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DESCRIPTION OF A NEW SPECIES OF THE GENUS *OPIUS* WESMAEL, BRED FROM THE CHERRY FRUIT FLY, *EUPHARANTA* SP.

(*HYMENOPTERA : BRACONIDAE*)

By

CHIHISA WATANABE

(渡邊千尙)

(With one Textfigure)

This new species is a parasite of the Cherry Fruit Fly (*Eupharanta* sp.) which attacks the cherry and causes wormy fruits. The material has been reared by the entomologists of the Hokkaido Agricultural Experiment Station and of the Yamagata Agricultural Experiment Station, and it has been sent to the writer for identification.

Subfamily ***Helconinae***

Tribe ***Opiini***

Genus ***Opius*** WESMAEL

Opius WESMAEL, Nouv. Mém. Acad. Sci. Bruxel., IX, p. 115 (1835).
Diachasma FÖRSTER, Verh. Naturh. Ver. Preuss. Rheinl., XIX, p. 259 (1862).

Genotype—*Opius pygmaeator* (NEES) (1811).

Opius aino sp. nov.

♀. Rufo-testaceous; eyes, tips of the mandibles and ovipositor-sheath black; antennae dark brown, sometimes the basal joints yellowish; hind tibiae and tarsi somewhat fuscous. Wings subhyaline; stigma and veins dark brown.

Head transverse, nearly twice as wide as long; vertex smooth and shining; distance from the ocelli to the eye-margin at least 4 times the distance between the posterior ocelli; antennae considerably longer than the body, 41 to 48-jointed, the scape and pedicel stout, the flagellum filiform; face closely punctate and hairy with a slight median ridge; clypeus coarsely punctate, rounded at the anterior margin, separated from the mandibles by a crescent-shaped opening; malar space a little longer than the width of a mandible at the base. Thorax smooth and shining with yellowish pubescence; mesoscutum with a deep median

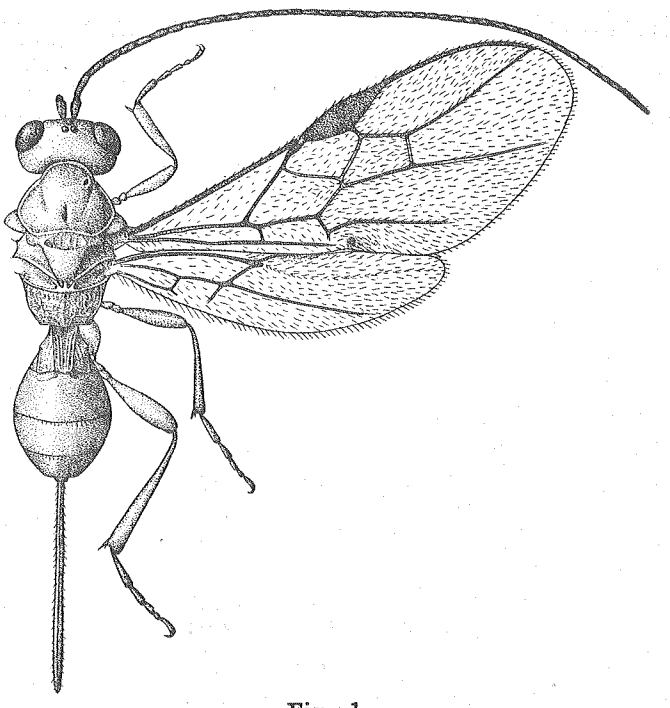

Fig. 1

Opius aino sp. nov. ♀

impression before the scutellum, the parapsidal furrows smooth, obsolete on the posterior half; mesopleural furrows strongly crenulate; propodeum rugose, incompletely areolate medially. Stigma of the fore wing subtriangular, the radius arising from about the middle; 1st abscissa of the radius about equal to one-third the width of the stigma; 2nd abscissa of the radius a little shorter than the 1st intercubitus; 2nd cubital cell slightly narrowed towards the apex; 2nd intercubitus decoloured, as long as the 2nd abscissa of the radius; 1st abscissa of the cubitus curved outwardly on the basal half; recurrent nervure joining the 2nd cubital cell close to the base; nervulus postfurcal by its own length. Hind wing with a pobrachial transverse nervure which is slightly antefurcal with the basal nervure. Legs rather slender; hind tibial spurs as long as one-third the length of the metatarsus. Abdomen ovate, not longer than the thorax; 1st tergite gradually narrowed towards the base, longitudinally striate, with strong sublateral carinae from the base to the apex; 2nd and following tergites smooth and shining; ovipositor exserted, a little longer than the abdomen.

Length: Body 4 mm. Antennae 6.5 mm. Fore wing 5 mm. Hind wing 3.5 mm. Ovipositor 2 mm.

