

Notes on the Lepturine Genus *Pidonia* (Coleoptera,
Cerambycidae) from East Asia

III. Two New Species of the Subgenus *Cryptopidonia* from Taiwan

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Abstract Two new species of the lepturine genus *Pidonia* are described from Taiwan. Both belong to the subgenus *Cryptopidonia*; one of them, named *P. (C.) ammashana*, is related to *P. pilushana*, while the other, named *P. (C.) fushani*, to *P. takahashii*.

The species of the genus *Pidonia* occur mainly in the temperate zone of the Holarctic Region, and more than 90 species have been known to belong to this genus. Up to the present, 19 species have been recorded from Taiwan. Study of the Formosan fauna still remains quite insufficient, despite its importance for analysing the origin of the Japanese fauna.

The present paper contains the result of my study on the species of the genus *Pidonia* obtained on Mt. An-ma Shan, 2,200 m in altitude, of the Ta-hsüeh-shan Mts., T'ai-chung Hsien, northwestern Taiwan. The holotypes of the new species to be described below will be deposited in the collection of the National Museum of Natural Science, T'ai-chung, Taiwan.

In preparing this report, I am much indebted to Mr. K. SUZUKI who gave me opportunity to work on this interesting material. My thanks are also due to Mr. Fushan CHEN for his kind help in the field.

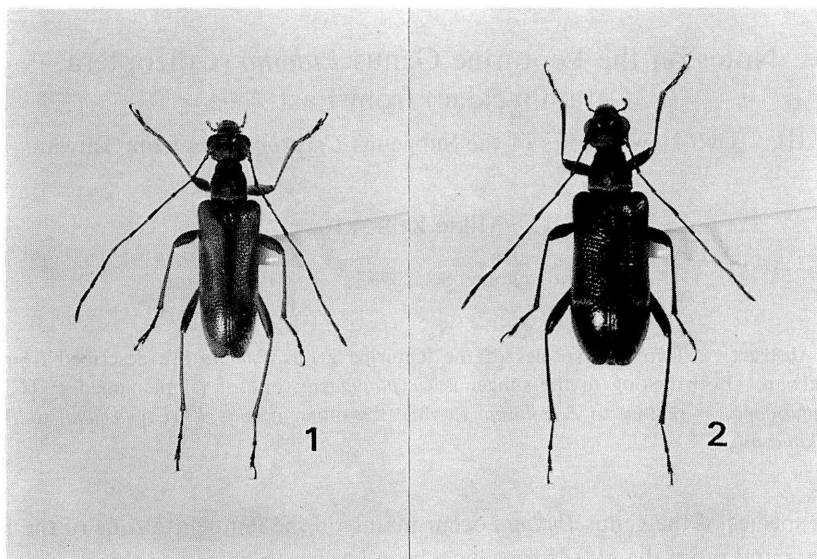
Pidonia (Cryptopidonia) ammashana KUBOKI, sp. nov.

(Figs. 1–6)

Body minute to small, relatively roundish and furnished with pale fulvous pubescence.

Length: 6.9–5.2 mm (male), 7.2–5.2 mm (female); breadth: 1.9–1.4 mm (male), 2.1–1.5 mm (female).

Color. Male:— Body fulvous to black; head reddish fulvous, sometimes with dark brown vertex; mouth-parts yellowish fulvous except for reddish brown apex of each mandible; eyes black; antennae fulvous; third and following segments infuscated, sometimes third to fifth segments fulvous except for dark brown apex of each segment; prothorax reddish fulvous, sometimes dark brown on both sides; scutellum reddish fulvous; coxae and trochanters fulvous; femora fulvous, sometimes apex of each hind



Figs. 1-2. *Pidonia (Cryptopidonia) anmashana* KUBOKI, sp. nov., from Mt. An-ma Shan in northwestern Taiwan; 1, ♂; 2, ♀.

