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

IV. Two New Species of the Subgenus Pidonia (s. str.) from Taiwan

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Abstract Two new species of the lepturine genus *Pidonia* are described from the Island of Taiwan. Both belong to the subgenus *Pidonia* (s. str.); one of them, *P.* (*P.*) *flaccidissima*, is related to *P. submetallica*, while the other, named *P.* (*P.*) *angustata*, to *P. meridionalis*.

The present paper contains the result of my study on the species of the genus *Pidonia* obtained on the mountainous areas of southern Taiwan. Two species are new to science and will be named *Pidonia flaccidissima* and *P. angustata*. The holotypes of the new species to be described below will be deposited in the collection of the National Museum of Natural Science, Tai-chung, Taiwan.

I wish herewith to express my hearty thanks to Mr. Kazutoshi Suzuki who gave me the opportunity to work on this interesting material. My thanks are also due to Mr. Wen-lung Chen for his kind help in the field.

Pidonia (Pidonia) flaccidissima KUBOKI, sp. nov.

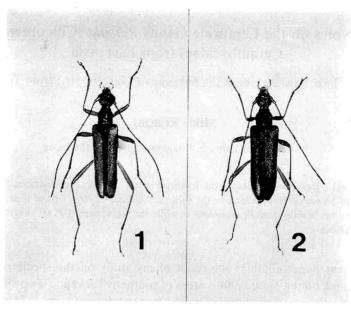
(Figs. 1-6)

Body medium, elongate, slightly tapering apically (male) or robust (female) and furnished with pale fulvous pubescence.

Length: 8.4-6.2 mm (male), 9.9-6.8 mm (female); breadth: 2.1-1.4 mm (male), 2.6-1.7 mm (female).

Color. Male:— Body fulvous to black; head fulvous; temples sometimes infuscate; mouth-parts yellowish fulvous except for reddish brown apex of each mandible; eyes black; antennae fulvous to black; 1st to 5th segments fulvous; 5th segment infuscate at their apices; 6th to 11th segments darkened; prothorax reddish fulvous with black sides; apex and base of pronotum reddish fulvous; scutellum reddish fulvous; coxae, trochanters and femora fulvous; tibiae fulvous, sometimes apex of each tibia faintly dark brown; tarsi dark brown; claws reddish brown. Elytra yellowish fulvous with indistinct black markings. Ventral surface: head fulvous; thorax fulvous; mesoand metasterna black; abdomen fulvous; first and second sternites black. Elytral markings: sutural marking narrowly present; basal marking narrowly present, joining sutural marking; latero-basal marking present, joining basal marking; latero-median

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Figs. 1–2. *Pidonia (Pidonia) flaccidissima* Kuboki, sp. nov., from Mt. Hsi-nan Shan in southern Taiwan; 1, δ ; 2, φ .

and latero-posterior markings small, variable, sometimes entirely absent; lateral three markings sometimes fused with one another, forming a narrow submarginal vitta; apical band broadly present, sometimes joining submarginal vitta.

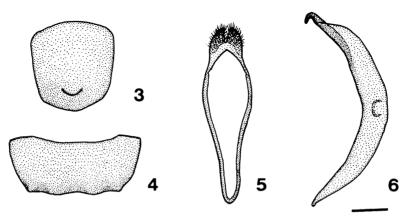
Female:— Body coloration and markings distinctly more developed in female than in male; head reddish brown; temples sometimes infuscate; mouth-parts reddish fulvous except for dark brown apex of each mandible and maxillary palpus; 1st to 5th antennal segments reddish fulvous; 5th segment infuscate at their apices; 6th to 11th segments darkened; prothorax reddish black to entirely black; apex and base of pronotum reddish brown; scutellum reddish brown; coxae, trochanters, femora and tibiae reddish brown; tarsi and claws dark brown; elytra black, rarely having a pair of fulvous stripes at middle. Ventral surface: head and prothorax reddish fulvous; meso- and metasterna black; abdomen reddish fulvous.

