

Notes on the Japanese Species of the Subgenus *Pidonia* (*Cryptopidonia*) (Coleoptera, Cerambycidae), with Description of a New Species

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Abstract *Pidonia* (*Cryptopidonia*) *simillima* OHBAYASHI et HAYASHI, 1960 is treated as a junior synonym of *P. (C.) masakii* HAYASHI, 1955 by reexamination of the type specimens and original description. An unnamed species hitherto been regarded as *P. (C.) simillima* is described under the name *P. (C.) kaguyahime* sp. nov.

Introduction

In 2017, I conducted a field survey of the *Pidonia* species at Mt. Inamura, Nara Prefecture where is the type locality of *Pidonia* (*Cryptopidonia*) *simillima* OHBAYASHI et HAYASHI, 1960. At the deciduous broad-leaved forest of 1,150m to 1,490 m in altitude, I collected two cohabitants, of which one was *P. (C.) masakii* HAYASHI, 1955 and the other was thought to be *P. (C.) simillima*. By this chance, I tried to examine the type specimens of *P. (C.) simillima*. According to the original description, the holotype and allotype were collected on the same day by the same collector (July 22, 1956, M. HAYASHI leg.) at Mt. Inamura, Nara Prefecture, but the paratypes were described only as “many: Honshu, Shikoku, Kyushu” without collecting data. Unfortunately, the holotype in the Masao HAYASHI Collection preserved in the Osaka Museum of Natural History, Osaka was destroyed by damage of dermestid beetle and left only the left mid-leg and a part of mesosternum, but the allotype was safely in perfect condition. As a result of close comparison between specimens collected at Mt. Inamura by me and the allotype of *P. simillima*, as well as the original description and text figures, it is concluded that *P. simillima* described by OHBAYASHI and HAYASHI (1960) is a melanic type of *P. masakii*, and the other sympatric species should be new to science described below as *P. (C.) kaguyahime* sp. nov. This new species is separable from *P. (C.) masakii* by the shape of prothorax, elytral maculae and genital features, and is widely distributed in Honshu Shikoku and Kyushu, Japan.

The holotype designated in this study is preserved in the collection of the National Museum of Nature and Science, Tsukuba, and the paratypes are preserved in the Osaka Museum of Natural History and the author’s collection.

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***Pidonia (Cryptopidonia) masakii* HAYASHI, 1955**

(Figs. 1–3, 6 & 9)

Pidonia insuturata ab. *masakii* TAMANUKI, 1943: 50. [nom. nud.]*Pidonia masakii* HAYASHI, 1955: 28, pl. 11, fig. 55.*Pidonia masakii* f. *hiurai* OHBAYASHI et HAYASHI, 1960: 14, pl. 2, figs. 3, 4, pl. 3, figs. 4, 11, 19.*Pidonia simillima* OHBAYASHI et HAYASHI, 1960: 14, pl. 2, figs. 5, 6, pl. 3, figs. 5, 12, 19. — *Syn. nov.***Distribution.** Honshu, Japan.