femur dark brown; tibiae fulvous, sometimes each apex of mid and hind tibiae faintly infuscated; tarsi dark brown to black; claws reddish brown. Elytra almost yellowish fulvous with black markings; the black portions frequently becoming dull submetallic blue. Ventral surface:— head fulvous; thorax fulvous; meso- and metasterna darkened; abdomen fulvous, each of first to second or third sternites dark brown. Elytral markings:— sutural marking indistinctly present, broadened basally, almost terminating in the point of apical fourth of elytra, sometimes entirely absent; basal marking wanting; latero-basal marking small; latero-median marking oblong, rather developed but obscure; latero-posterior marking wanting; apical band faintly present, sometimes entirely absent.

Female:— Body coloration and markings distinctly more developing in female than in male; head, thorax and scutellum black; elytra black frequently becoming vivid metallic blue with two pairs of arcuate whitish yellow markings, sometimes these markings gradually reducing or entirely disappearing; antennae and legs brownish black to black; coxae and trochanters fulvous; ventral surface:— head, thorax and abdomen black.

Structure. Head broader across eyes than basal width of prothorax (male, 1.16: 1; female, 1.10: 1); terminal segment of maxillary palpus broadened apically with straight outer margin; tempora slightly narrowed posteriorly in anterior half and abruptly constricted in posterior half, almost impunctate and shining, with several setae; frons subvertical and transverse, covered with coarse punctures, bearing a fine but distinct median longitudinal furrow extending backwards to vertex; vertex weakly

convex above, coarsely punctured; gula shining, very sparsely clothed with long pubescence. Eyes relatively prominent, moderately faceted, shallowly emarginate at middle of internal margins. Antennae relatively short and slender, inserted just behind the level across frontal margins of eyes, slightly longer (male) or distinctly shorter (female) than body; first segment distinctly dilated towards apex, weakly shining, sparsely clothed with fine pubescence; second to eleventh segments densely clothed with fine appressed pubescence and sparsely with fine erect pubescence; comparative length of each antennal segment as follows:— $5 > 1 + 2 = 3 > 4 = 6$ (male) or $5 > 1 + 2 > 3 > 4 = 6$ (female).

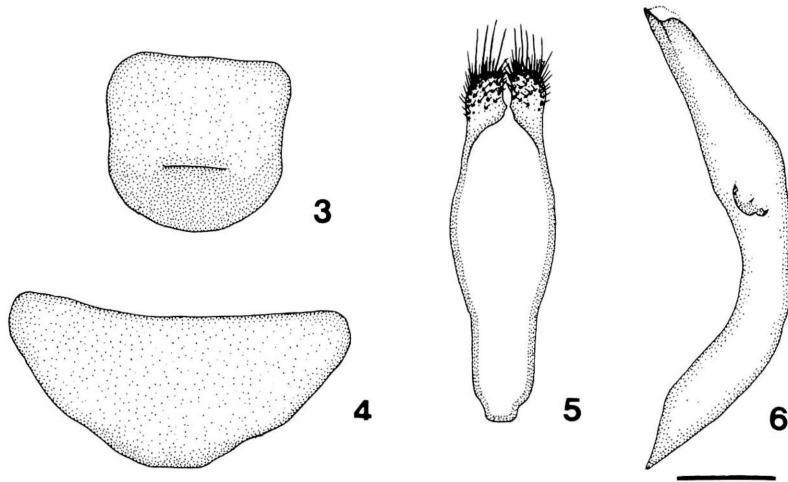
Prothorax longer than basal width (male, 1.07: 1; female, 1.01: 1), shallowly constricted both behind apex and before base, roundly expanded laterally just before the middle; breadth across expanded portions slightly shorter than base; basal margin weakly bisinuate, obviously broader than apical margin (male, 1.37: 1; female, 1.38: 1); disk of pronotum convex above, finely and closely punctured, sparsely clothed with fine pubescence; posterior lateral setae long; prosternum shining, extremely thinly clothed with short pubescence; meso- and metasterna finely punctate, densely clothed with fine appressed pubescence. Scutellum small and triangular, slightly longer than broad, bearing thin pubescence on the surface. Elytra 2.40 times (male) or 2.31 times (female) as long as basal width, gradually narrowed posteriorly (male) or almost parallel-sided (female), separately rounded at apices; surface sparsely and finely punctured, sparsely clothed with suberect pubescence; interspace between punctures broader than diameter of each puncture.