Structure. Head broader across eyes than basal width of prothorax (male, 1.21: 1; female, 1.09: 1); terminal segment of maxillary palpus deltoid, strongly broadened apically, obliquely truncate at apex, with straight outer margin in male; terminal segment of maxillary palpus club-shaped, gradually broadened apically, with curved outer margin in female; temples weakly expanded, gradually narrowed posteriorly in anterior half and gently 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; two to five supraorbital setae present, especially one

seta very long; gula shining, very sparsely clothed with long pubescence. Eyes relatively prominent, moderately faceted and strongly emarginate at middle of internal margins. Antennae relatively long and slender, inserted just behind the level across frontal margins of eyes; apical one segment surpassing elytral apices in male; antennae barely attaining elytral apices in female; 1st segment distinctly dilated toward apex, weakly shining and sparsely clothed with fine pubescence; 2nd to 11th 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=6>4 (male) or 5>1+2>3>6=4 (female).

Prothorax longer than basal width (male, 1.18:1; female, 1.06:1), shallowly constricted both behind apex and before base and dully angulate-prominent laterally just before the middle; breadth across prominent portions slightly broader than base (male, 1.03:1) or nearly as broad as base (female); basal margin bisinuate, obviously broader than apical margin (male, 1.46:1; female, 1.49:1); disk of pronotum convex above, coarsely punctate and sparsely clothed with fine pubescence; posterior lateral setae very long; prosternum shining, clothed with thin pubescence; meso- and metasterna finely punctate, densely clothed with fine appressed pubescence. Scutellum small, triangular, slightly longer than broad and bearing thin pubescence on the surface. Elytra 2.77 times (male) or 2.57 times (female) as long as basal width, gradually narrowed posteriorly (male) or almost parallel-sided (female) and separately subtruncate at apices; surface coarsely and deeply punctate, sparsely clothed with suberect pubescence; interspace between punctures broader than diameter of each puncture.

Legs slender, finely punctate, clothed with short pubescence; femora clavate, with subappressed pubescence; hind femur barely reaching (male) or not reaching (female) elytral apex; tibiae linear, with suberect pubescence; tarsi densely clothed with short pubescence on under surface; first segment of metatarsus longer than the following



Figs. 3-6. Pidonia (Pidonia) flaccidissima 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.

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two taken together; third segment strongly dilated apically, deeply emarginate at the middle of apex.

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

Male genitalia:— Median lobe long, relatively slender, strongly sclerotized, gradually sclerotized toward apex, moderately curved ventrally, acutely pointed and curving inwards at apex (Fig. 6); lateral lobes shorter than median lobe, deeply bilobed at apex; each lobe relatively short; apex of each lobe obliquely subtruncate, sparsely furnished with relatively short terminal hairs in ventral view (Fig. 5); endophallus long, furnished with a pair of falcate sclerites; diverticulum short, widest near the base and gradually narrowed apically.

Female genitalia:— Spermatheca lightly sclerotized, infuscate in basal half, ovoid, strongly hooked at basal two-thirds and narrowed toward apex; the part continuing to spermathecal duct constricted with transverse crease; spermathecal gland located at lateral wall; vagina enlarged basally; valvifer gradually narrowed apically; basal segment of coxite slightly narrowed apically; apical segment of coxite obtuse at apex, rather lightly sclerotized and infuscate at the inner part and sparsely furnished with sensory pubescence; stylus small, narrow, sclerotized and strongly infuscate except for apex, with long and sparse hairs at the terminal area.

Type series. Holotype: \circlearrowleft , Mt. Hsi-nan Shan, 1,800 m alt., Kao-hsiung Hsien, 19–IV–1985, Wen-lung Chen leg. Paratypes: $10 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$, same data as for the holotype; $3 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$, same locality as for the holotype, 9-V-1983, W. Chen leg.; $12 \circlearrowleft \circlearrowleft$, same locality as for the holotype, $16 \sim 17$ –IV–1987, W. Chen leg.; $2 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$, same locality as for the holotype, 26-V-1987, W. Chen leg.; $3 \circlearrowleft \circlearrowleft$, Mt. Nan-feng Shan, Kao-hsiung Hsien, 8-V-1983, W. Chen leg.; $9 \circlearrowleft \circlearrowleft$, $6 \circlearrowleft \circlearrowleft$, Mt. Shi Shan, 1,500–2,000 m alt., Kaohsiung Hsien, 27-IV-1985, W. Chen leg.; $5 \circlearrowleft \circlearrowleft$, same locality, 1,800 m alt., 18–VI–1987, W. Chen leg.; $1 \circlearrowleft \circlearrowleft$, Mt. Feng-kang Shan, 1,500 m alt., Kao-hsiung Hsien, 30-IV-1985, W. Chen leg.; $1 \circlearrowleft \circlearrowleft$, Mt. Chu-yun Shan, Kao-hsiung Hsien, 27-V-1987, W. Chen leg.; $2 \circlearrowleft \circlearrowleft$, Tien-chi, 2,200 m alt., Kao-hsiung Hsien, 4-V-1978, M. Kuboki leg.; $1 \circlearrowleft$, $1 \hookrightarrow$, same locality, 3-VI-1980, M. Kuboki leg.; $1 \hookrightarrow$, Li-kuan, 2,000 m alt., Kao-hsiung Hsien, 8-V-1978, M. Kuboki leg.; $1 \hookrightarrow$, Mt. Pei-ta-wu Shan, 2,000 m alt., Kao-hsiung Hsien, 2-V-1991, M. Kuboki leg.; $5 \circlearrowleft \circlearrowleft$, $1 \hookrightarrow$, Li-sung, 2,000 m alt., Tai-tung Hsien, 2-V-1987, M. Kuboki leg.; $2 \circlearrowleft \circlearrowleft$, $2 \hookrightarrow$, M. Kuboki leg.; $2 \circlearrowleft$, $2 \hookrightarrow$, M. Kuboki leg.; $2 \circlearrowleft$, M. Kuboki leg.