Specimens examined. 1 ♂ (left mid-leg and part of mesosternum) & 1 ♀ (holotype (♂) & allotype (♀) of *P. simillima* in the Osaka Museum of Natural History), Mt. Inamura, Tenkawa-mura, Nara Pref., 22.VII.1956, M. HAYASHI leg.; 8 ♂♂, 9 ♀♀, Mt. Kamabuse, 849–879 m alt., Mutsu-shi, Aomori Pref., 29.VI.1997, K. SUZUKI leg.; 3 ♂♂, 2 ♀♀, Amihari Spa, 1,050 m alt., Shizukuisi-machi, Iwate Pref., 17.VII.2018, M. KUBOKI leg.; 8 ♂♂, 6 ♀♀, Zaô-paradisu, 1,450 m alt., Yamagata-shi, Yamagata Pref., 20.VII.2017, M. KUBOKI leg.; 2 ♂♂, 4 ♀♀, Ōshimizu–Yanagisawa, 1,270–1,340 m alt., Katashina-mura, Gunma Pref., 27.VII.1993, S. TAKECHI leg.; 10 ♂♂, 4 ♀♀, Jizôdôgawa, 900 m alt., near Mt. Amagi, Nakaizu-machi, Shizuoka Pref., 12.VI.1989, S. TAKECHI leg.; 5 ♂♂, 4 ♀♀, Honzawa Spa, 1,900 m alt., Nanmoku-mura, Nagano Pref., 9.VII.2018, M. KUBOKI leg.; 2 ♂♂, 1 ♀, Yarisawa, 1,735 m alt., Kamikôchi, Azumi-mura, Nagano Pref., 30.VII.1992, S. TAKECHI leg.; 9 ♂♂, 2 ♀♀, Abe Pass, Shizuoka-shi, Shizuoka Pref., 13.VI.2018, K. KOBORI leg.; 5 ♂♂, 3 ♀♀, Mt. Fuji, 1,750 m alt., Narusawa-mura, Yamanashi Pref., 20.VI.2018, M. KUBOKI leg.; 6 ♂♂, 4 ♀♀, Mt. Surikogi-yama, Iida-shi, Nagano Pref., 1,700 m alt., 21.VI.2016, M. KUBOKI leg.; 7 ♂♂, 5 ♀♀, Myojin-daira, Higashiyoshino-mura, Nara Pref., 25.VI.1994, H. NAKABAYASHI leg.; 1 ♀, Taikonotsuji, Kamikitayama-mura, Nara Pref., 22.VI.1980, K. MIZUNO leg.; 8 ♂♂, 6 ♀♀, Ôdaigahara, 1,550–1,650 m alt., Kamikitayama-mura, Nara Pref., 26.VI.2018, M. KUBOKI leg.; 7 ♂♂, 1 ♀, Wasamata–Mt. Daifugen, Kamikitayama-mura, Nara Pref., 5.VII.1997, A. SUGIMURA leg.; 7 ♂♂, 6 ♀♀, Mt. Misen, 1,800–1,900 m alt., Tenkawa-mura, Nara Pref., 10.VI.1994, M. KUBOKI leg.; 12 ♂♂, 10 ♀♀, Mt. Inamura, 1,480 m alt., 29.VI.2017, M. KUBOKI leg.

Notes. The allotype of *P. (C.) simillima* is very similar to *P. (C.) masakii* collected from Mt. Inamura in the blackish body and elytral maculation, and also completely agreed with the following points: 1) prothorax constricted near the leading and trail edges, with lateral swelling roundish, 2) inner median marking on elytra circular and its arc slanting a little backward, 3) ventral sides of head and prothorax almost yellowish brown. The specimens of *P. (C.) masakii* from the Kii Peninsula are well-developed in blackish parts on the body especially on the elytra. *Pidonia (Cryptopidonia) simillima* is not only an independent species but also a melanistic type of *P. (C.) masakii*.