Legs relatively slender, finely punctate, clothed with short pubescence; femora clavate, with subappressed pubescence; hind femur not reaching elytral apex in both sexes; tibiae linear, with suberect pubescence; tarsi densely clothed with short pubescence on under surface; first segment of metatarsus longer than the following two taken together; third segment strongly dilated apically and deeply emarginate at the middle of apex.

Abdomen elongate and gradually narrowed toward apex; surface of each sternite densely covered with extremely fine pubescence; in male, apex of last sternite rounded and very shallowly emarginate at middle (Fig. 4), apex of last tergite rounded (Fig. 3); in female, apex of last sternite rounded, apex of last tergite truncate.

Male genitalia:— Median lobe weakly sclerotized, long, relatively thick, less curved ventrally (Fig. 6) and acutely pointed at apex; lateral lobes shorter than median lobe; each apex rounded and densely furnished with long terminal hairs (Fig. 5); endophallus long and furnished with a pair of falcate sclerites; diverticulum located at the apical portion of endophallus long.

Female genitalia:— Spermatheca minutely striated, lightly sclerotized, relatively swollen, strongly curved at middle, widest near the middle, abruptly narrowed apically; the part continuing to spermathecal duct funnel-shaped without transverse crease; spermathecal gland located at lateral wall; vagina enlarged basally; valvifer narrowed apically; apical segment of coxite furnished with sensory pubescence; stylus sclerotized



Figs. 3-6. *Pidonia (Cryptopidonia) amashana* KUBOKI, sp. nov., ♂. — 3, Last tergite; 4, last sternite; 5, lateral lobes of male genitalia, ventral view; 6, median lobe of the same, lateral view. Scale: 0.3 mm.

and ovate, enlarged apically with long sparse hairs at the terminal area.

Type series. Holotype: ♂, Mt. An-ma Shan, 2,200 m alt., Ta-hsüeh-shan Mts., T'ai-chung Hsien, 1-V-1990, M. KUBOKI leg. Paratypes: 2 ♂♂, 2 ♀♀, same data as for the holotype; 3 ♂♂, 2 ♀♀, same locality, 2~5-V-1990, M. KUBOKI leg.; 11 ♂♂, 5 ♀♀, same locality, 1~5-V-1990, K. SUZUKI leg.; 10 ♂♂, 11 ♀♀, same locality, 4~5-V-1991, M. KUBOKI leg.; 3 ♂♂, 3 ♀♀, same locality, 4~5-V-1991, K. SUZUKI leg.

Distribution. Northwestern Taiwan.

This remarkable new species was discovered in an evergreen mixed forest on Mt. An-ma Shan, which lies near the southwestern end of the Ta-hsüeh-shan Mountain Range.

Flight period. May.

Flower records. *Lithocarpus*, *Trochodendron aralioides*.

Remarks. This new species is allied to *Pidonia pilushana* S. SAITO, but can be distinguished from the latter by the following key:

1. Elytral markings: sutural marking of male clearly present, combining with apical band; apical band distinct; tempora less developed, narrowed in anterior half and gently constricted in posterior half; apex of male last sternite somewhat deeply emarginate at middle; median lobe of male genitalia strongly curved ventrally with its apex strongly sclerotized and faintly bending inside *P. pilushana* S. SAITO.
2. Elytral markings: sutural marking of male indistinctly present, broadened basally, almost terminating in the portion of apical fourth of elytra, sometimes entirely

absent; apical band faintly present, sometimes entirely absent; tempora well developed, slightly narrowed posteriorly in anterior half and abruptly constricted in posterior half; apex of male last sternite very shallowly emarginate at middle; median lobe of male genitalia weakly curved ventrally with its apex weakly sclerotized and produced *P. anmashana* sp. nov.