Distribution. Southern Taiwan.

Flight periods. April to June.

Flower records. Prunus, Rhododendron.

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

1. Elytra black to dark brown inclining to become dull submetallic green in both sexes; surface of elytron finely and shallowly punctured

...... P. submetallica Hayashi.

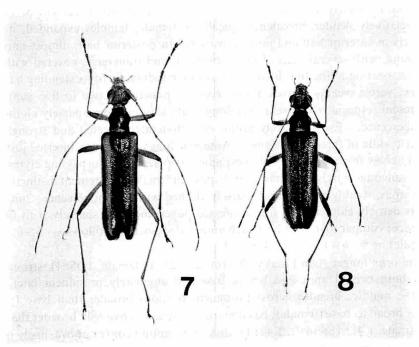
Pidonia (Pidonia) angustata KUBOKI, sp. nov.

(Figs. 7-12)

Body large, elongate, slightly tapering apically (male) or robust (female) and furnished with pale fulvous pubescence.

Length: 10.0-9.0 mm (male), 9.5-8.6 mm (female); breadth: 2.2-2.1 mm (male), 2.5-2.0 mm (female).

Color. Male:— Body fulvous to black; head reddish fulvous; mouth-parts yellowish fulvous except for reddish brown apex of each mandible; eyes black; 1st to 2nd antennal segments fulvous; 3rd and following segments infuscate at their apices; prothorax reddish fulvous, with black markings; apex and base of pronotum reddish fulvous; scutellum reddish fulvous; coxae and trochanters fulvous; femora fulvous, sometimes apex of each femur dark brown; tibiae dark brown; tarsi dark brown to



Figs. 7–8. *Pidonia (Pidonia) angustata* Kuboki, sp. nov., from Mt. Pei-ta-wu Shan in southern Taiwan; 7, ♂; 8, ♀.

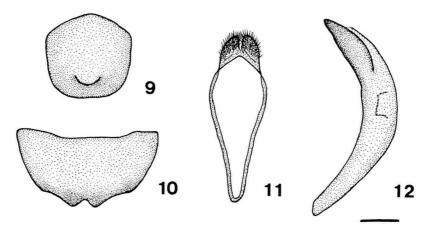
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black; claws reddish brown. Elytra yellowish fulvous with black markings. Ventral surface: head fulvous; thorax fulvous; meso- and metasterna darkened; abdomen fulvous; first and second sternites dark brown. Elytral markings: sutural marking broadly present, terminating behind base of elytra; lateral three markings always fused with one another, forming a broad submarginal vitta; basal marking narrowly present, joining submarginal vitta; apical band broadly present, joining submarginal vitta.

Female:— Body coloration and markings distinctly more developed in female than in male; head reddish brown; mouth-parts reddish fulvous except for dark brown apex of each mandible and each maxillary palpus; 1st to 2nd antennal segments reddish brown; 3rd and following segments infuscate; thorax black; apex and base of pronotum reddish brown; scutellum reddish brown; coxae and trochanters brownish yellow; femora almost brownish yellow; apex of each femur black; tibiae and tarsi dark brown; claws reddish brown; elytra almost black, having a pair of fulvous stripes at middle. Ventral surface: head, thorax and abdomen brownish yellow; meso- and metasterna black; first to second sternites darkened laterally; last sternite darkened apically. Elytral markings: sutural marking broadly present, terminating behind base of elytra; submarginal vitta broadly present, joining narrow basal marking; apical band broadly present, joining submarginal vitta and sutural marking.

