

Descriptions of the larva and pupa
of *Similipepsis takizawai* ARITA & ŠPATENKA
(Lepidoptera, Sesiidae)

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It is known that the larva of *Similipepsis takizawai* ARITA & ŠPATENKA is a borer of twigs of *Betula platyphylla* Sukatchev var. *japonica* (Miquel) Hara and *B. ermanii* CHAMISSO, Betulaceae (ARITA & ŠPATENKA, 1988). The mature larve and pupa of this species are described and illustrated in the present paper. The morphological characters of the immature stages of the genus *Similipepsis* have hitherto been unknown.

A detailed account of the life history of this species will be given by Mr. Y. Takizawa, of the Kyushu Research Center, Forest and Forest Products Research Institute, Kumamoto, in a forthcoming paper.

I wish to express my hearty thanks to Dr. S. MORIUTI, of University of Osaka Prefecture, for his kindness in correcting the original manuscript, and to Mr. Y. TAKIZAWA for his help during my field survey of the larva of this species.

Similipepsis takizawai ARITA and ŠPATENKA, 1988 (fig. 1-6)

Matura larva (figs. 1, 2, 3) : length 15.0-22.0 mm. Width 2.0-2.5 mm. Remarkably slender. Head brown ; mouth parts light brown. Body creamy yellow ; shield light brown ; thoracic legs pale yellowish brown. Head (fig. 3a) comparatively broader than long ; coronal suture very long, longer than frons. Ocelli (fig. 3b) six, with V and VI widely separated from I-IV. Labrum (figs. 3c & d) with strong arms. Mandible (fig. 3e) with one small and three large teeth. Shield well developed. Prothoracic spiracle remarkably large and located on a very large pinaculum of L-setae. Meso- and metathorax with a small brown-pigmented spot on strongly concave central margin of a large pinaculum of L1 and L3. Spiracle of 8th abdominal segment large, about twice as large as those of the other abdominal ones. Anal shield (fig. 2) extremely large, rounded posteriorly. Ventral proleg (fig. 3i) with 33+



Fig. 1. *Similipepsis takizawai* ARITA & ŠPATENKA, mature larva inside split stem.

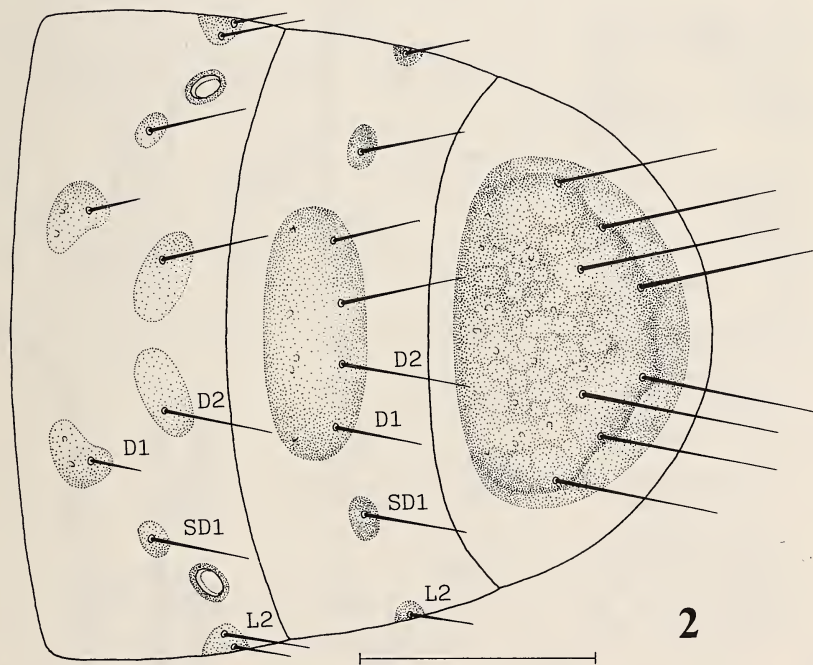


Fig. 2. *Similipepsis takizawai* ARITA & ŠPATENKA, mature larva, 8th to 10th abdominal segments, dorsal view (Scale line = 1.0 mm.).