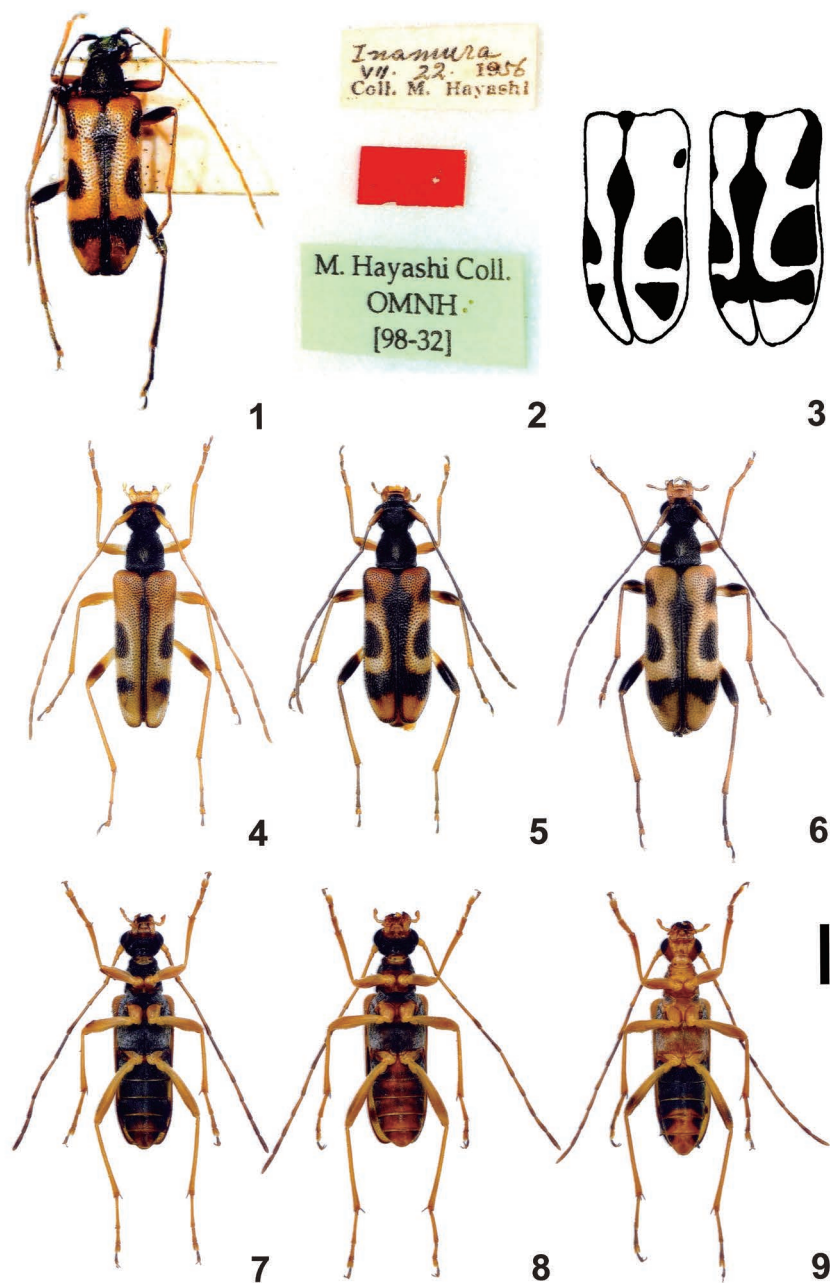
***Pidonia (Cryptopidonia) kaguyahime* KUBOKI, sp. nov.**

[Japanese name: Kaguya-hime-hanakamikiri]

(Figs. 4, 5, 7 & 8)

Pidonia simillima (nec OHBAYASHI & HAYASHI, 1960): OHBAYASHI, 1963: 274, pl. 137, fig. 8. — HAYASHI, 1968: 22, pls. 73, 74, pl. 6, fig. 37, pl. 8, fig. 46, pl. 10, fig. 37. — KOJIMA & HAYASHI, 1969: 15, pl. 6, figs. 4, 4 a. — KUBOKI, 1984: 193. — SAITO, 1992: 104, 112, 212, 444. — KATÔ *et al.*, 1995: 2. — SAITO, 2007: 386. — MIZUNO, 2012: 212.

Male. Body relatively small, roundish, slightly tapered apicad; colour fulvous to black and furnished with pale fulvous pubescence. Dorsal surface: head black; mouthparts fulvous except for reddish brown apex of each mandible; antennae fulvous to brown, first segment fulvous, second and following segments brown. Prothorax black. Scutellum black. Legs fulvous, each apex of hind femora faintly brown. Elytra yellowish fulvous with black markings. Elytral maculae: Sutural marking nar-



