

Pidonia (Omphalodera) warusawadakensis OHBAYASHI
(Coleoptera, Cerambycidae, Lepturinae),
a Distinct Species

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Abstract *Pidonia (Omphalodera) warusawadakensis* OHBAYASHI, 1959, stat. nov., is recognized as a distinct species. A key is given for the three species of *Pidonia (Omphalodera)* from Japan, and their distribution from Mt. Kitadake and Mt. Senjôdake, central Honshu, is reported.

Pidonia (Omphalodera) testacea warusawadakensis OHBAYASHI, 1959, was treated by HAYASHI (1969) as a form of *P. (O.) puziloi testacea*. Later, it was considered to be a subspecies of *P. (O.) testacea* by KUSAMA (1972, 1975) and an aberrant form or a form of *P. (O.) testacea* by NAKANE (1974) and KUBOKI (1979, 1984). SAITO (1992) suggested that *warusawadakensis* could possibly be a distinct species, though he treated it as a subspecies of *P. (O.) testacea*. In my view, *P. (O.) warusawadakensis* is a species distinct from *P. (O.) testacea* because of morphological differences in the male genitalia and differences in the length of the antennae. The two species are sympatric at high altitudes of the Akaishi Mountain Range. I am going to list characters distinguishing *P. (O.) warusawadakensis* from *P. (O.) testacea* and to provide a key to the three species of *Pidonia (Omphalodera)* from Japan.

Pidonia (Omphalodera) warusawadakensis OHBAYASHI, 1959; stat. nov.

(Figs. 1–2, 5–6, 11 & 13)

Pidonia testacea MATSUSHITA subsp. *warusawadakensis* OHBAYASHI, 1959, Ent. Rev. Japan, **10**: 1.

Omphalodera testacea subsp. *warusawadakensis*: OHBAYASHI, 1963, Iconogr. Ins. Japon. Col. nat. ed., **2**: 273, pl. 137, figs. 2c, ♂, 2d, ♀.

Pidonia (Omphalodera) puziloi testacea f. *warusawadakensis*: HAYASHI, 1969, Bull. Osaka Jonan Women's Jr. Coll., **4**: 94–95.

Pidonia (Omphalodera) testacea subsp. *warusawadakensis*: KUSAMA, 1972, List Jpn. Cerambycidae w. Ecol. & Distr., p. 23. — KUSAMA, 1975, Nat. Hist. Upper Stream Reg. Ooi Riv., Japan, pp. 105–106, 116. — SAITO, 1992, Illustr. Guide Identif. Longicorn Beetles Japan, pp. 108, 111, 210, 441.

Pidonia (Omphalodera) testacea ab. *warusawadakensis*: NAKANE, 1974, Nat. & Ins., Tokyo, **9**(13): 7.

Pidonia (Omphalodera) testacea: KUBOKI, 1979 (*warusawadakensis* as a form of *testacea*), Kontyû, Tokyo, **47**: 253–255. — KUBOKI, 1984, Longicorn-beetles Japan Col., Tokyo, p. 200, pl. 13, 96 d, ♂.

This species is very similar to *P. (O.) testacea* (MATSUSHITA, 1933), but *P. (O.)*

warusawadakensis can be distinguished by the following characters: antennae with the apex of the 11th segment reaching basal two-thirds of elytra in males and slightly surpassing the middle of elytra in females; 8th abdominal tergite in males slightly narrowed towards the apex and the apical margin nearly transverse with a slight emargination at the middle (Figs. 5 & 6); in the male genitalia, the median lobe more distinctly narrowed towards the apex (Fig. 13); lateral lobes of parameres shorter, each lateral lobe somewhat angulate on the inner apical margin (Fig. 11). Length: ♂, 5.0–7.0 mm; ♀, 5.0–7.3 mm (measured from tips of mandibles to elytral apices).

Type locality. Mt. Warusawadake, Shizuoka Pref., Japan.

