

Cerambycid Beetles (Coleoptera, Cerambycidae) from Northern Vietnam

I. A New Species of the Genus *Pidonia* (Lepturinae)¹⁾

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Abstract A new species of the cerambycid genus *Pidonia* is described from Mt. Phang Si Pang in Lai Chau Province of northern Vietnam, under the name of *Pidonia* (*Cryptopidonia*) *insperata*. The genus *Pidonia* is recorded for the first time from Indochina, and this is a third species belonging to the subgenus *Cryptopidonia* from the Asian Continent.

The second entomological expedition to northern Vietnam, which was organized by Dr. S.-I. UÉNO and Dr. M. OWADA of the National Science Museum, Tokyo, was made in the spring of 1995. Participating in this expedition, I succeeded in obtaining many cerambycid specimens from various parts of northern Vietnam. It was the best season for collecting beetles, especially for those gathering on tree flowers. I found some plants with good blossoms, which attracted many cerambycid beetles at some places of northern Vietnam. In the first part of this series of papers, I am going to describe one new species belonging to the subgenus *Cryptopidonia* of the lepturine genus *Pidonia*, which was collected from a meagre flower on the highest mountain of Vietnam.

Recently, many species of the genus were described from South China (HOLZSCHUH, 1991 a, b, 1992), mostly from Sichuan and one from Yunnan. Their subgeneric assignment was not made in their original descriptions, but judging from HOLZSCHUH's accounts, none of them seem to belong to *Cryptopidonia*. After all, this is the first record of *Pidonia* from Indochina, and this is a third species of the subgenus *Cryptopidonia* from the Asian Continent, which follows *Pidonia maai* GRESSITT, 1951, and *P. aenipennis continentalis* (TIPPMAN, 1955).

The type locality, Mt. Phang Si Pang, the highest mountain in Indochina, belongs to the Hoang Lien Son Mountains stretching from northwest to southeast near the northwestern border of the country. The *Pidonia* specimens were obtained in a valley on the northern ridge of the mountain near the pass "Deo Tram Ton", which is a

1) This study is supported by the Grant-in-aid No. 0641116 for Field Research of the Monbusho International Scientific Research Program, Japan.

little less than 2,000 m in height. The valley was to some extent deforested, but we were unable to approach the higher zones of the mountain because of impenetrable bush. It is possible that some other new *Pidonia* species inhabit the good natural forest at higher places, though it appeared very difficult to find good blossoms there.

Before going further, I wish to express my hearty thanks to Dr. Shun-Ichi UENO of the National Science Museum (Nat. Hist.), Tokyo, for his kind reading and criticizing the original manuscript of this paper, and also to all the members of the expedition 1995 for their kind support of my study. Deep gratitude is due to Dr. Tatsuyuki OHBA of the Natural History Museum and Institute, Chiba, who identified the plant bearing flowers.

Pidonia (Cryptopidonia) insperata A. SAITO, sp. nov.

(Figs. 1–14)

Length: male 6.1–8.0 mm, female 6.8–8.2 mm (from mandibular tip to elytral apex). Breadth: male 1.7–2.1 mm, female 2.0–2.4 mm (between humeral angles of elytra).

Male. Head entirely testaceous, with mouth-parts testaceous except for blackish brown apex of each mandible; eyes black. Antennae testaceous to blackish brown, 1st and 2nd segments entirely testaceous, 3rd and 4th segments testaceous sometimes darkened towards apices, 5th to 7th segments blackish brown, 8th to 10th segments brown, 11th segment brown in basal two-thirds.

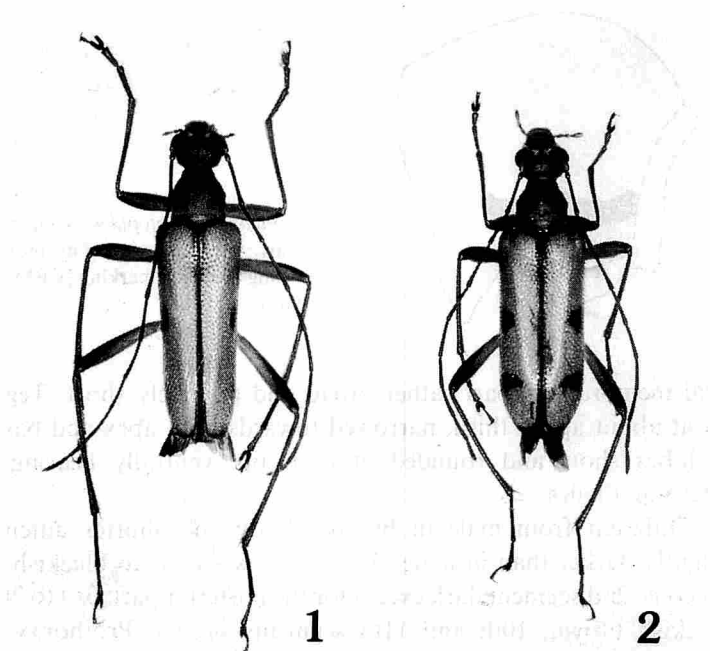
Prothorax testaceous; pronotum testaceous, with a small but remarkable black marking at each lateral margin (Fig. 3); prosternum entirely testaceous; ventral surfaces of meso- and metathoraces testaceous; scutellum brown to black; anterior margins of metasternum and metepisternum black.