Figs. 1–9. *Pidonia* (*Cryptopidonia*) spp. — 1, Allotype of *Pidonia (Cryptopidonia) simillima* OHBAYASHI et HAYASHI; 2, labels for the same specimen; 3, elytral maculae of *P. (C.) simillima* illustrated in OHBAYASHI & HAYASHI (1960); 4, *P. (C.) kaguyahime* KUBOKI, sp. nov., holotype male, from Uradani, Aichi Pref.; 5, same, paratype female; 6, *P. (C.) masakii* HAYASHI, female, from Mt. Inamura; 7 & 8, ventral side of *P. (C.) kaguyahime*, paratype males collected from Abe Pass, Shizuoka Pref.; 9, ventral side of *P. (C.) masakii*, male collected from Abe Pass. Scale bar: 2 mm for Figs. 4–9.

rowly present, vanishing at the behind of scutellum; basal marking lacking; latero-anterior and latero-median markings very small, oblong; latero-posterior marking relatively large, triangle; inner median marking large, round; apical band lacking. Ventral surface: Head black except for reddish brown throat; prothorax black; meso- and metasterna black except for yellowish brown central part; abdomen black except for yellowish brown central part of visible 3–5th sternites (Figs. 7 & 8).

Head across the middle of eyes about 1.08 times as wide as base of prothorax; terminal segment of maxillary palpus broadened apically with straight outer margin; temples very small, convergent and gently constricted at neck; vertex weakly convex above, coarsely punctate. Eyes relatively prominent, moderately faceted, shallowly emarginate at the middle of internal margins. Antennae relatively long and slender; apical two segments surpassing elytral apices; comparative length of each segment as follows: $5 > 1 + 2 > 4 = 6 > 3$.

Prothorax about 1.18 times as long as base, dully angulate-prominent laterad just before the middle, shallowly constricted both anteriorly and posteriorly; breadth across prominent portions slightly narrower than base; disc of pronotum convex above, finely and closely punctate, sparsely clothed with fine pubescence. Scutellum small and triangular. Elytra about 2.48 times as long as basal width, gradually narrowed posteriorly and separately rounded at apices; surface finely punctured, densely clothed with pubescence. Legs relatively slender; femora clavate; tibiae linear, straight.

Abdomen gradually narrowed towards apex; 8th tergite rounded at apex; lateral edge of 7th sternite almost straight, convergent posteriorly and trailing edge subtruncate.

Genitalia: Median lobe falcate, relatively slender and gently curved ventrad; tegmen with bilobed at the apex, distinctly shorter than median lobe, each lobe rather broad at the basal part, narrowed towards apex and bearing relatively long terminal hairs, its apico-lateral margin rounded and inner margin straight; endophallus long and furnished with a pair of falcate sclerites at the basal one-fifth; everted endophallus furnished with a pair of sickle-like sclerites at apex; diverticulum relatively long, slender and gradually thickened toward rounded apex.

Length: 8.8–5.9 mm.

Female. Body more robust and black markings more enlarged than in male. Apex of each maxillary palpus weakly dark brown. Elytral maculae: Sutural marking diamond-shaped and broadened in apical one-eighth of elytra; basal marking distinctly present; latero-basal marking small, linear-oblong; latero-median marking very small, oblong; inner basal marking triangle; inner median marking large and orbicular; latero-posterior marking large, deltoid; apical band broadly present. Ventral surface: Head, thoraces and abdomen reddish brown; first and second visible sternites black; meso- and metasterna black.

Head about 1.02 times as wide as base of prothorax. Antennae relatively short, barely reaching elytral apices; comparative length of each segment as follows: $5 > 1 + 2 > 6 > 3 = 4$.

Prothorax about 1.06 times as long as base. Elytra about 2.26 times as long as basal width, almost parallel-sided and separately rounded at apices.

Apex of last tergite subtruncate, shallowly emarginate at the middle; apex of last sternite round.

Length: 8.8–6.1 mm.