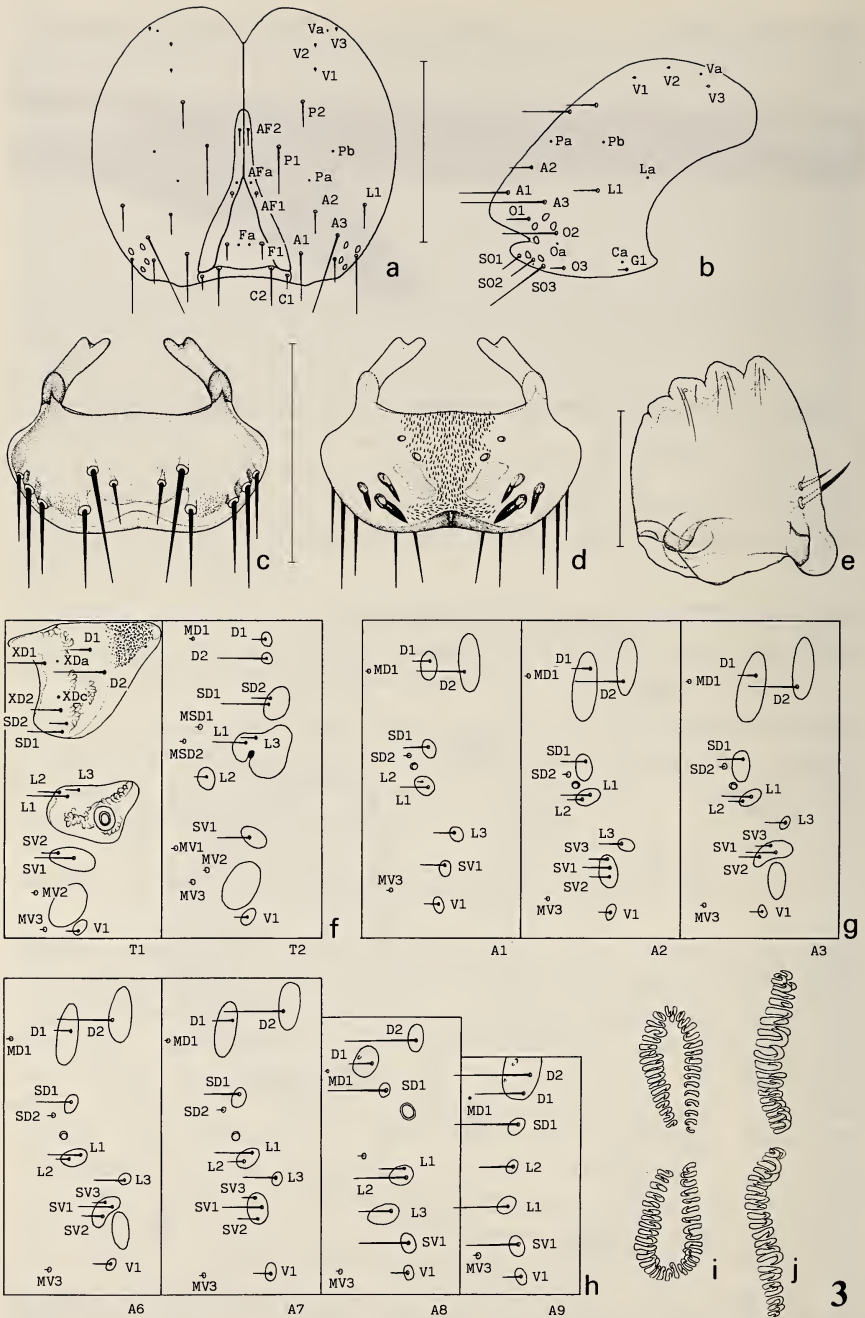


Fig. 3. *Similipepsis takizawai* ARITA & ŠPATENKA, mature larva. a) head frontal view; b) ocular region, left side; c) labrum, dorsal view; d) labrum, ventral view; e) mandible, ventral view; f) pro- and mesothorax; g) first to 3rd abdominal segments; h) sixth to 9th abdominal segments; i) 3rd abdominal proleg, ventral view; j) anal proleg, ventral view. (Scale line: a & b = 1.0 mm.; c, d & e = 0.25 mm.).

crochets arranged in lateral penellipse. Anal proleg (fig. 3j) with 22+ crochets.