Structure. Head broader across eyes than basal width of prothorax (male, 1.19: 1: female, 1.07: 1); terminal segment of maxillary palpus large, strongly broadened apically with obtusely angulate outer margin in male; terminal segment of maxillary palpus relatively slender, broadened apically in female; temples expanded, narrowed posteriorly in anterior half and fairly 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; two to five supraorbital setae present, especially one seta very long; gula shining, very sparsely clothed with long pubescence. Eyes relatively prominent, moderately faceted and strongly emarginate at middle of internal margins. Antennae long and slender, inserted just behind the level across frontal margins of eyes; apical two segments surpassing elytral apices in male; antennae barely attaining elytral apices in female; 1st segment distinctly dilated towards apex, weakly shining and sparsely clothed with fine pubescence: 2nd to 11th segments densely clothed with fine appressed pubescence and sparsely with fine erect pubescence; comparative length of each antennal segment as follows: -5 > 6 > 3 > 1 +2>4 (male) or 5>6>1+2>3>4 (female).

Prothorax longer than basal width (male, 1.23:1; female, 1.05:1), strongly constricted both behind apex and before base and angulately prominent laterally just before the middle; breadth across prominent portions broader than base (male) or nearly as broad as base (female); basal margin bisinuate, obviously broader than apical margin (male, 1.41:1; female, 1.49:1); disk of pronotum convex above, finely punctate and sparsely clothed with fine pubescence; posterior lateral setae very long; prosternum shining, clothed with thin pubescence; meso- and metasterna finely punctate, densely



Figs. 9-12. *Pidonia (Pidonia) angustata* Kuboki, sp. nov., 3. — 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.

clothed with fine appressed pubescence. Scutellum small, triangular, slightly longer than broad and bearing thin pubescence on the surface. Elytra 2.88 times (male) or 2.59 times (female) as long as basal width, gradually narrowed posteriorly (male) or almost parallel-sided (female) and separately truncate at apices; surface finely and shallowly punctate, sparsely clothed with suberect pubescence; interspace between punctures broader than diameter of each puncture.

Legs relatively slender, finely punctate, and 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, deeply emarginate at the middle of apex.

Abdomen elongate, gradually narrowed toward apex; surface of each sternite densely covered with extremely fine pubescence; in male, apex of last sternite emarginate triangularly at middle (Fig. 10), apex of last tergite round, hind angles round (Fig. 9); in female, apical margin of last sternite round and its apex weakly projecting roundly; apex of last tergite round, shallowly emarginate at middle.

Male genitalia:— Median lobe long, relatively thick, lightly sclerotized, gradually sclerotized toward apex, moderately curved ventrally and acutely pointed at apex (Fig. 12); lateral lobes shorter than median lobe, deeply bilobed at apex; each lobe relatively short; apex of each lobe obliquely subtruncate, very sparsely furnished with short terminal hairs in ventral view (Fig. 11); endophallus relatively short, furnished with a pair of falcate sclerites; diverticulum short, widest near the base, gradually narrowed apically.

Female genitalia:— Spermatheca lightly sclerotized, widest near the base, truncate at the basal part, strongly curved at the apical part and gradually narrowed with ob-

tuse apex; the part continuing to spermathecal duct constricted, with transverse crease; spermathecal gland located at lateral wall; vagina enlarged basally; valvifer gradually narrowed apically; basal segment of coxite slightly narrowed apically; apical segment of coxite obtuse at apex, rather lightly sclerotized, infuscate at the inner part and sparsely furnished with sensory pubescence; stylus medium, narrow, abaxially united to lateral face of coxite, slightly enlarged apically, lightly sclerotized and strongly infuscate except for apex, with long and sparse hairs at the terminal area.