Holotype: ♂, Uradani Primeval Forest, 920 m alt., Toyota-shi, Aichi Pref., C. Honshu, Japan, 8.VI.2019, M. KUBOKI leg. **Paratypes:** 5 ♂♂, 3 ♀♀, same data as for the holotype; 10 ♂♂, 10 ♀♀, Uradani, Shitara-chô, Aichi Pref., 1.VI.1997, A. SUGIMURA leg.; 5 ♂♂, 5 ♀♀, Ikokumagawa, Kazamaura-mura, Aomori Pref., 17.VI.2001, T. TAMURA leg.; 5 ♂♂, 3 ♀♀, Jyûniko, Iwasaki-mura, Aomori Pref., 23.VI.2001, T. TAMURA leg.; 1 ♀, Hashigami, Kawane-machi, Kuji-shi, Iwate Pref., 18.VII.2017, K.

YOSHIKAWA leg.; 1 ♀, same locality, 7.VII.2018, K. YOSHIKAWA leg.; 1 ♂, 2 ♀♀, Genbeidaira, 955 m alt., Kawai-mura, Iwate Pref., 24.VI.2006, K. SAKAGAMI leg.; 1 ♂, 1 ♀, Izumi, 615 m alt., Mt. Izumiga-take, Sendai-shi, Miyagi Pref., 11.VI.1994, S. TAKECHI leg.; 10 ♂♂, 3 ♀♀, Mt. Ohtakine, 1,130 m alt., Kawauchi-mura, Fukushima Pref., 23.VI.2001, M. KUBOKI leg.; 4 ♂♂, 2 ♀♀, Kojikiishi-rindô, Haramachi-shi, Fukushima Pref., 1.VI.1997, K. SAKAGAMI leg.; 1 ♀, Mikuni Pass, 1,015 m alt., Yuza-wa-machi, Niigata Pref., 13.VI.2004, S. TAKECHI leg.; 9 ♂♂, 3 ♀♀, Dôdaira, 900–1,200 m alt., Kiyokawa-mura, Kanagawa Pref., 27.VI.1993, S. TAKECHI leg.; 8 ♂♂, 6 ♀♀, Shaka-shindô, Shiramine-mura, Ishikawa Pref., 17.VI.2001, I. Yoshida leg.; 7 ♂♂, 6 ♀♀, Ashiu Forest Research Station, Miyama-chô, Kyoto Pref., 2.VI.2019, M. KUBOKI leg.; 7 ♂♂, 5 ♀♀, Mennoki Pass, Shitara-chô, 1,100 m alt., Aichi Pref., 8.VI.2019, M. KUBOKI leg.; 2 ♂♂, 2 ♀♀, Obanashigawa, 350–400 m alt., Yogo-chô, Shiga Pref., 25.V.1997, S. TAKECHI leg.; 3 ♂♂, 4 ♀♀, Mt. Nonobori, 770 m alt., 7.VI.2003, Kameyama-shi, Mie Pref., K. SAKAGAMI leg.; 3 ♂♂, 3 ♀♀, Wasamata, Kamikitayama-mura, Nara Pref., 31.V.2015, K. HAYASHI leg.; 7 ♂♂, 1 ♀, Wasamata–Mt. Daifugen, Kamikitayama-mura, Nara Pref., 5.VII.1997, A. SUGIMURA leg.; 7 ♂♂, 5 ♀♀, Mt. Hyônosen, 1,150 m alt., Ôya-chô, Hyogo Pref., 30.VI.2017, M. KUBOKI leg.; 6 ♂♂, 5 ♀♀, Sasayagawa, Shôbara-shi, Hiroshima Pref., 12.VI.1989, R. YANO leg.; 6 ♂♂, 5 ♀♀, Mt. Garyû, Geihoku-chô, Hiroshima Pref., 14.VI.1987, K. AKAGI leg.; 5 ♂♂, 3 ♀♀, Mt. Takashiro, Kisawa-son, Tokushima Pref., 27.VI.2016, K. HAYASHI leg.; 6 ♂♂, 4 ♀♀, Ichinomori, near Mt. Tsurugi, Kiyadaira-mura, Tokushima Pref., 29.VI.2014, K. HAYASHI leg.; 9 ♂♂, 6 ♀♀, Azamidani, 1,080–1,200 m alt., Mt. Unzen-dake, Obama-chô, Nagasaki Pref., 12.VI.1985, K. SUZUKI leg.; 1 ♀, Mt. Mukôzaka, 1,600 m alt., Gokase-chô, Miyazaki Pref., 21.VI.2015, K. ADACHI leg.; 1 ♂, 1 ♀, Mt. Shiratori, Mizukami-mura, Kumamoto Pref., 2–3.VII.1988, M. NISHIDA leg.; 3 ♂♂, same locality, 6.VI.1990, M. NISHIDA leg.; 1 ♂, 2 ♀♀, Mt. Wanitsuka, Kitagô-son, Miyazaki Pref., 25.V.2016, K. ADACHI leg.; 7 ♂♂, 2 ♀♀, same locality, 20.V.2018, M. KUBOKI leg.; 1 ♂, 1 ♀, Futamata, Uchinoura-chô, Kagoshima Pref., 5.V.2017, Y. SUGIURA leg.; 3 ♂♂, 2 ♀♀, Mt. Inao-dake, Ôsumi Peninsula, Kagoshima Pref., 31.V.1992, S. TSUYUKI leg.