***Pidonia (Cryptopidonia) fushani* KUBOKI, sp. nov.**

(Figs. 7-12)

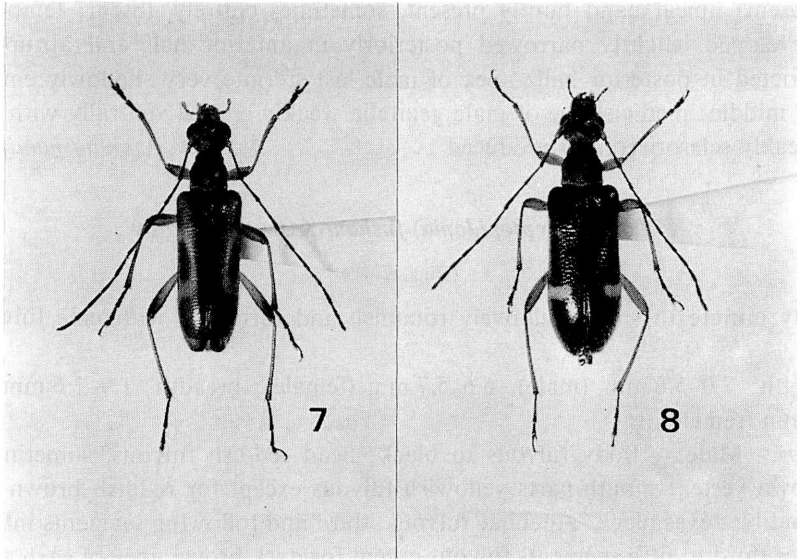
Body minute to small, relatively roundish and furnished with pale fulvous pubescence.

Length: 7.0-5.6 mm (male), 6.6-5.7 mm (female); breadth: 1.9-1.6 mm (male), 1.9-1.7 mm (female).

Color. Male:— Body fulvous to black; head reddish fulvous, sometimes with dark brown vertex; mouth-parts yellowish fulvous except for reddish brown apex of each mandible; eyes black; antennae fulvous; third and following segments infuscated, sometimes third to fifth segments fulvous except for dark brown apex of each segment; prothorax reddish fulvous, sometimes dark brown on both sides; scutellum reddish fulvous; coxae and trochanters fulvous; femora fulvous, sometimes apex of each hind femur dark brown; tibiae fulvous, sometimes each apex of mid and hind tibiae faintly infuscated; tarsi dark brown to black; claws reddish brown. Elytra almost yellowish fulvous with black markings; the black portions inclined to become dull submetallic blue. Ventral surface:— head fulvous; thorax fulvous; meso- and metasterna darkened; abdomen fulvous, each of first to second or third sternites dark brown. Elytral markings:— sutural marking narrowly present, sometimes entirely absent; basal marking wanting; latero-basal marking small; latero-median marking oblong, rather developed but obscure; latero-posterior marking wanting; apical band faintly present, sometimes entirely disappearing.

Female:— Body coloration and markings distinctly more developing in female than in male; head, thorax and scutellum black; elytra black frequently becoming vivid metallic blue with two pairs of arcuate whitish yellow markings, sometimes these markings gradually reducing or entirely disappearing; scape and pedicel yellowish brown; third and following segments infuscated; coxae and trochanters brownish yellow; femora and tibiae almost brownish yellow, sometimes infuscated at their apices, tarsi and claws dark brown; ventral surface:— head and thorax black, abdomen reddish brown; each of first to second sternites darkened to black.

