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A New *Pidonia* (Coleoptera, Cerambycidae) from the Hokuriku District, Central Japan

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Abstract A new species of *Pidonia* closely related to *P. signifera* is described from the northern side of central Honshu, Japan, under the name of *P. jasha*.

Pidonia signifera (BATES) is abundant in the three southern main islands of Japan, and is one of the common species appearing in deciduous broadleaved forests from May to July. It has been known, however, that the so-called *signifera* consists of populations with more or less different features, though detailed investigations of this group of species have been neglected as they are very common everywhere. The authors have been making field surveys on each population, and have alreadly reported on the Tsushima population last year as one of the results (S. & A. SAITO, 1988).

KAWAHARA (1983) and MIZUNO (1983) pointed out that the tenth and eleventh antennal segments are tinted with white in females from Toyama Prefecture (by the former) and from Gifu Prefecture (by the latter). The present authors also reported a similar phenomenon on the individuals from Otari-mura at the northern part of Nagano Prefecture, and mentioned that such populations were found all over the area at the northern side of central Honshu, from Fukui Prefecture in the southwest to the northern part of Nagano Prefecture in the northeast (S. & A. SAITO, 1984).

In the present paper, a new species, which has previously been regarded merely as a population of *P. signifera* in the Hokuriku District, will be described under the name of *Pidonia jasha*.

Before going further, the authors wish to express their hearty thanks to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his kind reading and criticizing the original manuscript of this paper, and to Miss Hiroko NAGAOKA, Messrs. Souichi YAMADA, Shin-Ichiro KOMATA, Toshinobu MATSUMOTO and Ryô INAGAWA for offering valuable specimens for the present study.



Figs. 1-4. Pidonia jasha sp. nov. and P. signifera (BATES). — 1, P. jasha, male; 2, P. signifera, male; 3, P. jasha, female; 4, P. signifera, female.

Pidonia (Pidonia) jasha S. et A. SAITO, sp. nov.

[Japanese name: Hokuriku-hime-hana-kamikiri]

(Figs. 1, 3, 5-6, 9-10, 14-16, 18)

Length: male 6.5–9.3 mm, female 7.0–10.0 mm (from mandibular tips to elytral apices). Breadth: male 1.5–2.3 mm, female 1.8–2.7 mm (across humeral angles of elytra).

Male. Head entirely black, with mouth-parts testaceous except for the apical part of each mandible. Antennae almost dark brown, 1st segment a little paler than the other ones, 3rd–10th segments slightly darkened towards respective apices. Prothorax entirely black, scutellum black. Meso- and metathoraces entirely black except for posterior central part of metasternum testaceous. Legs almost testaceous, with apical third of middle femur, apical half of hind one, and sometimes basal third of middle and hind tibiae black; apical parts of 1st and 2nd as well as all of 3rd and 4th tarsal segments, all of middle and hind tarsi and claws black. Elytra almost testaceous, each elytron provided with one black stripe on suture, two black spots at the lateral side before middle, one black lateral marking which is narrowed inwards and usually connected with the sutural stripe behind middle (sometimes free), and one black marking at the apical margin. Abdomen almost black except for middle parts of 4th and 5th sternites (sometimes 2nd to 5th) which are dark reddish brown.

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Fig. 5. Variation of elytral markings in the male of P. jasha sp. nov.



Fig. 6. Colour variation of female antennae in P. jasha sp. nov.

Head subrectangular, broader across eyes than length (1.4-1.5:1); surface densely covered with coarse punctures and short testaceous pubescence, bearing an obscure longitudinal furrow extending from frons to vertex along median line; eyes prominent laterally. Antennae slender, extending beyond elytral apex at the middle to the apex of 10th segment; 3rd-10th segments widest at the apical parts. Pronotum almost as long as width at posterior part or sometimes at middle (1-1.1:1), apparently swollen laterad and constricted both anteriorly and posteriorly; disc convex; surface covered with slightly denser and finer punctures than on head, and similarly pubescent to the latter, the pubescence being directed towards the posterior part of disc. Elytra 2.5-2.7 times as long as width between humeral angles; surface covered with sparser and larger punctures than on pronotum and with short testaceous pubescence; apex of each elytron narrowly rounded.

