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OCCURRENCE OF PELECYSTOMA TRICOLOR WESMAEL IN JAPAN

(HYMENOPTERA: BRACONIDAE)

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Several months ago a number of Braconid specimens bred from larvae of *Scopelodes venosa* Walker, the Blackish Cochlid Moth, were forewarded to me for identification by Mr. Shintaro Miura of Kitakami-shi, Iwate-ken. My own examination has convinced me that these specimens should be identified with *Pelecystoma tricolor* Wesmael which is new to Japan. On the basis of the present material a redescription of this species is given in the following lines.

Subfamily **Rogadinae**

Genus ***Pelecystoma*** Wesmael

Pelecystoma Wesmael, Nouv. Mém. Acad. Sci. Bruxelles 11 : 91, 1838. [Type species : *Rogas luteus* Nees, 1834].

In 1838, the genus *Pelecystoma* was established by Wesmael for *Rogas luteus* Nees and *Pelecystoma tricolor* Wesmael occurring in Europe, and then, up to the present, about a dozen other species occurring in various parts of the world have been included in this genus by authors, that is, Ashmead (1897), Schrottky (1915), Enderlein (1920), Vojnovskaja-Krieger (1935), Telenga (1940), Granger (1949) and Muesebeck & Walkley (1951). Furthermore, certain authors have sunken the genus *Macrostomion* Szépligeti, 1900 [Type species : *Macrostomion bicolor* Szépligeti, 1900, lives in New Guinea] as a synonym of *Pelecystoma*. I have, however, some hesitation in accepting the synonymy, since further investigations of these genera and their allies are necessary in order to have a definite conclusion concerning the taxonomy of these genera.

This genus is distinctive by the following features :—

Maxillary palpi 6-segmented, the 3rd and 4th segments being dilated in both sexes. Hind tibial spurs nearly straight and pubescent. Abdomen oblong-oval ; suture between 2nd and 3rd tergites distinct and crenulate. Ovipositor exerted.

Pelecystoma tricolor Wesmael

Pelecystoma tricolor Wesmael, Nouv. Mém. Acad. Sci. Bruxellus 11 : 92, ♂, 1838 ; Blanchard, Hist. Nat. Insect. 3 : 342, 1840 ; Reinhard, Berl. Entom. Zeitschr. 9 : 244, ♀♂, 1865 ; Marshall, Spec. Hymén. Europe et Alg. 4 : 269, ♀♂, 1895 ; Dalla Torre, Cat. Hymen. 4 : 225, 1896 ; Szépligeti, Gen. Insect. 22 :

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82, 1904; Fahringer, Opusc. bracon. 3 : 208, ♀♂, 1932; Telenga, Fauna de l'URSS, Hymén. 5 (3) : 131, ♀♂, 1941.

Exothecus discolor Ruthe, Stettin. Entom. Zeitung 16 : 191, ♂, 1855.

Specimens examined : 71 ♀♀ & 80 ♂♂, Kitakami-shi, Iwate-ken, Japan, VII, 1961, reared from larvae of *Scopelodes venosa* by S. Miura.

The specimens examined agree well enough with the original description of *tricolor* as well as its redescriptions stated by the above-listed authors.

♀. Head and thorax ocher-yellow; eyes, stemmaticum and tips of mandibles black; postscutellum and metanotum at middle dark-brown. Propodeum and basal four tergites ocher-yellow and tinged with dark-brown. Legs ocher-yellow; claws black. Antennae dark-brown, the basal three segments being yellowish. Wings hyaline; stigma dark-brown; veins pale-yellow to dark-brown. Ovipositor reddish-yellow, the sheath being fuscous.

