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SEVERAL HOST RECORDS OF GONIINAE FROM JAPAN (Diptera, Tachinidae)¹

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During the past three years I have had good chances to examine the several tachinid-flies reared from the larvae, prepupae and pupae of butterflies. In this paper are recorded 14 new host insects from Japan. All tachinid-flies examined in this study belong to the subfamily Goniinae. The host records hitherto known only from the literature are excluded in this paper. Identification of the host species was mainly owed to Messrs. H. Fukuda and H. Tanaka of Kagoshima Prefecture. The newly recorded host insects were marked with an asterisk. The scientific names of the host species were referred to Dr. Shirôzu's book (1959) "Iconographia Insectorum Japonicorum Colore Naturali Edita".

Before going further I wish to express my cordial thanks to Prof. K. Yasumatsu and Prof. Y. Hirashima of the Entomological Laboratory, Kyushu University, for their constant guidance and encouragement. I am also much indebted to Messrs. H. Fukuda and H. Tanaka of Kagoshima Prefecture for their kindness in identifying the host insects and in giving me the chances examining these interesting material.

1. *Thecocarcelia thrix* Townsend, 1932

Specimens examined: 2 ♀♀, Mt. Kanmuri, Kagoshima Pref., 1. iv. 1960, reared from larva of *Potanthus flavum* Murray by H. Tanaka; 1 ♀, Mt. Omeguriyama, Ibusuki Province, Kagoshima Pref., ? vi. 1961, reared from the same host as the preceding one by H. Tanaka; 1 ♀, Mt. Eboshi, Kagoshima Pref., 18. vi. 1964, reared from the same host as the preceding one by A. Tanaka.

Host: **Potanthus flavum* Murray.

Distribution: Japan and Formosa.

The genus *Thecocarcelia* Townsend is characteristic in its very large bare eye and 4 (2+2) sternopleural bristles. *Thecocarcelia thrix* Townsend has been known to occur in Formosa. I think the Japanese species known as *Masicera oculata* Baranov should be referred to this species, though I have not been able to examine the original description of *M. oculata* (Takano, 1951, 1956; Koizumi, 1964).

This species is very closely allied to the following one, but is easily distinguishable from it by the reddish yellow palpus, narrower frontal stripe and 2 proclinate outer frontorbital bristles in male.

1. Contribution Ser. 2, No. 280, Entomological Laboratory, Kyushu University.

2. *Thecocarcelia incedens* (Rondani, 1861)

Specimen examined: 1♂, Kirishimajingū, Mts. Kirishima, Kagoshima Pref., 3. ix. 1961, reared from larva of *Thoressa varia* Murray by H. Fukuda.

Host: **Thoressa varia* Murray.

Distribution: Japan and Europe.

3. *Pales pavidā* (Meigen, 1824)

Specimen examined: 1♂, Uearatachō, Kagoshima City, 15. iii. 1964, reared from larva of *Lycaena phlaeas daimio* Seitz by K. Hashimoto.

Host: **Lycaena phlaeas daimio* Seitz.

Distribution: Japan, Formosa and Europe.

4. *Sturmia bella* (Meigen, 1824)

Specimens examined: 1♂, Yunono, Mts. Kirishima, Kagoshima Pref., 11. ix. 1966, reared from *Byasa alcinous* Klug by K. Kanmiya; 2♂♂, Takeda Temple, Kaseda City, Kagoshima Pref., 16-17. iv. 1964, reared from pupa of *Caduga sita nipponica* Moore by H. Fukuda; 1♂, same locality as the preceding, 1. v. 1964, reared from pupa of *Dichorragia neshimachus nesiotes* Fruhstorfer by H. Fukuda.

Hosts: **Byasa alcinous* Klug; *Caduga sita nipponica* Moore; **Dichorragia neshimachus nesiotes* Fruhstorfer.

Distribution: Japan, Formosa, Java and Europe.

5. *Aplomyia confinis* (Fallén, 1820)

Specimens examined: 1♂, Kuharagō, Ōmura City, Nagasaki Pref., 5. vii. 1965, reared from pupa of *Celastrina argiolus ladonides* de l'Orza by H. Tanaka; 1♂, Uearatachō, Kagoshima City, 20. vi. 1965, reared from pupa of *Celastrina albocaerulea sauteri* Fruhstorfer by K. Hashimoto; 1♂, same locality as the preceding, 1. vi. 1965, reared from pupa of *Lycaena phlaeas daimio* Seitz by H. Shima; 1♂, Kobayashi City, Miyazaki Pref., 16. ix. 1965, reared from pupa of *Everes argiades hellotia* Ménétériès by H. Tanaka.

Hosts: **Celastrina argiolus ladonides* de l'Orza; **Celastrina albocaerulea sauteri* Fruhstorfer; **Everes argiades hellotia* Ménétériès; *Lycaena phlaeas daimio* Seitz.

Distribution: Japan, China, Formosa, Europe and Africa.

6. *Aplomyia laeviventris* (v. d. Wulp, 1893)

Specimens examined: 4♂♂ 1♀, Mikkanzaka, Kagoshima City, ?. xii. 1965, reared from *Everes lacturnus kawaii* Matsumura by H. Tanaka.

Host: **Everes lacturnus kawaii* Matsumura.

Distribution: Japan, Formosa, Indo-China, Java, India and Africa.