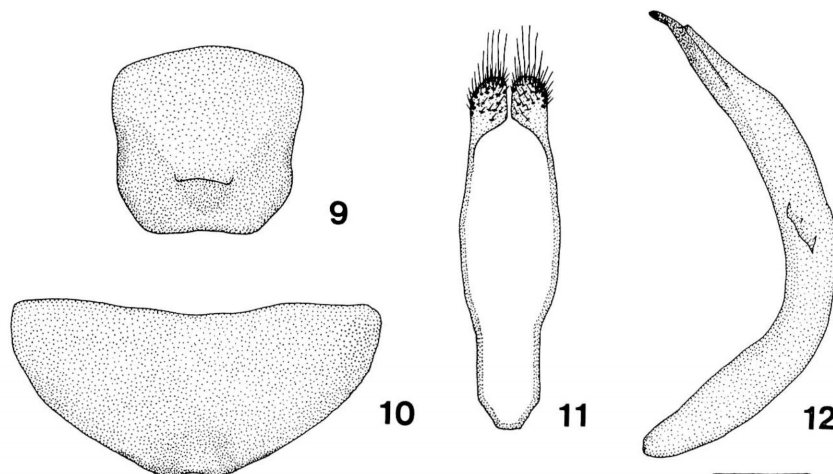
Structure. Head broader across eyes than basal width of prothorax (male, 1.17: 1; female, 1.10: 1); terminal segment of maxillary palpus broadened apically with straight outer margin; tempora narrowed posteriorly in anterior half and abruptly constricted in posterior half, almost impunctate and shining, with several setae; frons subvertical and transverse, covered with coarse punctures, bearing a fine but distinct median longitudinal furrow extending backwards to vertex; vertex weakly convex



Figs. 7-8. *Pidonia (Cryptopidonia) fushani* KUBOKI, sp. nov., from Mt. An-ma Shan in north-western Taiwan; 7, ♂; 8, ♀.

above, coarsely punctured; gula shining, very sparsely clothed with long pubescence. Eyes relatively prominent, moderately faceted, shallowly emarginate at middle of internal margins. Antennae relatively short and slender, inserted just behind the level across frontal margins of eyes, slightly longer (male) or distinctly shorter (female) than body; first segment distinctly dilated towards apex, weakly shining, sparsely clothed with fine pubescence, second to eleventh segments densely clothed with fine appressed pubescence and sparsely with fine erect pubescence; comparative length of each antennal segment as follows:— $5 > 1 + 2 = 3 > 4 \geq 6$ (male) or $5 > 1 + 2 > 3 > 4 > 6$ (female).

Prothorax longer than basal width (male, 1.11: 1; female, 1.00: 1), shallowly constricted both behind apex and before base, roundly expanded laterally just before the middle; breadth across expanded portions slightly shorter than base; basal margin weakly bisinuate, obviously broader than apical margin (male, 1.33: 1; female, 1.38: 1); disk of pronotum convex above, finely and closely punctured, sparsely clothed with fine pubescence; posterior lateral setae long; prosternum shining, extremely thinly clothed with short pubescence; meso- and metasterna finely punctate, densely clothed with fine appressed pubescence. Scutellum small and triangular, slightly longer than broad, bearing thin pubescence on the surface. Elytra 2.37 times (male) or 2.27 times (female) as long as basal width, gradually narrowed posteriorly (male) or almost parallel-sided (female), separately rounded at apices; surface sparsely and finely punctured, sparsely clothed with suberect pubescence; interspace between punctures broader than diameter of each puncture.



Figs. 9–12. *Pidonia* (*Cryptopidonia*) *fushani* KUBOKI, sp. nov., ♂. — 9, Last tergite; 10, last sternite; 11, lateral lobes of male genitalia, ventral view; 12, median lobe of the same, lateral view. Scale: 0.3 mm.

