

Description of the Larva of *Donacia clavareau*
(Coleoptera, Chrysomelidae)

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Abstract The larva of *Donacia clavareau* JACOBSON is described and illustrated. Some biological notes are also given.

Donacia clavareau JACOBSON, 1906

(Figs. 1–14)

Last instar larva. Body about 10.5 mm in length, milky white, more or less shiny, dorso-ventrally arcuate, fleshy, covered entirely with fine pubescence; head and thoracic legs very small; 8th abdominal segment equipped with a pair of hook-shaped spiracles on dorsum; 9th abdominal segment extremely small and indistinct.

Head capsule about 0.75 mm in breadth, widest near the middle in dorsal view, more than twice the posterior width; dorso-posterior margin moderately arcuate forwards; anterior portion of frons strongly porrect, its anterior margin deeply emarginate; dorsal surface with 6 or 7 pairs of setae at the sides; frons with 5 pairs of setae; frontal suture V-shaped though indistinct; endocarina absent; ocelli with 5 pigmented spots on each side. Antennal articulating membrane well elevated. Antenna 3-segmented, the 1st much larger than the other segments, transverse, with a transverse series of several sensillae in the middle, the 2nd as long as wide, furnished with 2 minute sensillae and a sensory appendage on the apical disc, sensory appendage conical, scarcely projecting beyond the 3rd segment, which is about as long as or a little longer than the 2nd, subtruncated apically, and bears a sensory seta near the apex. Labrum less than twice as wide as long; anterior margin nearly straight; dorsum with 2 rows of setae, of which the anterior row consists of 4 short setae and the posterior of 4 long setae and 2 sensillae. Epipharynx with 2 rows of short setae at the central part near the anterior margin and with a pair of long setae at the lateral parts. Mandibles nearly triangular, and pointed at the apices, each with a subapical tooth on dorsal cutting edge, which are blunt, especially in the right mandible; molar part reddish brown, bearing a seta and a few sensillae on the dorsal surface. Maxillae more or less slender, widely separated from each other by a well developed labium; cardo with a short seta; stipes subquadrate, slightly smaller than cardo, bearing 2 long setae; palpifer larger than 3rd segment of palpus, with 2 long setae and a sensilla; palpus with 3 segments which decrease in length towards the apex, the 1st with 2 sensillae, the 2nd with 2 setae and a sensilla, and the 3rd with a few sensory papillae at the apex;

mala with an elongate spine and a stout seta, the former being a little shorter than the latter, both reaching or extending beyond the apex of palpus. Labium with 6 uni-setiferous sensillae and 6 sensillae in the anterior part and 2 long setae at the base; palpi widely separated from each other, 1-segmented, each furnished with 9 minute papillae around the sensory papilla.

Prothoracic segment about 1.5 times as wide as long in dorsal view; tergum with a U-shaped shield, which is scattered with a number of sclerotized patches. Legs similar to one another; tibia nearly equal in length to tarsus.

Abdominal segments except for the 8th and 9th clearly divided into 3 parts (tergum, pleurum and sternum) by 2 longitudinal grooves; tergum with 2 transverse tubercles; pleurum with a single tubercle; sternum with 2 longitudinal tubercles. All the tubercles suffused with setae except in the spiracular area.

Host. *Scirpus fluviatilis* (TORR.)

Specimens examined. 10 exs., Mitanda, Katsuta, Ibaraki-ken, 3-IX-1988, Y. NARITA leg.

Notes. The larvae of *Donacia clavareaui* feed on the roots and stolon stems of *Scirpus fluviatilis*. Imagines in their pupal cocoons and larvae of various stages are found at any time of the year, but the imagines appear only during the months of May, June and July. In the last instar larva and the prepupa, ocelli disappear rather frequently.