CHAETOTAXY : Head (fig. 3a) with AF1 microscopic and distant from AF2. AFa very near to AF1. Prothorax with L setae close together, located on anterodorsal part of their common pinaculum. Meso- and metathorax with L1 and L3 on a large common pinaculum ; SV group

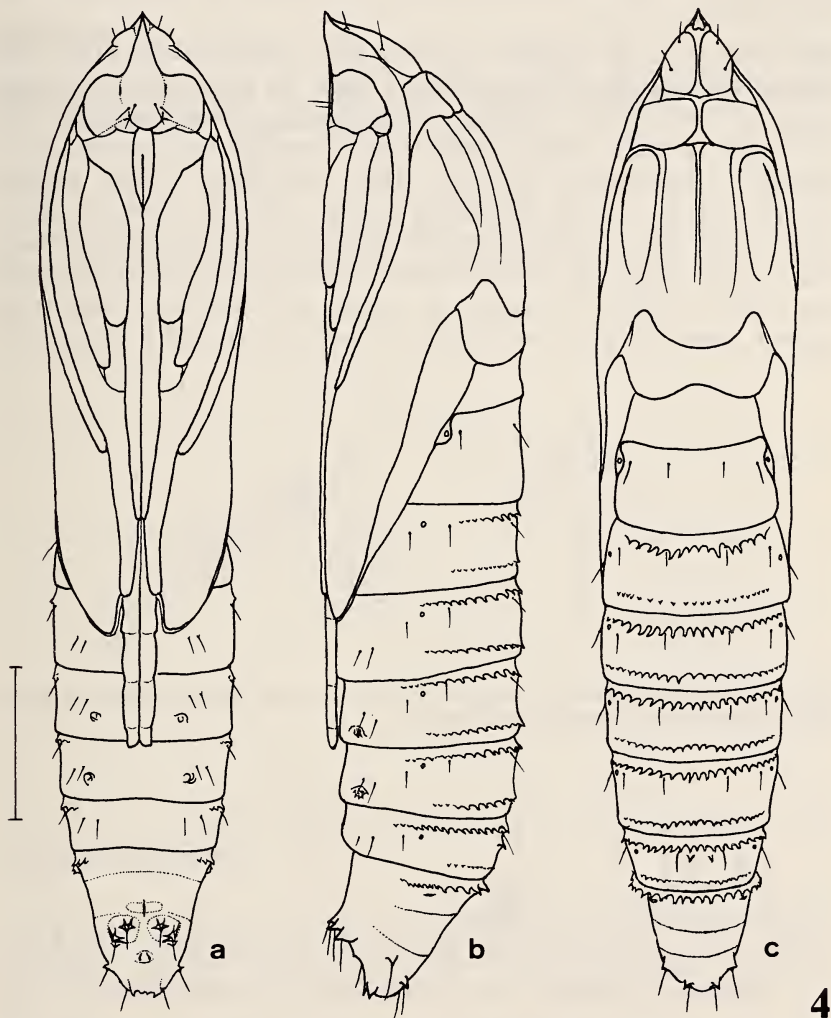


Fig. 4. *Similipepsis takizawai* ARITA & ŠPATENKA, pupa, ♂. a) ventral view ; b) lateral view ; c) dorsal view. (Scale line = 2.0 mm.).

unisetose. Abdomen : D1 and D2 with its own large pinaculum on 1st-8th segments ; 9th segment with D1 and D2 on a common pinaculum ; SV group unisetose on 1st, 8th and 9th, and trisetose on 2nd-7th segments.