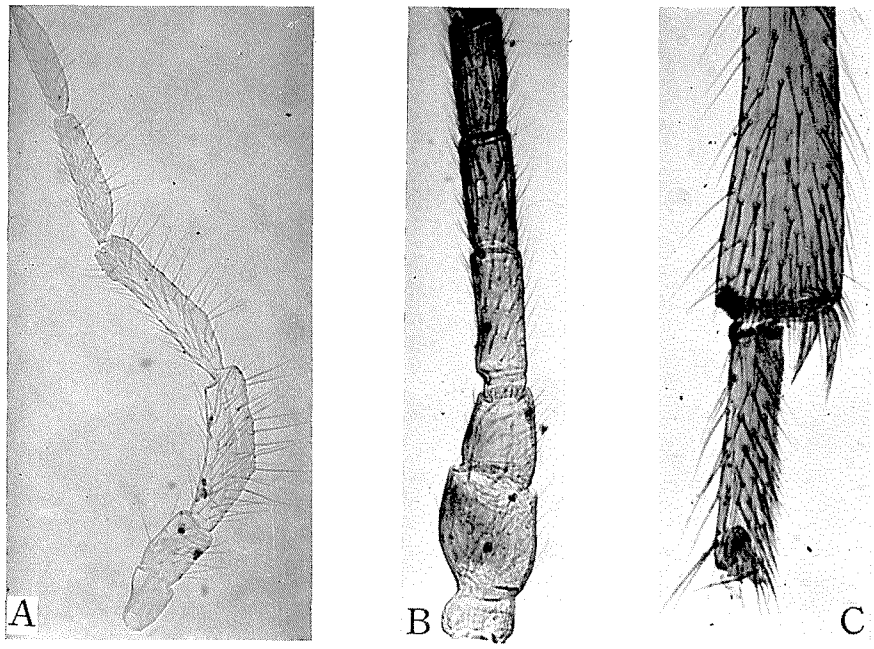

Fig. 1. *Pelecystoma tricolor* Wesmael (♀):
A. Maxillary palpus. B. Basal segments of antenna.
C. Hind tibial spurs.

Head transverse; vertex smooth and shining; occiput weakly margined laterally; face finely punctate; eyes large, emarginate opposite insertion of antennae; maxillary palpi 6-segmented, the 3rd and 4th being dilated, but not so much as in *Pelecystoma luteum*. (Fig. 1, A). Antennae with 30–34 segments; scapus 1.5 times as long as pedicel; 1st flagellar segment a little longer than the 2nd. (Fig. 1, B). Thorax smooth and shining; notauli distinct and weakly crenulate; mesopleural furrows distinct and smooth. Propodeum rather smooth with a trace of median longitudinal carina and some reticulations. In fore wing stigma 2.5 times as long as its widest part; 1st abscissa of radius as long as one-third of the 2nd, which

is 2 times as long as 2nd intercubitus; 2nd cubital cell rather trapeziform; recurrent nervure received in 1st cubital cell a short distance from apex; nervulus postfurcal by its own length. In hind wing 2nd basal cell as long as half length of 1st basal cell. Hind tibial spurs subequal in length, the longer one being as long as one-third length of basal segment of hind tarsus. (Fig. 1, C). Abdomen long-oval with six tergites visible above; 1st tergite broadened towards apex and conspicuously longer than median width; four basal tergites longitudinally rugose; 5th tergite finely punctate; 6th smooth and shining; 2nd tergite 1.5 times as long as the 3rd; suture between 2nd and 3rd tergites weakly crenulate. Ovipositor exerted, as long as basal segment of hind tarsus, with the sheath pubescent.

Length 3.5–5 mm. (Excluding ovipositor).

The male agrees well enough, both in color and structure, with the above-mentioned description of the female except as below :—

♂. Generally, paler in color than female; fuscous markings of propodeum and basal four tergites not so much conspicuous as in female; antennae with 23–27 segments; abdomen more slender; eight tergites visible above.

Length 3–4 mm.

This species is closely related to *Pelecystoma luteum* (Nees) known to occur in Europe and Japan, but the most obvious differences between them lie in the structure of the maxillary palpi, the number of the antennal segments, the size of the body and the color of the stigma.

Pelecystoma tricolor has been known as a parasite of *Cochlidion limacodes* in Europe. In Japan it has been discovered that this Braconid is a gregarious endoparasite of the larva of *Scopelodes venosa*. The cocoons of the parasite are found within the host-body, being protected by the indurated skin of the victim which is attached to the leaf of the persimmon, *Diospyros kaki*. Having examined fifteen victims it has been found that there are from six to twenty-four issuing holes of the parasite on the upper side of each victim.

Hosts : *Cochlidion limacodes* Hufnagel (after Marshall, in Europe) and *Scopelodes venosa* Walker (in Japan).

Distribution : Europe and Japan.

THE CHOICE OF THE NAME OF A BRACONID. Recently, the writer has found that two names were published for a single species of the Braconidae simultaneously in his work*, the one, *semanoti*, being found on page 83 and the other, *seminoti*, on pages 81 and 82. On this occasion, acting upon the Article 24 (a) with the Recommendation 24 A of the International Code of Zoological Nomenclature the writer ought to select ***Aspidocolpus semanoti*** as the name of this species: indeed, *seminoti* is evidently of *lapsus calami*.

C. WATANABE

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* Watanabe, C.: Hymenopterous parasites of the longicorn beetle, *Semanotus rufipennis* Motschulsky. Ins. Mats. 18: 79–83, 1954.