Acknowledgment

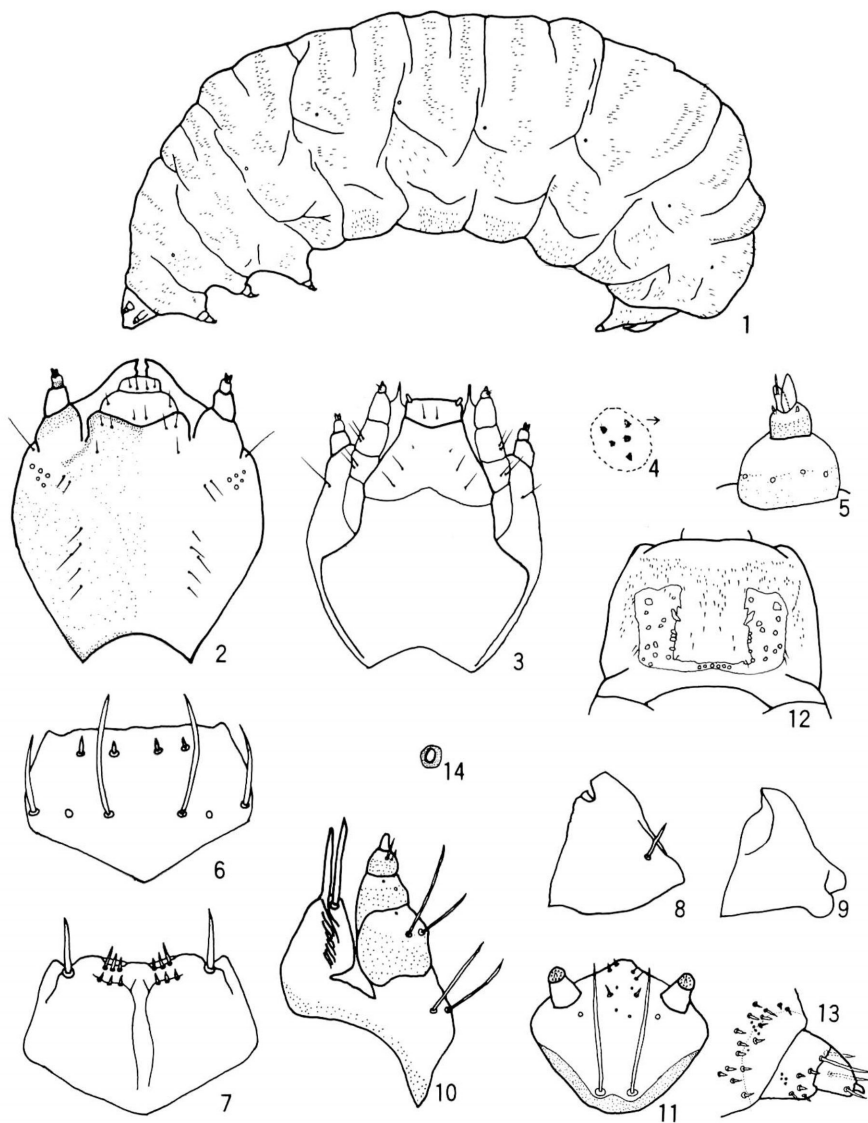
I wish to express my sincere gratitude to Dr. N. HAYASHI for his continuous guidance and encouragement in the course of this study. Many thanks are due to Professor Y. KOMIYA for his kind aid and valuable suggestions.

要 約

成田行弘：フトネクイハムシの幼虫。——ウキヤガラを食草とするフトネクイハムシ *Donacia clavareaui* JACOBSON の終令幼虫を記載し、その生態に言及した。あらゆる齢の幼虫や、羽化したまま藪の中にとどまっている成虫は一年を通じて見られるが、食草の葉上に成虫が出現するのは5月から7月までに限られる。

References

- HAYASHI, N., 1959. Coleoptera – Chrysomelidae (*partim*). *Illustrated Insect Larvae of Japan*, 491–514. Hokuryukan, Tokyo. (In Japanese.)
 KANAZAWA, I., 1985. Immature stages. *Atlas of the Japanese Donaciinae*, 161–163. Fossil Insect Research Group for Nojiri-ko Excavation, Osaka. (In Japanese.)



Figs. 1-14. Last instar larva of *Donacia clavareai*. — 1, Larva, lateral view; 2, head, dorsal view; 3, same, ventral view; 4, right ocelli; 5, right antenna, ventral view; 6, labrum, dorsal view; 7, epipharynx, ventral view; 8, right mandible, dorsal view; 9, left mandible, ventral view; 10, left maxilla, ventral view; 11, labium, ventral view; 12, prothorax, dorsal view; 13, left mesothoracic leg, lateral view; 14, spiracle (of mesothoracic segment).