♂. Closely resembles the female in general structure and colour, but the antennae are longer than those of the female, about one and half times the length of the body, 43 to 48-jointed, and the abdomen is oblong, more slender than that of the female.

Length: Body 4 mm. Antennae 7 mm. Fore wing 5 mm. Hind wing 3.5 mm.

Holotype (♀) and **Allotype** (♂): Mashike, Hokkaido, 26. VI, 1935, S. KATO leg. **Paratypes:** 8♀♀, 6♂♂, Mashike, 26. VI, 1935, S. KATO leg.; 11♀♀, 4♂♂, Mashike, 27. V, 1937, K. ENDO leg.; 5♀♀, 4♂♂, Yonezawa, Yamagata-ken, Honshu, 9. V, 1934, K. OKAZAKI leg.

The type-specimens are in the Entomological Institute of the Hokkaido Imperial University, Sapporo.

Habitat: Hokkaido (Mashike); Honshu (Yonezawa, Yamagata-ken).

Host—*Eupharanta* sp. (**Autôhamadara-mibae**)*

This species is a solitary parasite of the Cherry Fruit Fly (*Eupharanta* sp.) which attacks the cherry in Hokkaido and Yamagata-ken. It passes the winter as a full-grown larva in a puparium of the host in the soil. The adults begin to emerge during early summer, and fly to cherry trees, where the females lay their eggs in the maggots of the Cherry Fruit Fly.

Remarks: This species resembles *Opius testaceus* WESMAEL** in colour and structure, but is easily distinguished from the latter by the relative length of the 2nd abscissa of the radius. Further, on account of the short cubital cell, the 2nd abscissa of the radius not exceeding in length the 1st intercubitus, and the subtriangular stigma this species surely belongs to a group which has been recognized as the genus *Diachasma* FÖRSTER by certain authors.

Here the writer wishes to express his sincere thanks to Dr. S. KUWAYAMA and Mr. S. KATO of the Hokkaido Agricultural Experiment Station and to Mr. K. OKAZAKI of the Yamagata Agricultural Experiment Station for their kindness in sending the material.

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* Japanese name.

** Nouv. Mém. Acad. Sci. Bruxel., XI, p. 146, ♀♂ (1838).

摘　　要

從來山形縣地方にて櫻桃の害蟲として知らるるアウトウハマダラミバヘ (*Eupharanta* sp.) が數年來北海道の增毛郡、小樽郡等の各所に發生し、未だ發生地域は比較的狹隘なりと雖も、一度發生するや全樹悉く之に侵され、一粒の健果さへ見る能ざるの慘狀を呈することあり。爾來その防除法の研究中なりし北海道農事試驗場昆蟲部にて有力なるコマユバチの寄生するを發見し、筆者にその同定を依頼せり。曩に山形縣立農事試驗場の豊田德治、岡崎勝太郎、仲野恭助の三氏は〔櫻桃翅斑實蠅防除ニ關スル試驗研究、昭和10年 (1935)〕の〔天敵の調査〕の章にてコマユバチ科に屬する1種の寄生蜂を報告せり。然れども生態に關する調査の記述のみにて、形態の記載全然無く、果して北海道にて得たる寄生蜂と同一種なりや否やは不明なりしところ、岡崎勝太郎氏の好意によりその標本を檢する機會を得、同一種なることが判明せり。而して研究の結果明らかに新種と認むべきものなれば

Optius aino WATANABE (sp. nov.)　(アウトウミバヘコマユ)

と命名せり。

尙この寄生蜂は寄主の幼蟲に產卵し、翌年に至り地中にて越冬せる寄主の蛹內より羽化し、再び櫻果を喰害中の幼蟲に寄生するものなり。

A BRACONID PARASITE OF *PORTHESIA SIMILIS* FUESSLY

(HOST RECORD OF *BRACONIDAE*, I)

By

CHIHISA WATANABE

Microplitis cerurae MATSUMURA

Microplitis cerurae MATSUMURA: in OKAMOTO, Report Agr. Exp. Stat. Hokkaido, No. 12, p. 52, ♂, Pl. V, fig. 11 (1912); WATANABE, Jour. Facul. Agr., Hokkaido Imp. Univ., XLII, p. 106, ♀ ♂ (1937).

Host—*Porthesia similis* FUESSLY

This species has been represented as a solitary parasite of young larvae of *Cerura lanigera* BUTLER and *Dicranura vinula* LINNÉ. In the course of the present study it has also been reared from larvae of *Porthesia similis* FUESSLY, showing that mature parasitized host-larvae are about half the size of unparasitized ones.

Habitat: Hokkaido (Sapporo, 3♀ ♀, 1♂, 20. VIII, 1938, 1♀, 27. VIII, 1938, C. WATANABE leg.)

General Distribution: Japan (Hokkaido).