Male genitalia nearly membraneous near base, though gradually sclerotized towards apex. Median lobe regularly and rather strongly arcuate, especially in apical half; viewed dorsally, apical portion rather rapidly narrowed towards conspicuously projected apex. Lateral lobes relatively long, widest at apical fourth and shallowly bilobed at apex in dorsal view, each lobe being short and very broad, with rounded apex and bearing very long terminal hairs.



Figs. 7-12. Length of antenna in proportion to elytral length. — 7, P. signifera, male (from Daibosatsu, Yamanashi); 8, same, female; 9, P. jasha, male (from Yashagaike, Fukui); 10, same, female; 11, P. michinokuensis, male (from Hakkôda, Aomori); 12, same, female.

Female. Obviously different from male in wider body, darker elytra and shorter antennae. Head broader across eyes than length (1.4-1.5:1). Antennae barely reaching elytral apex by the last segment; almost black, 1st and 2nd a little paler than 3rd to 8th; 9th black, sometimes pale testaceous in apical half; 10th pale testaceous, sometimes black in basal half, rarely black throughout; last segment pale testeceous except for the apical half which is pale brown. Pronotum almost as long as width at the posterior part or sometimes at the middle (1-1.1:1). Elytra 2.3-2.4 times as long as width between humeral angles; each black stripe and marking broader than in male, lateral spots connected with each other and extending to behind middle. Legs darker than in male, middle and hind ones almost black except for apical third of each femur testaceous. Abdomen almost testaceous, with the anterior lateral



Figs. 13-17. Male genitalia of *Pidonia* spp.; lateral lobes in dorsal view; median lobe in lateral view (15); apex of median lobe in dorsal view (16-17). — 13, 17. *P. signifera* (from Daibosatsu, Yamanashi). — 14-16. *P. jasha* sp. nov. (Scale: 0.25 mm.)



Figs. 18–19. Female genitalia of *Pidonia* spp. — 18, *P. jasha* sp. nov. (body length 7.90 mm); 19, *P. signifera* (from Daibosatsu, Yamanashi; body length 10.05 mm). (Scale: 0.5 mm.)

side of 1st to 4th sternites black and the last sternite wholly dark brown.

Female genitalia as in Fig. 18. Spermatheca strongly curved at the apical part, constricted near the base, and with spermathecal gland at the middle lateral face;

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Characters	Species name		
	<i>michinokuensis</i> (Tôhoku Dist.)	<i>jasha</i> sp. nov. (Hokuriku Dist.)	signifera (Kantô Dist.)
Antenna			
Male 5th: 6th	1:0.70-0.80	1:0.70-0.80	1:0.75-0.80
Female	Not reaching or reaching elytral apex by last segment (Fig. 12)	Reaching elytral apex by last segment (Fig. 10)	Reaching elytral apex by 10th segment (Fig. 8)
5th: 6th	1:0.65-0.70	1:0.70-0.80	1:0.70-0.75
Colour of	Black	Almost pale	Black
9th-last		testaceous,	
segments		sometimes black	
Elytra (breadth: lengt	th)		
Male	Middle breadth <37% of elytral length	Middle breadth <35% of elytral length	Middle breadth $<34\%$ of elytral length
Female	Middle breadth <41% of elytral length	Middle breadth <43% of elytral length	Middle breadth $<40\%$ of elytral length
Legs in male	Entirely testaceous	Partially black	Partially black

Table 1.	Diagnostic features of Pidonia michinokuensis HAYASHI
	P. jasha sp. nov. and P. signifera (BATES).

spermathecal duct with a small protrusion before entering into bursa copulatrix.

