of upper surface of body smooth.

Material studied: Japan: Honshu, Karuizawa, Shinano, 1♂ and 1♀ (types), 3. VIII. 1959, S. MIYAMOTO.

Affinities: *P. miyamotoi* LV. is much robuster (body $2.36 \times$ as long as broad), with antennae much shorter. *P. perplexus* (DGL. SC.) is also considerably robuster, with 2nd antennal joint longer and thinner and pronotum appreciably shorter and broader. *P. pusillus* RT. is much shorter and relatively robuster, with a much shorter and broader pronotum and the hair covering of the upper surface longer.

✓ 3. *P. sinuaticollis* RT.

♀. 4-5 mm. Light cinnamon, decidedly opaque. Antennae yellowish brown, 2nd-4th joints apically darkened. Scutellum margined with whitish tomentous hairs apically. Markings of elytra as in *P. setulosus*; only exocorium and apex of clavus shining behind the posterior silvery band; membrane light smoky. Under surface and legs light cinnamon, abdomen apically darkened.

Fig. 1 c. Relatively gracile, body $3.75 \times$ as long as broad. Head as broad as long, vertex twice as broad as eye. Antennae long, proportions between joints $10 + 50 + 15 + 15$; 2nd joint $1.67 \times$ as long as basal width of pronotum, thickening appreciably apically, 3rd joint $0.3 \times$ as long as 2nd. Pronotum opaque, $1.5 \times$ as broad basally as long; lateral margins strongly insinuated, apical half of pronotum therefore parallel-sided. Hair covering of upper surface short. Rostrum extending to middle coxae.

Material studied: USSR, Turkestan: Staraja prist. bl. Džilikulja, Vahš, several spec., 14–25. VI. 1944, GUSSAKOVSKI. – Distribution: Central Asia.

Easily distinguished in the body form, in the shape and length of the 2nd antennal joint and in the shape of the pronotum.

4. *P. ponderosus* n. sp.

Fig. 1 d. ♀. Length 4 mm. As *P. sinuaticollis*, but smaller and robuster, body $3.1 \times$ as long as broad; head and pronotum somewhat darker; head $1.3 \times$ as broad as long; crown twice as broad as eye; proportions between antennal joints $8 + 35 + 15 + 13$, 2nd joint $1.13 \times$ as long as basal width of pronotum, 3rd joint $0.43 \times$ as long as 2nd; pronotum much shorter and broader, $1.6 \times$ as broad as long and hair covering of upper surface longer and erect.

Material studied: Sardinia: Cristano, 1 ♀ (type), 13. VI. 1949, SERVADEI. – Recorded as *P. sinuaticollis* by SERVADEI (1952, p. 454).

Easily distinguished from the other European species with erect hair covering by the light cinnamon colouring, the distinct apical thickening of the 2nd antennal joint and the shape of the pronotum.

5. *P. lucidus* n. sp.

♂. Length 3.5 mm. Head, pronotum and scutellum blackish brown, distinctly shining. Antennae yellow-brown, joints apically darkened. Scutellum with 3 groups of silvery hairs. Elytra dull cinnamon, with silvery bands as in *P. setulosus*, entire corium and apex of clavus behind the posterior silvery band shining and

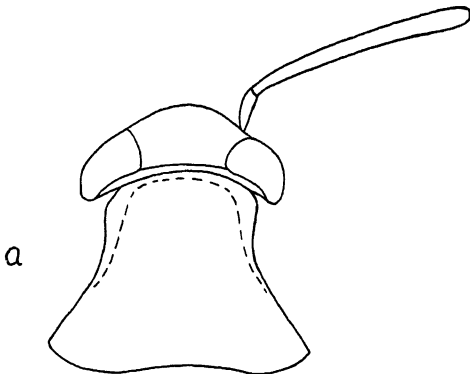


Fig. 2. *Pilophorus lucidus* n. sp.: a head and pronotum. – Orig.

dark brown; cuneus also shining; membrane dark smoky. Under surface blackish; abdomen with an oblique silvery hair group on either side. Coxae yellowish;

femora reddish brown; tibiae basally reddish brown, apically tinged with yellowish; tarsi yellowish brown.

Fig. 1 e. A small but relatively robust species, body $3.1 \times$ as long as broad. Vertex $1.67 \times$ as broad as eye. Proportions between antennal joints $5 + 25 + 10 + 10$; 2nd joint $0.9 \times$ as long as basal width of pronotum, only slightly thickening apically; 3rd joint $0.4 \times$ as long as 2nd. Pronotum strongly shining, only faintly microsculptured, $1.4 \times$ as broad as long, lateral margins strongly insinuated. Hair covering of upper surface smooth. Rostrum extending to hind coxae.

Material studied: Japan: Kyushu, Fukuoka, Hirao, 2 ♂♂ (types), 24. VI. 1959, Y. MIYATAKE.

Easily distinguished in the small size and the shining pronotum. *P. pullulus* POPP. from Formosa is still smaller, length only 2.2 mm, with 2nd antennal joint entirely black. In *P. formosanus* POPP. the 2nd antennal joint is darkened both apically and basally, the middle femora and the middle tibiae are blackish and the posterior silvery band of the elytra is not straight (lying more basally in the clavus than in the corium).

6. *P. typicus* (DIST.)

♂. Length 3.2 mm. Easily distinguished from the Palearctic species in the black colouring, with only 1st antennal joint, base of 3rd joint, coxae and knees light brown or whitish. Pronotum, entire corium and clavus behind the posterior silvery band and cuneus shining. Hair covering smooth.

Material studied: Japan: Kyushu, Wakasugi-yama near Fukuoka, 3 spec., 13. X. 1957, S. MIYAMOTO (recorded as *P. niger* by me 1961, p. 167). — *P. typicus* has previously been recorded from Ceylon, Indian and Formosa.

Affinities: *P. niger* POPP. is somewhat bigger, length 4.5 mm., with only the exocorium shining behind the posterior silvery band on the elytra.

References: LINNAVUORI, R. 1961. Contributions to the Miridae fauna of the Far East. Ann. Ent. Fenn. 27, p. 155 – 169. — POPPIUS, B. 1914. Übersicht der *Pilophorus*-Arten nebst Beschreibung verwandter Gattungen (Hem. Het.). Ann. Soc. Ent. Belg. 1915, p. 237 – 254. — SERVADEI, A. 1952. Hemiptera Sardiniana. Redia 37, p. 443 – 478.