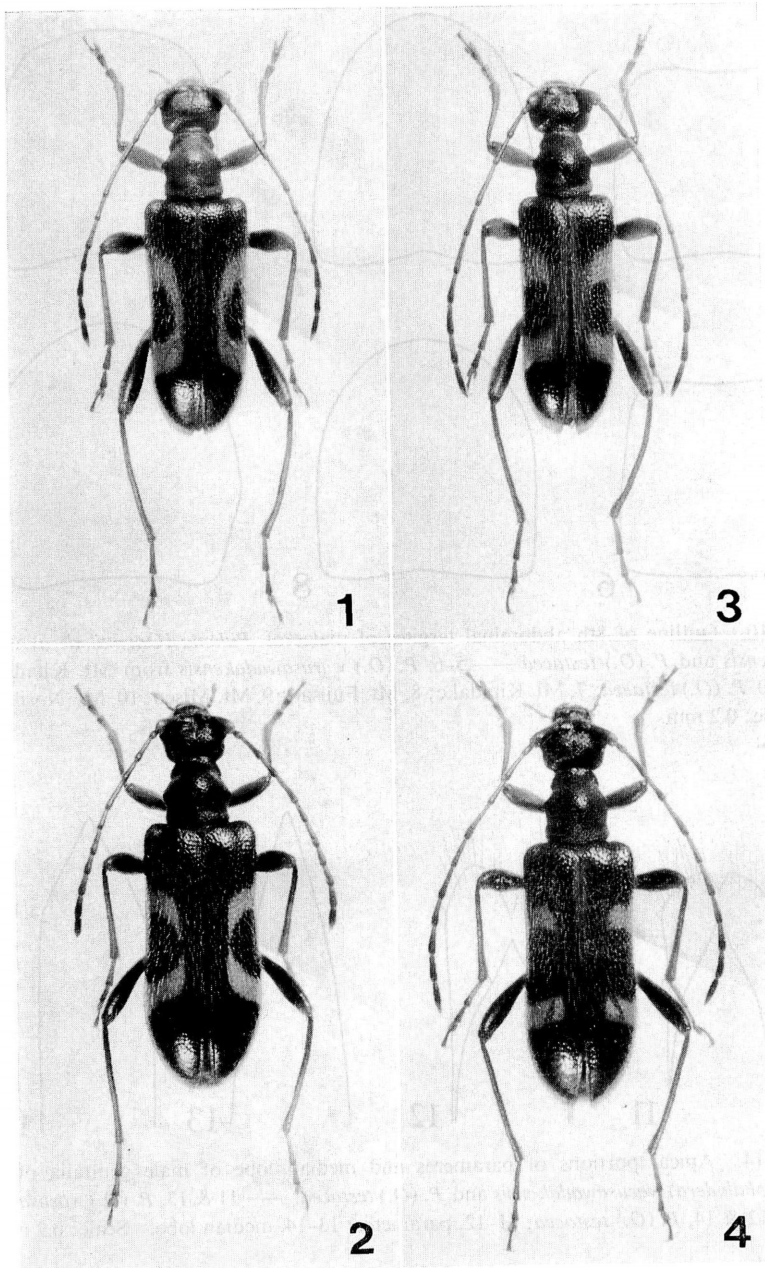
Distribution. The Akaishi Mountain Range, central Honshu.

Specimens examined. 157 exs. (108 ♂♂, 49 ♀♀): 1 ♂ (holotype), 1 ♀ (allotype), Mt. Warusawadake, Shizuoka Pref., 7–VIII–1954, K. KUSAMA leg. (N. OHBAYASHI collection); 15 ♂♂, 12 ♀♀, Mt. Kitadake, Shirane-oike (ca. 2,300 m in alt.), Yamana-shi Pref., 6 & 7–VIII–1986, T. SHIMOMURA leg.; 71 ♂♂, 28 ♀♀, Mt. Kitadake, Shirane-oike (2,200–2,250 m in alt.), Yamana-shi Pref., 5–VIII–1989, T. SHIMOMURA leg.; 20 ♂♂, 8 ♀♀, Mt. Senjôdake, nr. Umanose (2,550–2,700 m in alt.), Nagano Pref., 9–VIII–1988, T. SHIMOMURA leg.; 1 ♂, Sanpuku-tôge (ca. 2,600 m in alt.), on the borders between Nagano and Shizuoka Prefectures, 10 & 11–VII–1979, T. SHIMOMURA leg. (in T. SHIMOMURA coll.).