Legs testaceous, with tarsi and claws dark brown to black; dorsal side of each femur dark brown to black in apical half; front femora paler than the other parts; front tibiae darkened at apical parts; middle tibiae brown to black except for apical parts; hind tibiae brown to black sometimes except for under surface of apical third.

Elytra almost yellowish brown, paler than head and prothorax, each elytron provided with three black markings at side; first and second markings oval at basal fourth and before the middle; third marking transverse and lying at three-fourths from base, usually indistinct, frequently vanished; apex of elytron black, which sometimes linearly extends forwards along lateral margin of elytron; elytral suture black.

Abdomen bicoloured; 1st and 2nd sternites dark brown, 3rd sternite dark brown in basal half or at basal edge and sometimes entirely testaceous, 4th and 5th sternites testaceous.

Head subrectangular, broader across eyes than length (1.5–1.6 : 1); surface densely covered with coarse punctures and short testaceous pubescence, with one or two pairs of rather long and thin setae postero-internal to eyes, which are directed backwards; an obscure median longitudinal line extending from frons to vertex; eyes prominent



Figs. 1–2. *Pidonia (Cryptopidonia) insperata* sp. nov.; 1, holotype, male [NSMT]; 2, allotype, female [NSMT].

laterally. Antennae slender, extending beyond elytral apex at the base to the middle of 9th segment; length order of antennal segments roughly measured as follows: 5th > 3rd > 6th \geq 7th \geq 4th > 1st \geq 9th \geq 8th > 11th > 10th > 2nd.

Pronotum slightly longer than width at the middle (1.1–1.2 : 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 in the visible area, a little longer than width and covered with short testaceous pubescence.

Legs elongate, densely covered with fine testaceous pubescence.

Elytra 2.3–2.5 times as long as width between humeral angles, with the disc slightly but widely depressed at middle; surface covered with sparser and larger punctures and longer testaceous pubescence than those on pronotum; apex of each elytron subtruncate with rounded outer angle.

Abdomen gradually narrowed towards apex, densely pubescent throughout; last abdominal sternite and tergite, and 8th abdominal tergite as shown in Figs. 4–6. Median lobe of genitalia (Fig. 7) ventrally curved throughout, very gradually narrowed towards apex; median struts narrowed towards bases, somewhat curved dorsally at each base. A pair of sclerites irregularly falcate (Fig. 8). Internal sac (Fig. 9) moderately sclerotized at the subapical part, which is sinuately and obtusely ridged on each side,

