

Two New Species of the Genus *Pidonia* (Coleoptera, Cerambycidae) from the Central Part of Taiwan

By

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Ten species of the genus *Pidonia* MULSANT have hitherto been described from Taiwan. Most of them are commonly found in the evergreen broadleaved forests in the central part of the island. During the survey made in recent years by the author himself and his friends, a number of specimens belonging to this genus were obtained in central Taiwan. This collection included two species which seemed new to science. It is the purpose of the present paper to give descriptions of these new species.

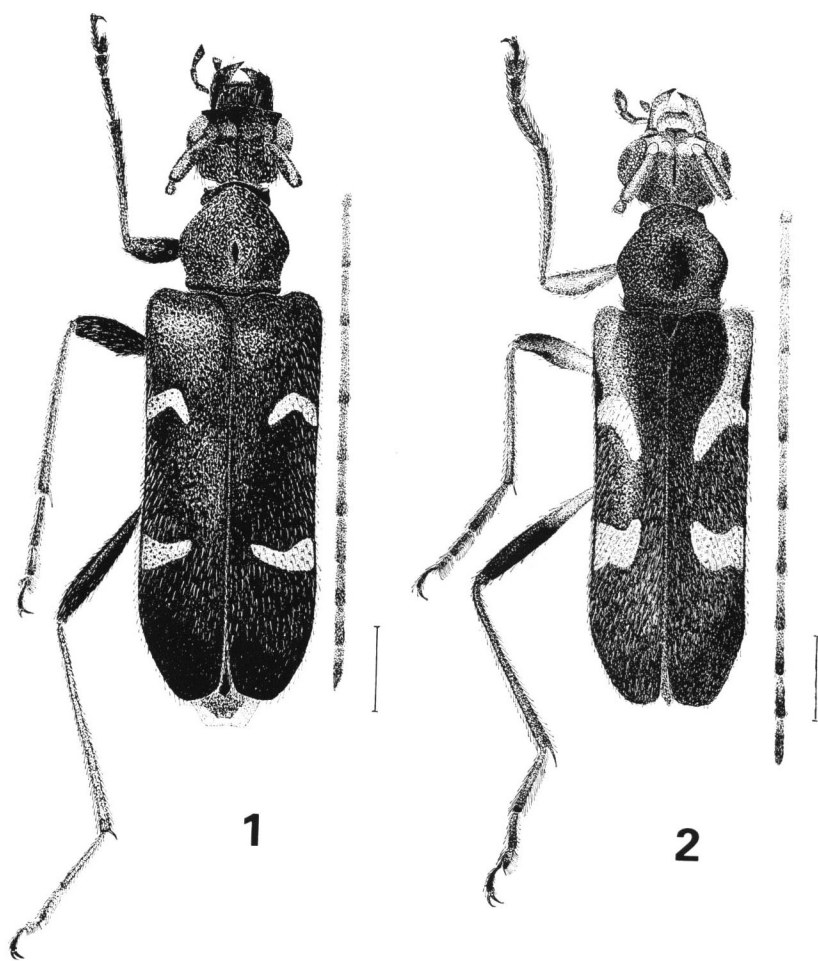
Before going further, the author wishes to express his cordial thanks to Professor H. SAWADA, Professor Y. WATANABE and Dr. S. OKAJIMA of the Laboratory of Entomology, Tokyo University of Agriculture, for their constant guidance and for reading the manuscript, to Dr. Y. KUROSAWA and Dr. S.-I. UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for their useful advice during the course of this study and to Dr. J. C. LIEN of the U. S. Naval Medical Research Unit No. 2, Taipei, Mr. K. MATSUKI of Taiwan University, Professor Y. HAYASHI of the Tokyo University of Agriculture, for their kind aid rendered in various ways. Thanks are also due to Messrs. H. FUJITA, M. ITOH, M. KUBOKI, T. NIISATO, Y. ODA, H. SAKAINO and T. SHIMOMURA for supplying him with valuable materials.

Pidonia (Pidonia) pilushana S. SAITO, sp. nov.

(Figs. 1-6, 13A-I)

Body relatively small, rather wide. Length: male 6.7-8.6 mm, female 6.3-9.2 mm (from mandibular tip to elytral apex). Breadth: male 1.6-2.3 mm, female 2.9-3.8 mm (between humeral angles of elytra).