Legs relatively slender, finely punctate, clothed with short pubescence; femora clavate, with subappressed pubescence; hind femur not reaching elytral apex in both sexes; tibiae linear, with suberect pubescence; tarsi densely clothed with short pubescence on under surface; first segment of metatarsus longer than the following two taken together; third segment strongly dilated apically and deeply emarginate at the middle of apex.

Abdomen elongate and gradually narrowed toward apex; surface of each sternite densely covered with extremely fine pubescence; in male, apex of last sternite rounded and very shallowly emarginate at middle (Fig. 10), apex of last tergite truncate (Fig. 9); in female, apex of last sternite rounded, apex of last tergite truncate.

Male genitalia:— Median lobe weakly sclerotized, long, relatively thick, less curved ventrally (Fig. 12) and acutely pointed at apex; lateral lobes shorter than median lobe; each apex rounded and densely furnished with long terminal hairs (Fig. 11); endophallus long and furnished with a pair of falcate sclerites; diverticulum located at the apical portion of endophallus long.

Female genitalia:— Spermatheca minutely striated, lightly sclerotized, relatively swollen, strongly curved at middle, widest near the middle, abruptly narrowed apically; the part continuing to spermathecal duct funnel-shaped without transverse crease; spermathecal gland located at lateral wall; vagina enlarged basally; valvifer narrowed apically; apical segment of coxite furnished with sensory pubescence; stylus sclerotized and ovate, enlarged apically with long sparse hairs at the terminal area.

Type series. Holotype: ♂, Mt. An-ma Shan, 2,200 m alt., Ta-hsüeh-shan Mts., T'ai-chung Hsien, 1–V–1990, M. KUBOKI leg. Paratypes: 1 ♂, 1 ♀, same data as for

the holotype; 2 ♂♂, 2 ♀♀, same locality, 2~5-V-1990, M. KUBOKI leg.; 8 ♂♂, 2 ♀♀, same locality, 1~5-V-1990, K. SUZUKI leg.; 5 ♂♂, 2 ♀♀, same locality, 4~5-V-1991, M. KUBOKI leg.; 1 ♂, same locality, 4~5-V-1991, K. SUZUKI leg.

Distribution. Northwestern Taiwan.

Flight period. May.

Flower records. *Lithocarpus*, *Trochodendron aralioides*.

Remarks. This new species is closely allied to *Pidonia takahashii* KUBOKI, but can be distinguished from the latter by the following key:

1. Prothorax deeply constricted both behind apex and before base; disk of elytron deeply and irregularly punctured; humeral angles of female elytra yellowish brown; median lobe of male genitalia weakly curved. . . . *P. takahashii* KUBOKI.
2. Prothorax shallowly constricted both behind apex and before base; disk of elytron shallowly and regularly punctured; humeral angles of female elytra black inclining to become vivid metallic blue; median lobe of male genitalia strongly curved. *P. fushani* sp. nov.

要 約

窪木幹夫：東アジア産ヒメハナカミキリ属の知見。III. 台湾北西部で発見された *Cryptopidonia* 亜属の2新種。——台湾北西部、鞍馬山の亜高山帯常緑混交林から採集された *Pidonia* 属の2新種、*P. (C.) anmashana* と *P. (C.) fushani* を記載した。前者は *P. pilushana* S. SAITO に近縁であるが、雄の上翅S紋やA紋が不明瞭でときに消失すること、頭側の頬がよく発達し角ばること、雄の腹部末端節腹板中央の三角形の切れ込みが弱いこと、雄交尾器の中葉片の湾曲が弱く先端が曲がらないことなどの差異によって区別できる。また、後者は *P. takahashii* KUBOKI に似ているが、前胸前後縁のくびれが弱いこと、上翅が浅く不規則に点刻されること、雌の上翅肩部が黒く青色の金属光沢を帯びること、雄交尾器の中葉片が強く湾曲することなどの点で区別できる。

References

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