Type series. Holotype: 3, Yashagaike, Imajô-chô, Fukui Pref., 18 June 1989, S. SAITO leg. Allotype: \mathcal{Q} , same data as for the holotype. Paratypes: 18 $\mathcal{J}\mathcal{J}$, 35 QQ, same data as for the holotype; 6 33, 10 QQ, same data as for the holotype, H. NAGAOKA leg.; 3 33, 3 99, same data as for the holotype, S. YAMADA leg.; 10 33, 15 22, same locality as for the holotype, 17 June 1989, S. SAITO leg.; 6 33, 20 \bigcirc \bigcirc , same locality as for the holotype, same date, H. NAGAOKA leg.; 3 \bigcirc , 3 \bigcirc , 9, same locality as for the holotype, same date, S. YAMADA leg.; 1 3, same locality as for the holotype, 20 May 1982, S. SAITO leg.; 9 33, 4 99, same locality as for the holotype, 15 June 1982, S. SAITO leg.; 2 33, 2 99, same locality as for the holotype, 15 June 1982, S. Комата leg.; 5 33, 1 2, Kinome-tôge, Tsuruga-shi, Fukui Pref., 19 May 1982, S. Комата leg.; 2 JJ, 3 99, Kinome-tôge, Tsuruga-shi, Fukui Pref., 19 May 1982, T. MATSUMOTO leg.; 1 3, Kinome-tôge, Tsuruga-shi, Fukui Pref., 16 June 1982, R. INAGAWA leg.; 5 ♂♂, 3 ♀♀, Ikenokouchi, Tsuruga-shi, Fukui Pref., 22 May 1982, S. Комата leg.; 10 33, 8 99, Ikenokouchi, Tsuruga-shi, Fukui Pref., 22 May 1982, T. Matsumoto leg.; 5 ♂♂, 3 ♀♀, Ikenokouchi, Tsuruga-shi, Fukui Pref., 22 May 1982, R. INAGAWA leg.; 1 ♂, 3 ♀♀, Mt. Nosakadake, Tsuruga-shi, Fukui Pref., 17 May 1982, 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 collection of the authors themselves.

Range. Honshu (northern parts of Kyoto, Gifu and Nagano Prefs., and Fukui

and Toyama Prefs.)

Notes. This new species resembles *P. michinokuensis* HAYASHI, 1981, and *P. signifera* (BATES, 1884). The differences between these three species are shown in Table 1 and Figs. 1–19. At first sight, especially in the elytral markings, male specimens of this species resemble those of *P. semiobscura* PIC, 1901, but can be distinguished from the latter by the black head and prothorax ventrally.

Most of the specimens examind were collected on the flowers of Symplocos chinensis f. pilosa, except for a few which were found on Angelica sp. and others.

要 約

斉藤秀生・斉藤明子: 北陸地方産ヒメハナカミキリの1新種. ―― 筆者らは,本州,四国,九州に 広く分布し,5~7月に落葉広葉樹林に現われる,ナガバヒメハナカミキリの各地の個体群について調 査を行なっている. このうち,とくに北陸地方の個体群では雌の触角第 10-11節が白色になるという 事実が,川原 (1983),水野 (1983),および斉藤・斉藤 (1984)によって指摘されている.

この個体群について詳細な検討を加えた結果,体全体が幅広で,触角の長さや交尾器に顕著な差が 見られ,本州,四国,九州に広く分布する個体群とは異なる別の種であることが明らかになったので, 未記載の独立種と認めて,ここでホクリクヒメハナカミキリ *Pidonia jasha* と命名した.

References

BATES, H. W., 1884. Longicorn beetles of Japan. J. Linn. Soc. London, (Zool.), 18: 205-262.

HAYASHI, M., 1968-'69. A monographic study of the lepturine genus *Pidonia* MULSANT (1963) with special reference to the ecological distribution and phylogenetical relation (Coleoptera: Cerambycidae). *Bull. Osaka Jonan Women's Jr. Coll.*, 3: 1-61 (1968), 4: 69-111 (1969).

KAWAHARA, M., 1983. Notes on the Cerambycidae from Etchû Province 2. Miscellaneous account of *Pidonia* from Toyama Prefecture. *Amika-tsûshin, Toyama*, (3): 37–39. (In Japanese.)

MIZUNO, K., 1983. Miscellanea Pidonii (3). Gekkan-mushi, Tokyo, (159): 25-30. (In Japanese.)

SAITO, S., & A. SAITO, 1984. Studies on the local variation of *Pidonia* I. Vicinities of Mt. Shiroumadake and Amakazari-yama (*Pidonia pallidicolor* and its cohabitants). Sayabane, Tokyo, (10): 1–17. (In Japanese.)

— & — 1988. A new *Pidonia* from the Tsushima Islands (Coleoptera, Cerambycidae). Spec. Bull. Jpn. Soc. Coleopterol., (3): 119–125.