MATERIAL EXAMINED : Japan : Honshu- 18 larvae, feeding within twig of *Betula platyphylla* SUKACHEV var. *japonica* (MIQUEL) HARA, Iwate-ken, Tamayama-mura, Kouma, 22.VI.1986, Y. ARITA, fixed on 23.VI.1986.

Pupa (figs. 4, 5, 6) : length 12.5-16.0 mm. Width 2.0-2.5 mm. Very slender, light brown. Frontal process (figs. 5a & b) well developed, triangular and pointed. Maxilla extremely long, about as long as half the length of body. Mesothoracic legs extending far beyond tips of maxillae. Metathoracic legs very long, extending a little beyond posterior margin of 5th abdominal segment. Wings somewhat short, the tips reaching to middle of the 4th abdominal segment. Mesothorax with alar dorsal furrows well developed. Abdominal dorsal surface with two rows of spines on 3rd-6th in female and 3rd-7th in male ; 8th segment with a single row of spines in both sexes, and in female the

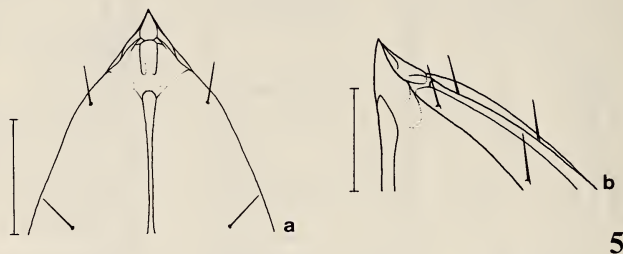


Fig. 5. *Similipepsis takizawai* ARITA & ŠPATENKA, pupal frontal process. a) dorsal view ; b) lateral view. (Scale line = 0.5 mm.).

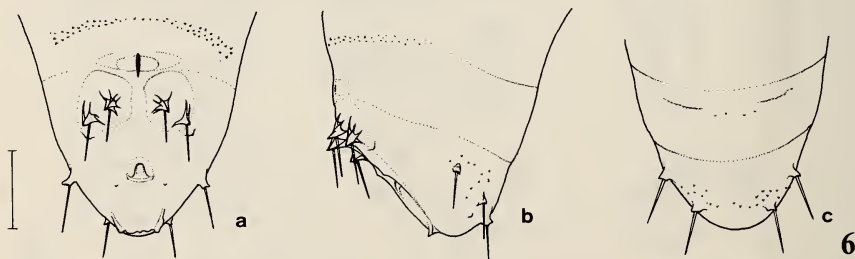


Fig. 6. *Similipepsis takizawai* ARITA & ŠPATENKA, pupa, ♂, terminal segments. a) ventral view ; b) lateral view ; c) dorsal view. (Scale line = 0.5 mm.).

row being very short and interrupted at middle. Tenth abdominal segment (figs. 6a-c) with five pairs of broad spines, viz., two pairs large and broad on ventral side, a single on lateral side, and two pairs on dorsal side.

MATERIAL EXAMINED : Japan : Honshu- 8exs., reared from larvae, Iwate-ken, Tamayama-mura, Kouma, 22.VI.1986, Y. ARITA, pupated early July 1986.

Reference

ARITA, Y. & ŠPATENKA, K., 1988. A new species of *Similipepsis* (Lepidoptera, Sesiidae) from Japan. *Jpn. J. Ent.*, 57 : 61-66.

Aufruf um Mitarbeit

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