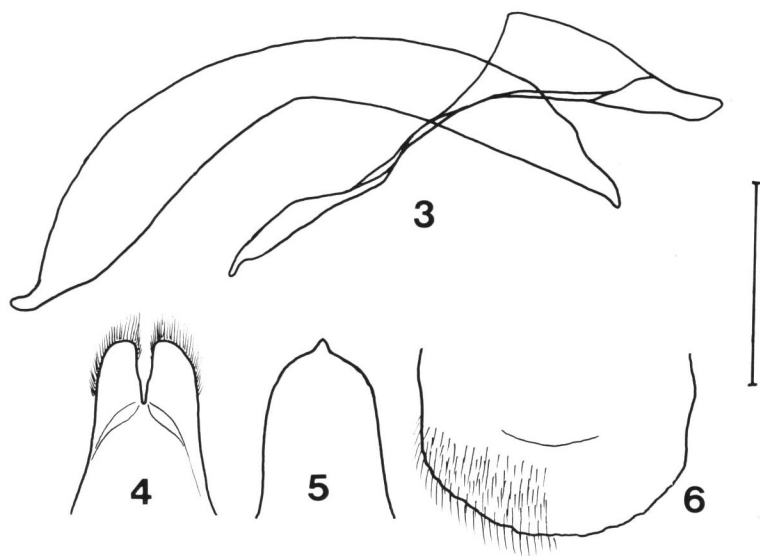
Male. Head entirely black, with mouth-parts, anterior parts of antennal insertions and tempora testaceous, ventral surface of neck brown. Antennae testaceous, 5th to 9th segments each darkened towards apex, and each of 10th and 11th segments uniformly blackish brown, excepting somewhat paler proximal part. Prothorax entirely black, prosternum sometimes testaceous, ventral surfaces of meso- and meta-thoraces entirely black, scutellum blackish brown. Legs entirely testaceous, with front tarsi and claws somewhat darker than the other parts; apical third of middle and hind femora frequently dark brown on the dorsal surface, excepting the testaceous



Figs. 1-2. *Pidonia pilushana* sp. nov. — 1. Female. — 2. Male. (Scale 1 mm).

extremity. Elytra almost black and with metallic tinge, each elytron provided with two short white markings before and behind middle, both arcuate outwards and sometimes connected with each other at middle; besides these, a longitudinal testaceous marking present along the side, extending from humerus to the anterior white marking. Abdomen bicolored, 1st and 2nd sternites reddish brown, the remainings black though the posterior half of 3rd sternite is sometimes brown.

Head subrectangular and broader across eyes than length (1.5-1.4 : 1), narrowed posteriorly and abruptly constricted at neck; surface densely covered with very coarse punctures and with short testaceous pubescence, bearing a conspicuous longitudinal furrow extending from frons to vertex; eyes prominent laterally. Antennae slender and relatively short, barely reaching elytral apex at the middle of 10th segment; length



Figs. 3–6. *Pidonia pilushana* sp. nov. — 3. Median and lateral lobes in lateral view. — 4. Apex of lateral lobes in ventral view. — 5. Apex of median lobe in ventral view. — 6. Eighth abdominal tergum in ventral view. (Scale 0.5 mm).

order of antennal segments is roughly measured as follows: $5\text{th} > 3\text{rd} > 6\text{th} \geq 4\text{th} = 7\text{th} > 1\text{st} \geq 11\text{th} > 8\text{th} = 9\text{th} > 10\text{th} > 2\text{nd}$. Pronotum a little longer than width at middle (1.2 : 1); sides swollen laterally at middle and constricted both anteriorly and posteriorly; disc strongly convex, surface covered with denser and finer punctures and pubescence than those on head. Scutellum triangular, shorter than width, and covered thinly with short testaceous pubescence. Ventral surface of meso- and metathoraces densely covered with fine white pubescence. Elytra 2.5 times as long as width between humeral angles, almost parallel-sided in basal three-fourths, though distinctly convergent posteriorly, and somewhat depressed at basal three-fourths; surface covered with evidently larger and sparser punctures than those on pronotum; apical margin narrowly rounded. Legs relatively slender, densely covered with fine testaceous pubescence. Abdomen somewhat curved downwards, 1st sternite the widest and 5th the narrowest.

Male genitalia nearly membranous near base, though gradually sclerotized towards apex; median lobe ventrally curved in apical half; viewed laterally, median lobe constricted near middle, apical portion abruptly narrowed towards pointed apex; viewed dorsally, apical portion almost parallel-sided to rounded extremity, the centre of which is distinctly produced into a sharp tubercle. Lateral lobes relatively short, widest at middle and bilobed at apex in dorsal view, each lobe being rather broad, its apico-lateral margin fringed densely with conspicuous terminal hairs.