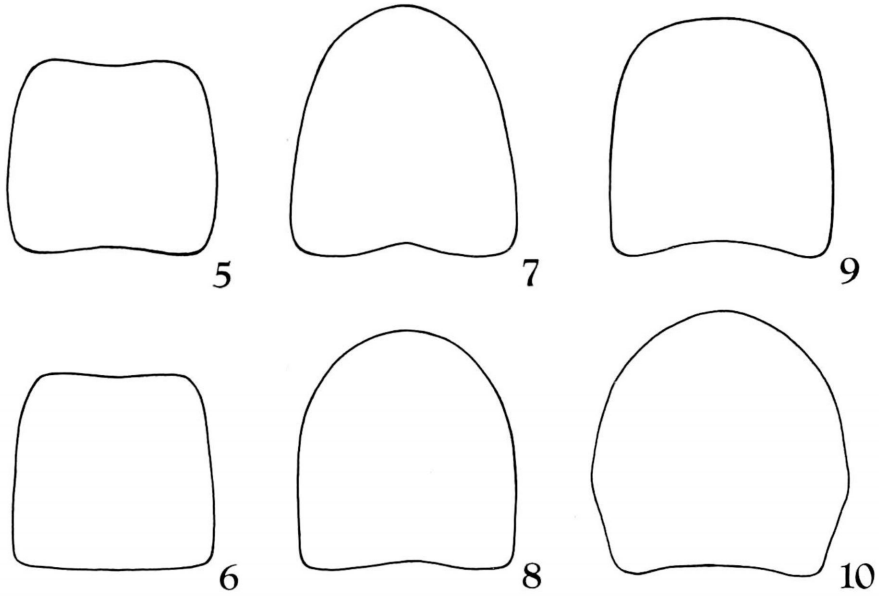
Notes. The typical form of this species has two pairs of arcuate, whitish yellow markings combined near the suture on the elytra, and the elytral suture is black in females. The head and prothorax are reddish brown in males. These characteristics may be of use for distinguishing this species from *P. (O.) testacea* of the Akaishi Mountain Range, but there occur intermediate forms in elytral markings and coloration of the head and prothorax. I have examined specimens of *P. (O.) testacea* with elytral markings similar to those of this species, from Mt. Misen, ca. 1,900 m in alt., Nara Prefecture and from other localities. It is difficult to distinguish this species from *P. (O.) testacea* only by using elytral markings and coloration.

Key to the Species of *Pidonia* (*Omphalodera*) from Japan

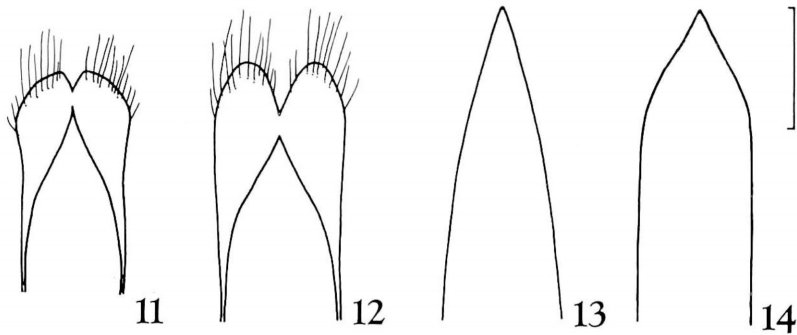
1. Vertex relatively flat and gradually impressed towards neck; elytral surface finely punctured and sparsely clothed with long pubescence *P. puziloi*.
- Vertex relatively convex and abruptly impressed at neck; elytral surface coarsely punctured and densely clothed with short pubescence 2.
2. Antennae with apex of 11th segment reaching basal five-sixths of elytra in males or surpassing basal three-fifths of elytra in females; apical margin of 8th abdominal tergite in males rounded (Figs. 7–10); male genitalia with lateral lobes of parameres longer and apical margin of each lateral lobe rounded (Fig. 12) *P. testacea*.
- Antennae with apex of 11th segment reaching basal two-thirds of elytra in males or slightly surpassing the middle of elytra in females; apical margin of 8th



Figs. 1-4. *Pidonia (Omphalodera) warusawadakensis* and *P. (O.) testacea* from Mt. Kitadake, Shirane-oike, Yamanashi Pref. — 1-2. *P. (O.) warusawadakensis*; 1, male; 2, female. — 3-4. *P. (O.) testacea*; 3, male; 4, female.