Type series. Holotype: \circlearrowleft , Mt. Pei-ta-wu Shan, 1,800 m in altitude on the southwestern slope, in Tai-wu Hsiang of Ping-tung Hsien, 2–V–1991, M. Kuboki leg. Paratypes: 1 \circlearrowleft , same data as for the holotype; 2 \circlearrowleft \circlearrowleft , 1 \circlearrowleft , same locality, 1,700 to 2,050 m alt., 30–IV \sim 3–V–1991, M. Kuboki leg.; 1 \circlearrowleft , 3 \circlearrowleft \circlearrowleft , same locality, 1 \sim 3–V–1993, M. Kuboki leg.; 3 \circlearrowleft \circlearrowleft , 2 \circlearrowleft \circlearrowleft , same locality, 30–IV \sim 3–V–1991, K. Suzuki leg.; 3 \circlearrowleft \circlearrowleft , 2 \circlearrowleft \circlearrowleft , same locality, 30–IV \sim 3–V–1991, K. Suzuki leg.; 3 \circlearrowleft \circlearrowleft , 2 \circlearrowleft , same locality, 1 \sim 3–V–1993, K. Suzuki leg.; 1 \circlearrowleft , Mt. Shi Shan, 2,000 m alt., Kao-hsiung Hsien, 27–IV–1985, W. Chen leg.; 3 \circlearrowleft \circlearrowleft , 4 \circlearrowleft , Tien-chi, 2,200 m alt., Kao-hsiung Hsien, 26–V–1987, W. Chen leg.; 5 \circlearrowleft \circlearrowleft , 4 \circlearrowleft , Tien-chi, 2,200 m alt., Kao-hsiung Hsien, 7 \sim 8–V–1978, M. Kuboki leg.; 1 \circlearrowleft , Li-sung, 2,000 m alt., Tai-tung Hsien, 4–VI–1980, M. Kuboki leg.; 1 \circlearrowleft , same locality, 29–IV–1987, M. Kuboki leg.

Distribution. Southern Taiwan.

Flight period. April to June.

Flower records. Rhododendron, Prunus.

Remarks. This new species has been confused with *Pidonia meridionalis* KUBOKI, but can be distinguished from the latter by the following key:

要 約

窪木幹夫:東アジア産ヒメハナカミキリ属の知見。IV. 台湾南部で発見された Pidonia 亜属の 2 新種。 一台湾南部の山岳地帯の常緑混交林から採集された Pidonia 属の 2 新種。P. (P.) flaccidissima と P. (P.) angustasta を記載した。前者は P. submetallica Hayashi に近縁であるが、雄の上翅が黄褐色で小さい黒色紋を持つこと、雌の上翅が金属光沢を帯びず黒色でまれに上翅中央縦に黄褐色紋を持つこと、上翅の点刻が粗く深いことなどの差異によって区別できる。また、後者は P. meridionalis Kuboki に似ているが、雄の腹部末端節腹板中央が三角形に切れ込むこと、雄の腹部末端節背板が切形で後端角が丸いこと、上翅が細かく浅く点刻されることなどの点で区別できる。

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Elytra, Tokyo, 22 (1): 189, May 15, 1994

Records of Some *Pidonia* (Coleoptera, Cerambycidae) from the Oga Peninsula, Akita Prefecture, North Japan

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Through the courtesy of Mr. Fukuo Satô, Akita City, I had an opportunity to examine some *Pidonia* collected in the *Fagus* forest of Mt. Kenashi-yama, 600-650 m in altitude, the Oga Peninsula, Akita Prefecture, North Japan. All the specimens were collected by him on June 23, 1991. I thank him for his kindness in giving me the specimens.

1. Pidonia (Pidonia) obscurior michinokuensis Hayashi, 3 33.

Femora almost fulvous; apical halves of mid and hind femora sometimes weakly dark; elytra yellowish fulvous with black markings.

2. Pidonia (Pidonia) signifera BATES, 4 3.

Femora fulvous to black; apical halves of mid and hind femora black; elytra brownish fulvous with black markings.

- 3. Pidonia (Cryptopidonia) simillima Онвачаяні et Начаяні, 2 дд, 1 Q.
- 4. Pidonia (Cryptopidonia) amentata kurosawai Ohbayashi et Hayashi, 3 33, 4 99. Elytral marking distinctly present; sutural marking narrowly (male) or broadly (female) present, vanishing behind scutellum, sometimes reaching elytral base in female; apical band lacking in both sexes.
- 5. Pidonia (Mumon) aegrota BATES, 8 ♂, 7 ♀♀.

 Ventral surface of abdomen fulyous in both sexes.