Female. Different from male in darker color, absence of humeral testaceous marking, and broader and somewhat larger body. Mouth-parts blackish brown to black. Prothorax completely black. Coxae and femora completely black, the latter sometimes testaceous both at bases and at apices, tibiae and tarsi sometimes blackish brown at apices, 5th tarsal segment almost blackish brown, claws testaceous. White markings on each elytron completely divided into two spots. Head a little broader across eyes than length (1.3–1.5: 1). Pronotum nearly as long as or slightly longer than width at middle (1.05: 1). Antennae clearly shorter than in male, not reaching apex; length order of antennal segments as follows: 5th > 3rd > 1st = 4th > 6th $\geq$ 7th > 11th > 9th $\geq$ 8th $\geq$ 10th > 2nd. Elytra 2.3 times as long as width between humeral angles. Abdomen nearly parallel-sided in three basal sternites, abruptly narrowed posteriorly from 4th sternite; 5th sternite semicircular.

Type-series. Holotype: ♂, Pilu-shenmu (near Mt. Pilushan, 2,440 m alt.), Hwalien Hsien, 8 May 1977, S. SAITO leg. Allotype: ♀, same data as the holotype. Paratypes: 351 ♂♂, 216 ♀♀, same locality as the holotype, early May to early June, 1977 and 1978, H. FUJITA, M. ITOH, M. KUBOKI, T. NISATO, Y. ODA, H. SAKAINO, T. SHIMOMURA and S. SAITO leg.

The holo- and allotypes are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo; the paratypes are distributed to the above collection and to the collections of the author himself and of the other collectors.

Notes. Most of the specimens examined were collected on the flowers of *Trochodendron aralioides* SIEBOLD et ZUCCARINI (Trochodendraceae) and *Prunus* sp. (Rosaceae), except for a few specimens which were found on *Viburnum morrisonense* HAYATA (Caprifoliaceae), *Deutzia taiwanesis* SCHNEIDER (Saxifragaceae) and others.

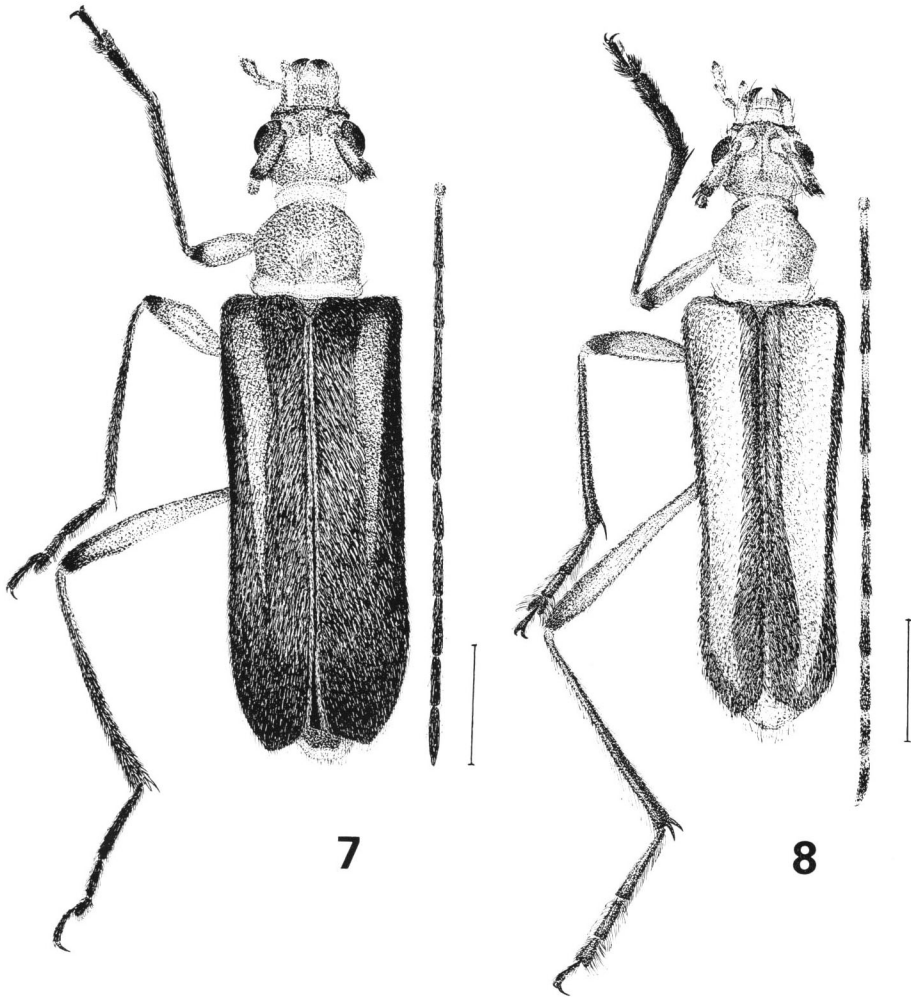
At first sight, especially in the elytral markings, male specimens of this species resemble females of *P. subaenea*, but can be distinguished from the latter by the arcuate white markings on elytra and by the bicolored abdomen. Female specimens of this species resemble those of *P. oyamae* and *P. testacea*, but differ from them in the bicolored abdomen, and from females of *P. oyamae* also in the shining elytra.