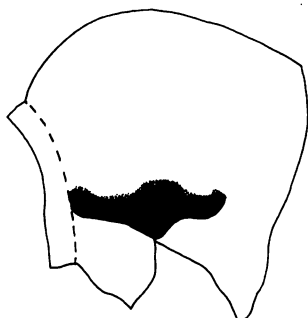


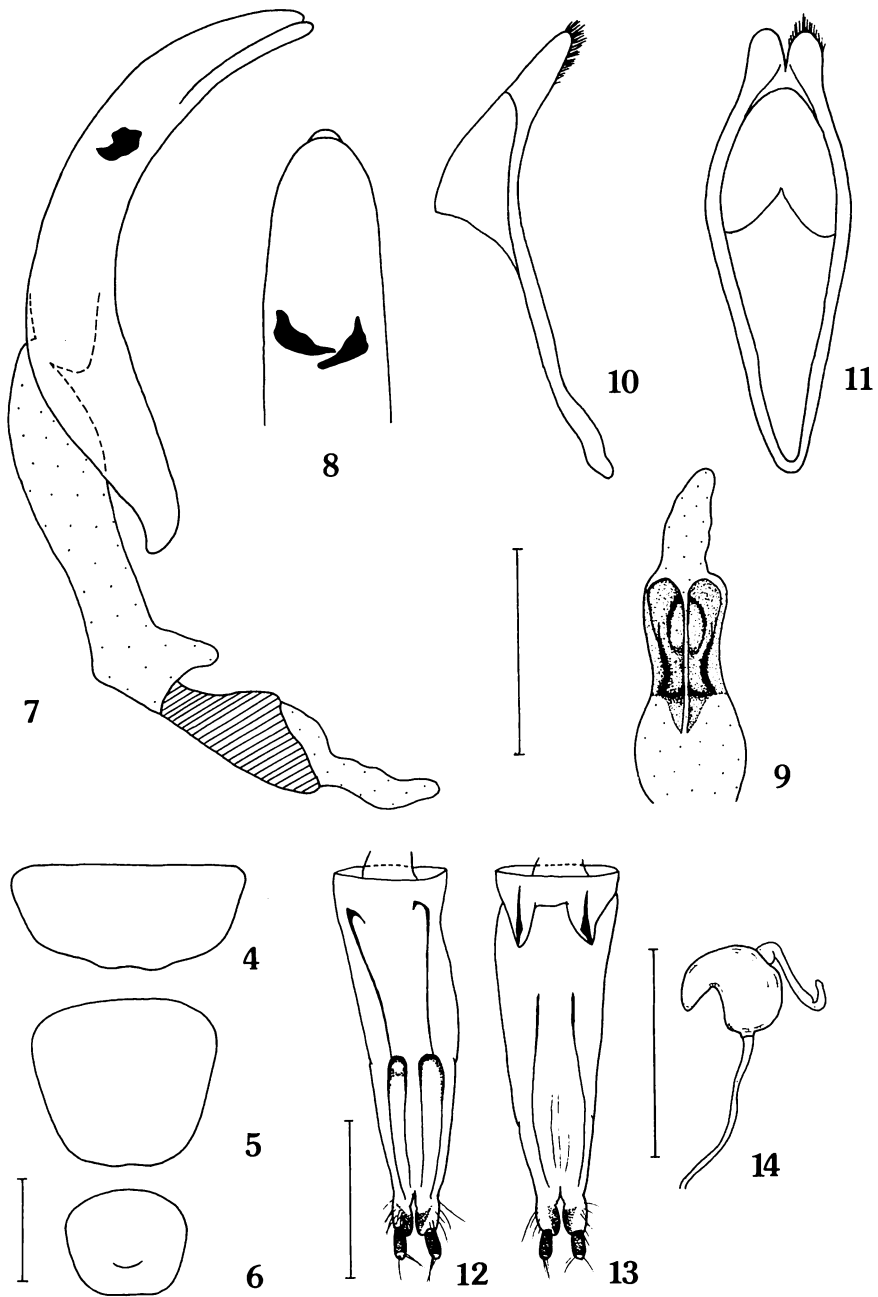
Fig. 3. *Pidonia (Cryptopidonia) insperata* sp. nov.; left lateral view of prothorax, showing the black marking [CBM-ZI 33966].

with the apical membranous part rather broad and relatively short. Tegmen (Figs. 10–11) widest at about apical third, narrowed towards both apex and base in dorsal view; lateral lobes short and rounded at each tip, ventrally bearing short but conspicuous terminal hairs.

Female. Different from male in broader body and shorter antennae. Head testaceous, slightly darker than in male. Antennae testaceous to blackish brown, 1st segment testaceous, 2nd segment dark except for the posterior part, 3rd to 9th segments brown to blackish brown, 10th and 11th segments brown. Prothorax testaceous, somewhat darker than in male, with a small but remarkable black marking at each lateral margin of pronotum; scutellum dark brown. Legs testaceous, dorsal side of each femur dark brown in apical half. Elytra testaceous, a little darker than in male; second marking larger than in male, third marking usually oblong and connected with lateral margin, though sometimes rudimentary. Abdominal sternites entirely testaceous.

Head broader across eyes than length (1.5–1.6 : 1). Antennae shorter than in male, extending beyond elytral apex at the end of 9th segment to the base of 10th; length order of antennal segments roughly measured as follows: 5th > 3rd \geq 6th > 7th \geq 4th > 9th \geq 8th > 11th \geq 1st \geq 10th > 2nd. Pronotum slightly longer than width at the middle (1.1 : 1). Elytra 2.2–2.3 times as long as width between humeral angles. Abdomen gradually narrowed towards apex. Ninth abdominal segment (ovipositor) (Figs. 12–13) short; paraproct short, with a pair of baculi; basal part of coxite gradually narrowed towards apical part; coxite lobes broad with rounded apices; stylus large, articulated to the apex of coxite lobe. Spermatheca (Fig. 14) weakly sclerotized, well constricted at base, broad at basal two-thirds, narrowed and abruptly bent at apical third, with spermathecal gland at the outer side of the middle, the part continuing to spermathecal gland somewhat depressed; spermathecal duct rather thick, short and simple.