This species has not been known to occur in Japan including the Ryukyus. I

could examine the specimens collected from Kyushu and the Ryukyus other than the above listed localities: 1♂, Miyagahama, Ibusuki City, Kagoshima Pref., 13. x. 1963, H. Tanaka leg.; 1♂ 1♀, Is. Nakanoshima, Tokara Islands, 27. vii. 1964, H. Shima leg.; 1♂, Is. Takarajima, Tokara Islands, 18. vii. 1964, A. Tanaka leg.; 1♂, same locality as the preceding, 21. vii. 1964, A. Tanaka leg.; 1♂, Is. Kikaijima, Amami Islands, 20. iii. 1967, K. Kanmiya leg.; 1♂, Akamine, Is. Okinoerabu, Amami Islands, 9. xi. 1966, Y. Miyatake leg.

This species is closely related to the preceding species, but is easily differentiated as follows: (1) palpus yellow, (2) abdomen and scutellum entirely black, (3) mid-tibia with only one anterodorsal bristle, (4) hairs on 4th abdominal tergum finer and denser than in the preceding species, and so on.

7. *Phryxe heraclei* (Meigen, 1824)

Specimens examined: 2♂♂, Shigeta, Takakumachō, Kagoshima Pref., 1. vi. 1962, reared from pupa of *Pelopidas mathias oberthūrei* Evans by H. Fukuda.

Host: **Pelopidas mathias oberthūrei* Evans.

Distribution: Japan and Europe.

8. *Phryxe nemea* (Meigen, 1824)

Specimens examined: 1♂ 3♀♀, Mt. Eboshidake, Kagoshima Pref., 20 & 23. iv. 1967, reared from larva of *Caduga sita nipponica* Moore by N. Tsunochi.

Host: **Caduga sita nipponica* Moore.

Distribution: Japan and Europe.

9. *Phryxe vulgaris* (Fallén, 1810)

Specimens examined: 1♂, Uearatachō, Kagoshima City, 3. vii. 1964, reared from *Colias erate poliographus* Motshulsky by K. Hashimoto; 1♂ 1♀, same locality as the preceding, 1. vii. 1964, reared from same host as the preceding by K. Hashimoto; 1♂, same locality as the preceding, 20. v. 1965, reared from larva of *Pieris rapae crucivora* Boisduval by S. Ōga.

Hosts: **Colias erate poliographus* Motshulsky; *Pieris rapae crucivora* Boisduval.

Distribution: Japan and Europe.

The genus *Phryxe* Robineau-Desvoidy is characteristic in its erect apical scutellar bristle, basal humeral bristles in a line and densely haired eye, etc. The three species mentioned above are very closely related to each other, but different in the structure of male genitalia, color of pollinosity and the position of undermost frontal bristle, etc.

10. *Exorista japonica* (Townsend, 1909)

Specimen examined: 1♂, Kagoshima City, 20. x. 1962, reared from pupa of *Melanitis phedima oitensis* Matsumura by K. Kusigemati.

Host: **Melanitis phedima oitensis* Matsumura.

Distribution : Japan, China and Indo-China.

11. *Compsilura concinnata* (Meigen, 1824)

Specimen examined : 1 ♂, Ushitaki, Osaka Pref., 11. vi. 1961, reared from prepupa of *Argynnis paphia geisha* Hemming.

Host : **Argynnis paphia geisha* Hemming.

Distribution : Japan, Europe and North America.

References

- Herting, B. (1960) Biologie der westpaläarktischen Raupenfliegen, *Mong. z. Angew. Ent.* Nr. 16 : 188 pp.
- Koizumi, K. (1964) in Yasumatsu and Watanabe "The tentative catalogue of insect natural enemies of injurious insects in Japan. Part 1, Parasite-Predator Host Catalogue" *Ent. Lab. Fac. Agr. Kyushu Univ., Fukuoka* : 121-129.
- Mesnil, L. P. (1944-1965) in Lindner "Die Fliegen der paläarktischen Region" 64g *Larvaevorinae (Tachininae)* : 879 pp.
- (1950) Notes sur les Carceliina (Diptera: Tachinidae) et révision des espèce d'Afrique, *Rev. Zool. Bot. Afr.* XLIII (1-2) : 24 pp.
- & H. Pschorn-Walcher (1968) A preliminary list of Tachinidae (Diptera) from Japan, *Mushi* 41(12) : 149-174.
- Takano, S. (1951) in Ishii, Esaki et al. "Iconographia Insectorum Japonicorum Edita Secunda, Reformata" (in Japanese) : 1699-1716.
- (1956) Systematic and ecological studies of Tachinoidea (in Japanese), *Ann. Rep. Co-oper. Res. Minist. Educ., 1955, Agr.* : 59-63.

TWO PORIZONTINAE NEW TO JAPAN

(Hymenoptera : Ichneumonidae)

By Setsuya Momoi

In the following lines two species of Porizontinae are added to the Japanese fauna.

1. *Meloboris collector* (Thunberg, 1822)

Specimens examined. ♀, Bibai, Hokkaido, 1. vii. 1961, bred from a noctuid on poplar, K. Kamijo leg. ♀, Sapporo, Hokkaido, 24. vii. 1956, S. Momoi leg. ♀, Sasayama, Hyogo, 6. vi. 1953, K. Iwata leg.

Distribution. China, Europe, Japan.

2. *Campopletis latrator* (Gravenhorst, 1829)

Specimens examined. ♀, Bibai, Hokkaido, 29. vi. 1961, bred from a noctuid on poplar, K. Kamijo leg. ♀, Yamabe, Hokkaido, 5. vii. 1958, bred from a noctuid on poplar, C. Nishiguchi leg.

Distribution. Europe, Japan.