***Pidonia (Pidonia) major* S. SAITO, sp. nov.**

(Figs. 7–12, 13J–M)

Body relatively large, elongate. Length: male 9.3–12.0 mm, female 10.3–13.4 mm (from mandibular tip to elytral apex). Breadth: male 2.4–3.0 mm, female 2.8–3.6 mm (between humeral angles of elytra).

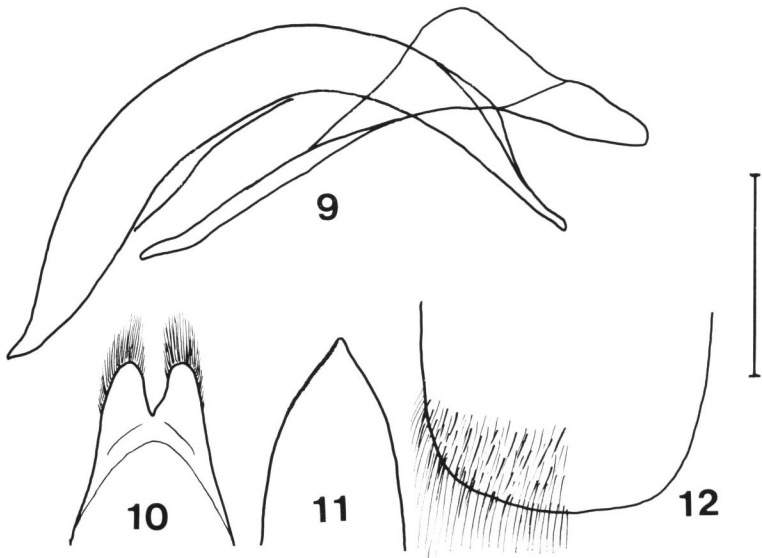
Male. Head entirely testaceous, with apex of each mandible blackish brown, posterior half of neck sometimes blackish brown, vertex, occiput and tempora somewhat reddish testaceous. Antennae almost dark brown, excepting uniformly testaceous 2nd segment, 3rd to 7th, sometimes to 9th, segments each darkened apically and the extension of dark part gradually becomes larger towards apex, terminal two to four segments almost dark brown. Prothorax generally testaceous, though blackish



Figs. 7-8. *Pidonia major* sp. nov. — 7. Female. — 8. Male. (Scale 2 mm).

brown just before each coxal cavity; anterior margin of mesosternum sometimes blackened. Scutellum testaceous, with the side margins black. Legs testaceous except for apical parts of femora, tibiae and tarsi, all of which are black; tibiae with ill-defined testaceous patches on the inner side; claws brown. Elytra bicolored, each largely testaceous with black circumference. Abdomen bicolored, 1st sternite entirely black, 2nd black with testaceous posterior part, the remainings uniformly testaceous.

Head subrectangular, broader across eyes than length (1.5-1.6 : 1), abruptly constricted at neck; surface densely covered with coarse punctures and short testaceous pubescence, bearing a longitudinal furrow extending from frons to vertex along median



Figs. 9-12. *Pidonia major* sp. nov. — 9. Median and lateral lobes in lateral view. — 10. Apex of lateral lobes in ventral view. — 11. Apex of median lobe in ventral view. — 12. Eighth abdominal tergum in ventral view. (Scale 0.5 mm).

line; eyes prominent laterally. Antennae slender, barely reaching elytral apex at middle of 10th segment; length order of antennal segments is roughly measured as follows: 5th > 3rd > 6th > 7th > 4th > 8th > 9th = 11th > 10th > 1st > 2nd. Pronotum a little longer than width at middle (1.2: 1), swollen laterally and constricted both anteriorly and posteriorly; disc convex above, surface covered with slightly denser and finer punctures and pubescence than those on head. Scutellum triangular, shorter than width and covered thinly with short testaceous pubescence. Elytra 2.7-2.8 times as long as width between humeral angles, with the disc somewhat depressed at basal three-fourths; surface covered with larger punctures than those on pronotum; apex of each elytron obliquely truncated. Legs relatively elongate, densely covered with fine testaceous pubescence. Abdomen relatively long, gradually narrowed apically, covered with very fine pubescence.