Figs. 5-10. Outline of 8th abdominal tergites of males of *Pidonia (Omphalodera) warusawadakensis* and *P. (O.) testacea* — 5-6. *P. (O.) warusawadakensis* from Mt. Kitadake. — 7-10. *P. (O.) testacea*; 7, Mt. Kitadake; 8, Mt. Fujisan; 9, Mt. Misen; 10, Mt. Norikuradake. Scale: 0.2 mm.



Figs. 11-14. Apical portions of parameres and median lobe of male genitalia of *Pidonia (Omphalodera) warusawadakensis* and *P. (O.) testacea*. — 11 & 13, *P. (O.) warusawadakensis*; 12 & 14, *P. (O.) testacea*; 11-12, parameres; 13-14, median lobe. Scale: 0.2 mm.

abdominal tergite in males nearly transverse with a slight emargination at middle (Figs. 5 & 6); male genitalia with lateral lobes of parameres shorter and each lateral lobe somewhat angulate on inner apical margin (Fig. 11).....
 *P. warusawadakensis*.

**Observations on the Vertical Distribution of the Three *Omphalodera*
on Mt. Kitadake and Mt. Senjōdake of the Akaishi Mountain Range**

The specimens examined of *P. (O.) warusawadakensis* from Mt. Kitadake, Yamaguchi Prefecture, were collected on flowers of *Rodgersia podophylla* A. GRAY (Saxifragaceae) in the coniferous forests near Shirane-oike (2,200–2,300 m in alt.). *P. (O.) warusawadakensis* is sympatric with *P. (O.) testacea* in this area. On August 9, 1988, I collected only *P. (O.) warusawadakensis* between 2,550 and 2,700 m on Mt. Senjōdake about 7 km northwest of Mt. Kitadake across the Norogawa River. On August 5, 1989, I collected *P. (O.) testacea* [1 ♂] and *P. (O.) puziloi* [4 ♂♂] on the same flowers of the Umbelliferae at Hirogawara (about 1,600 m in alt.) at the base of Mt. Kitadake. According to KUSAMA (1975), *warusawadakensis* occurs only on the Akaishi Mountain Range (=the Southern Japanese Alps) at an elevation of 2,400 m and higher places. According to KUBOKI (1979), *testacea* is distributed on Mt. Senjōdake (=Mt. Senjōgatake) from 1,500 to 2,400 m in altitude and *warusawadakensis* occurs from 2,000 to 3,000 m. The vertical distribution of these three species on Mt. Kitadake and Mt. Senjōdake is as follows: *P. (O.) puziloi* is distributed at about 1,600 m or lower places, *P. (O.) testacea* occurs from about 1,500 to 2,400 m, and *P. (O.) warusawadakensis* is found at about 2,000 m and higher places. *P. (O.) puziloi* is sympatric with *P. (O.) testacea* at about 1,500–1,600 m in altitude, and *P. (O.) testacea* is sympatric with *P. (O.) warusawadakensis* at about 2,000 to 2,400 m in altitude.

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要 約

下村 徹: ワルサワダケフタオビヒメハナカミキリは独立種。 — *Pidonia (Omphalodera) testacea warusawadakensis* OHBAYASHI, 1959 の分類学的扱いについて, KUSAMA (1972, 1975) はその扱いを支持し, NAKANE (1974) は *testacea* の ab. として, KUBOKI (1979, 1984) は *testacea* の form として, 取り扱ってきた。 SAITO (1992) は *testacea* の亜種として扱ったが, 独立種の可能性

が強いと述べた。 *P. (O.) warusawadakensis* (ワルサワダケフタオビヒメハナカミキリ) は雄交尾器、触角の長さなどの形態的特徴によって、 *P. (O.) testacea* (ニセフタオビヒメハナカミキリ) とは識別ができ、赤石山脈 (南アルプス) 北部の亜高山帯、標高約 2,000~2,400 m で両者が同所的に分布しているので独立種とみなした。日本産 *Pidonia (Omphalodera)* の 3 種の検索表を付し、赤石山脈北部の北岳と仙丈岳でのこれら 3 種の垂直分布について報告した。

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