Fig. 4–14. *Pidonia (Cryptopidonia) insperata* sp. nov. — 4, Last abdominal sternite; 5, last abdominal tergite; 6, 8th abdominal tergite; 7, median lobe in lateral view; 8, apex of median lobe in dorsal view; 9, apex of inner sac in dorsal view; 10, tegmen in lateral view; 11, same in dorsal view; 12, ovipositor in ventral view; 13, same in dorsal view; 14, spermatheca in lateral view. 4–11, Paratype, male [CBM-ZI 33966]; 12–14, paratype, female [CBM-ZI 33968]. (Scales: 0.5 mm.)



Type series. Holotype: ♂, Hoang Lien Son Mts., northern ridge of Mt. Phang Si Pang, 1,950 m in altitude, in Lai Chau Province, 17-V-1995, A. SAITO leg. [NSMT]. Allotype: ♀, same locality as for the holotype, 13-V-1995, A. SAITO leg. [NSMT]. Paratypes: 2 ♂♂, 1 ♀ [NSMT], 6 ♂♂, 1 ♀ [CBM-ZI 33961-33967], same data as for the holotype; 4 ♂♂ [NSMT], 1 ♀ [CBM-ZI 33968], same data as for the allotype.

The holo- and allotypes are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo [NSMT]. The paratypes are preserved in the above collection and the collection of the Natural History Museum and Institute, Chiba [CBM].

Notes. All the specimens examined were collected on the blossoms of *Berchemia floribunda* (WALL.) BRONGN. (Rhamnaceae), which were by no means conspicuous. At the time of collecting, the weather was rather good, but as the plant in question was growing at the bottom of a narrow valley, the sunlight did not appear to be so strong.

At first sight, this new species resembles pale individuals of *Pidonia* (*Cryptopidonia*) *masakii* HAYASHI, 1955, and males of *P. (C.) oyamae* (OYAMA, 1908), from Japan, but can be readily distinguished from the latter two by the presence of lateral markings of the pronotum and the black dorsal side of each femur.

As was already mentioned in the introduction, this is a third species of *Cryptopidonia* to be recorded from the Asian Continent, though the subgenus flourishes in Japan and also in Taiwan. As was already reported in a previous paper of mine (SAITO, 1989), some subgeneric characters appear in the features of the ovipositor. Characteristic features of *Cryptopidonia* are as follows: the paraproct is very short, the coxite lobes are broad with rounded apices, and each stylus is large and articulated to the apex of the coxite lobe. All features of the ovipositor possessed by *Pidonia insperata* conform to those of the other species of the subgenus, with the exception of the *oyamae* group whose ovipositor differs in the length of paraproct. It is, however, not clear from the features of the ovipositor to which species of the subgenus the new species is most closely related. On the other hand, the spermatheca of the present species is unique in general configuration and has nothing in common with those of any other species of *Cryptopidonia*, since its capsule is broad and well constricted at the base. It is of considerable interest to note that a similar conformation of spermatheca is widely found in the members of the subgenus *Pidonia*.

Being restricted to East Asia, the subgenus *Cryptopidonia* has a distributional range narrowly stretching from Hokkaido and the southern Kurils in the northeast to northern Vietnam in the southwest. Until now, only two species, *P. maai* and *P. aenipennis continentalis* have been known from the Asian Continent, both from Fukien (= Fujian) Province of southeastern China, and the nominotypical subspecies of the latter is endemic to Taiwan. These Fujianese species of *Cryptopidonia* have metallic elytra, which are markedly different from the ordinarily non-metallic ones in the present species. All these facts seem to suggest that *P. insperata* is an isolated species, which belongs to a lineage hitherto unknown to the science.

要 約

齊藤明子：北ベトナムのカミキリムシ類. I. *Pidonia* 属の1新種. — 1995年に実施された学術調査によって、ベトナム北部の中国国境に近いインドシナ最高峰のファン・シ・パン山で、*Pidonia* 属のハナカミキリの一種が採集された。この種は、体形や雌の産卵管の形態などから *Cryptopidonia* 亜属に含まれるもので、一見、日本の *Pidonia masakii* の黄色個体または *P. oyamae* の雄個体に似ている。この亜属の種は、これまでアジア大陸では *Pidonia maai* と、基亜種が台湾に生息する *P. aenipennis continentalis* の2種が、いずれも中国の福建省から記録されているにすぎない。原記載によると、これらのいずれもが上翅に金属光沢をもつものであり、今回獲られた種は明らかに新種であることがわかったので、*Pidonia (Cryptopidonia) insperata* と命名して、ここに記載した。

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