Male genitalia nearly membraneous near base, though gradually sclerotized towards apex. Median lobe remarkably curved ventrad in apical half; viewed laterally, apical portion gradually acuminate, narrowly produced, and slightly reflexed to pointed apex; viewed dorsally, apical portion rather rapidly narrowed to pointed apex. Lateral lobes relatively long, widest at apical third in dorsal view and bilobed at apex, each lobe gradually narrowed apicad and rounded at the tip, bearing a number of conspicuously long terminal hairs.

Female. Evidently different from male in darker color and larger body.

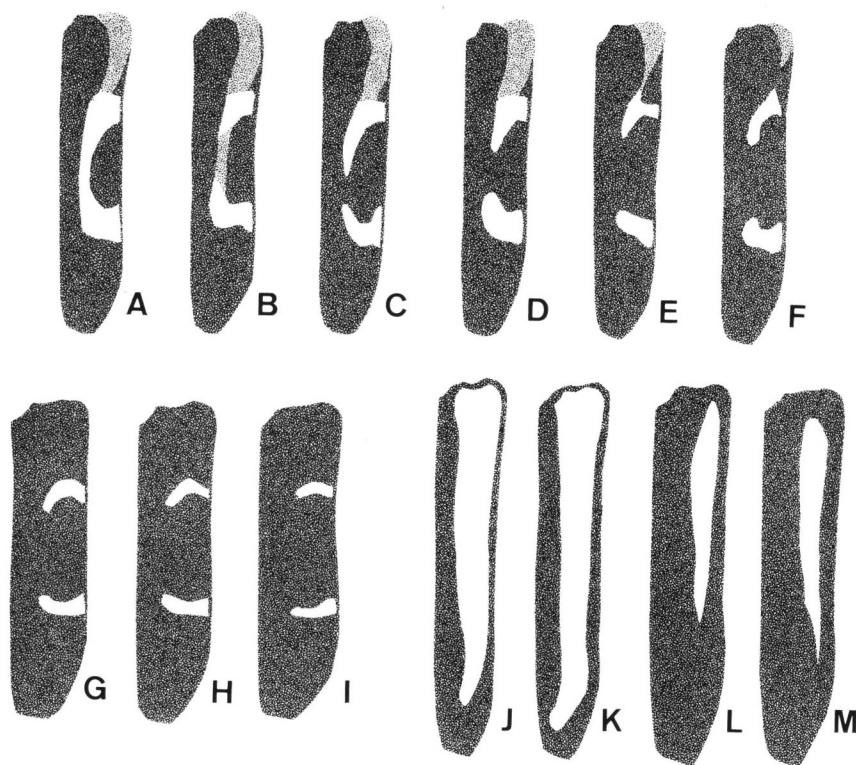


Fig. 13. Variation of elytral markings in *Pidonia pilushana* sp. nov. and *P. major* sp. nov. — A–F, *P. pilushana*, male; G–I, same, female; J–K, *P. major*, male; L–M, same, female.

Eyes smaller than in male. Antennae much shorter, not reaching elytral apex, and uniformly black, excepting entirely testaceous apex of 1st segment and blackish brown apex of 11th segment. Length order of antennal segments as follows: $5\text{th} > 3\text{rd} > 6\text{th} = 7\text{th} > 4\text{th} > 9\text{th} = 11\text{th} \geq 1\text{st} = 8\text{th} > 10\text{th} > 2\text{nd}$. Pronotum a little longer than width at middle (1.1–1.2 : 1). Elytra 2.4–2.5 times as long as width between humeral angles, black circumference evidently broader than in male. Abdomen uniformly testaceous.

Type-series. Holotype: ♂, Pilu-shenmu (near Mt. Pilushan, 2,440 m alt.), Hwalien Hsien, 8 May 1977, S. SAITO leg. Allotype: ♀, same data as the holotype. Paratypes: 52 ♂♂, 20 ♀♀, same locality as the holotype, early May to early June, 1977 and 1978, H. FUJITA, M. ITOH, Y. ODA, H. SAKAINO, T. SHIMOMURA and S. SAITO leg.

The holo- and allotypes are preserved in the National Science Museum (Nat. Hist.), Tokyo. The paratypes are in the author's and other collector's collections.

Notes. All the specimens were found on the flowers of *Trochodendron aralioides* SIEBOLD et ZUCCARINI and *Prunus* sp. This new species is very peculiar in having

entirely testaceous pronotum and ventral surface of body, and remarkably broad black parts on elytra. Therefore, it can be readily distinguished from all the other Formosan species of the genus *Pidonia*.

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