Distribution. Honshu, Shikoku, Kyushu. The vertical distribution of this species is limited to the deciduous broad-leaved forest in mountain zone.

Flight period. May to the beginning of July in western Japan; June to the middle of July in eastern Japan.

Remarks. This new species resembles *P. (C.) masakii* but may be readily distinguished from it by the following points: 1) antennae relatively long, reaching elytral apices at 9th segment in male; 2) head and prothorax black; 3) swellings of prothorax weaker; 4) lateral edge of 7th sternite in male almost straight, convergent posteriorly and subtruncate at trailing edge; 5) tempora black to dark brown in ventral side; 6) meso- and metasterna black except for yellowish brown part.

Four species of the subgenus *Cryptopidonia*, *P. (C.) kaguyahime* sp. nov., *P. (C.) insuturata* PIC, 1901, *P. (C.) hylophila* KUBOKI, 1977 and *P. (C.) masakii*, were collected by my investigation in Mt. Inamura on June 29, 2017. *Pidonia (Cryptopidonia) kaguyahime* sp. nov. can be distinguished from the other three species by the following points: 1) *P. (C.) insuturata*: prothorax rounded and prominent laterad before the middle of sides, and last sternite in male distinctly concaved at middle of apical margin; 2) *P. (C.) hylophila*: elytra weakly lustrous and sparsely clothed with pubescence; 3) *P. (C.) masakii*: ventral sides of head and prothorax almost fulvous.

Etymology. The species name of this new species is given after Princess Kaguya (Kaguya-hime) who is the main character in “The Tale of the Bamboo Cutter” (Taketori Monogatari), thought to be the oldest Japanese Folktale. It primarily details the life of a mysterious girl called Kaguya-hime, who was discovered as a baby inside the stalk of a glowing bamboo plant.

要 約

窪木幹夫：日本産ヒメハナカミキリ属（コトヒメハナカミキリ亜属）（鞘翅目カミキリムシ科）の1新種の記載を含む新知見。——ニセヨコモンヒメハナカミキリ *Pidonia simillima* OHBAYASHI et HAYASHI, 1960 は、奈良県稲村ヶ岳産の♂個体（1956年7月22日採集）を正基準標本（holotype）、同♀個体を別基準標本（allotype）として記載された。副基準標本（paratype）は、“many: Honshu, Shikoku, Kyushu”と記述されているだけで、具体的な採集場所、採集日、採集者の記述がない。不幸なことに、正基準標本は、虫害により、左中脚と中胸腹板の一部だけになっていたが、同所同日に採集された別基準標本を調査した結果、基準標本の雌雄はムネアカヨコモンヒメハナカミキリ *Pidonia masakii* HAYASHI, 1955 の黒化型と判明した。一方、従来から本種と誤同定されてきたものは、未記載の新種であることが明らかになったので、カグヤヒメハナカミキリ（新種新称）*Pidonia kaguyahime* KUBOKI, sp. nov. と命名して記載した。

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