

# FRAGMENTA FAUNISTICA

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## **Syrphid flies (*Diptera*, *Syrphidae*) from China collected by Polish expeditions**

**Abstract:** The paper contains a list of 17 species of dipterans of the family *Syrphidae* collected by Polish expeditions in south-east China. The *Syrphidae* material included two rarely registered species: *Eumerus japonicus* MATS. and *Mesembrius flaviceps* (MATS.).

**Key words:** *Syrphidae*, *Diptera*, China

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### INTRODUCTION

In terms of faunistic data, the fauna of China has been very poorly studied in comparison with other Asian countries. This is due both to China's immense area and the resultant exceptionally high geobotanical diversity there, the presence of several climatic zones and limited possibilities for field studies. Chinese *Syrphidae* have also been quite poorly studied in comparison with other Asian countries. A large monograph is available about India (BRUNETTI 1923), and the *Syrphid* fauna of Japan has been described and discussed in multi-volume publications by MATSUMURA (1904) and SHIRAKI (1968). Mongolian *Syrphidae* have been described by STACKELBERG and PECK (1979), and their Siberian cousins, by VILOVITSH (1983). Against this background, the literature on Chinese *Syrphidae* does not look at all impressive, with a few papers by SACK (1933, 1938, 1941) discussing incomplete material collected by past expeditions, works by HERVÉ-BAZIN (1929 a, b, 1930) with descriptions of new species registered in China and publications by contemporary Chinese dipterologists, including CHU XIPING, HE JILONG (1992, 1996), HE JILONG (1992, 1993), HUANG CHUNMEI, CHENG XINYUE (1959) and LI QINGXI, HE JILONG (1993, 1994).

The collections of syrphid flies from China are small, numbering about 90 individuals. However, they have yielded 17 species, among which are two



rarities: *Eumerus japonicus* and *Mesembrius flaviceps*. The study material is the outcome of two expeditions of Polish entomologists: R. Bielawski in 1965 and R. Bielawski, B. Pisarski in 1966, both of which explored the south-eastern part of the country. The study specimens were collected in the environs of Beijing in the Hopeh province, the environs of Nankin in the Kiangsu province, the Hupeh province, the area surrounding the town of Wuhan, and the Kwantung province (near Kanton). Beijing is situated in the biome of multispecies deciduous forests in a temperate climate zone, Nankin and Wuhan lie in a zone of subtropical and tropical mountain forests and the town of Kanton is the southernmost locality, situated in a tropical forest zone. The geographical situation is reflected in the study material, which includes wide-range species, registered throughout the Palaearctis or even in the Holarctis, such as *Eupeodes corollae* or *E. nitens*, as well as species inhabiting only south-east Asia and Japan, such as *Mesembrius flaviceps* and *Eumerus japonicus*. A third group of species, representing the Indo-Malayan element, was collected in the environs of Kanton and Nankin. This group includes such species as *Betasyrphus serarius*, *Syritta orientalis*, *Lathyrrophthalmus arvorum* or *L. quinquestriatus*. The latter have also been found in India and Indonesia, reaching as far as Australia.

#### SPECIES COMPOSITION

### Family: SYRPHIDAE

#### Subfamily: SYRPHINAE

#### Tribe: Syrphini

#### *Betasyrphus* MATSUMURA, 1917

##### 1. *Betasyrphus serarius* (WIEDEMANN, 1830)

Material examined: China: Kiangsu prov., Hangcon, 24.09.1965, 1 male, Nankin, 15.11.1956, 2 males.

Distribution: Far East of Russia (Khabarovsk, Primorye, Sakhalin, Kuril Isles), China, Korea, Japan, Oriental Region, New Guinea, Australia.

#### *Episyrphus* MATSUMURA et ADACHI, 1917

##### 2. *Episyrphus balteatus* (DE GEER, 1776)

Material examined: China: Kiangsu prov., Nankin, 16.11.1965, 2 males, Hangcon, 23-24.11.1965, 2 males, 1 female; Hupeh prov., Wuhan, 2.05.1966, 3 males, 2 females; Kwantung prov., Kanton, 6-8.12.1965, 1 male, 2 females.

Distribution: Cosmopolitan species, Mentioned from China (VIOLOVITSH 1960).

#### *Eupeodes* OSTEN-SACKEN, 1877

##### 3. *Eupeodes corollae* (FABRICIUS, 1794)

Material examined: China: Kiangsu prov., Nankin, 16.11.1865, 1 male, 1 female, Cisian-shan 20 km S ad Nankin, 17.11.1965, 2 males, 2 females; Hupeh



prov., Wuhan, 2.05.1966, 5 males, 4 females; Kwantung prov., Kanton, 6.12.1965, 1 female.

Distribution: Palaearctic and Oriental Regions. Known from China (VIOLOVITSH 1960).

4. *Eupeodes nitens* (ZETTERSTEDT, 1843)

Material examined: China: Hupeh prov., Wuhan, 11.12.1965, 1 male, 1 female.

Distribution: Holarctic Region. Mentioned from China (VIOLOVITSH 1960).

*Scaeva* FABRICIUS, 1805

5. *Scaeva pyrastris* (LINNAEUS, 1758)

Material examined: China: Hopeh prov., Shisan-lin, 60 km N ad Beijing, 1 male, 2 females, Sian-shan, 20 km NW ad Beijing, 11.09.1965, 2 males.

Distribution: Holarctic Region. Known from China (VIOLOVITSH 1960).

6. *Scaeva selenitica* (MEIGEN, 1822)

Material examined: China: Hopeh prov., Sian-shan, 20 km NW ad Beijing, 11.09.1965, 1 male.

Distribution: Palaearctic and Oriental Regions. Known from China (PECK 1988).

*Sphaerophoria* LE PELETIER et SERVILLE, 1828

7. *Sphaerophoria macrogaster* (THOMSON, 1869)

Material examined: China: Hupeh prov., Wuhan, 2.05.1966, 1 male, 1 female.

Distribution: Far East of Russia, Mongolia, China, Korea, Japan, Oriental Region, New Guinea, Australia.

Tribe: *Paragini*

*Paragus* LATREILLE, 1804

8. *Paragus serratus* (FABRICIUS, 1805)

Material examined: China: Kwantung prov., Cun-hua, 96 km N ad Kanton, 29.09.1965, 2 males, 1 female.

Distribution: India, Afghanistan, Oriental Region.

9. *Paragus tibialis* (FALLÉN, 1817)

Material examined: China: Kwantung prov., Cisin-ien, 100 km W ad Kanton, 5.11.1965, 1 male.

Distribution: Palaearctic Region. Known from China (VIOLOVITSH 1960).

**Subfamily: MILESIINAE**

Tribe: *Eumerini*

*Eumerus* MEIGEN, 1822

10. *Eumerus japonicus* MATSUMURA, 1916

Material examined: China: Kwantung prov., Cun-hua, 90 km N ad Kanton, 29.09.1965, 1 female.

Distribution: Far East of Russia (Primorye, Sakhalin), Korea and Japan.



Tribe: *Eristalini**Lathyrophthalmus* MIK, 189811. *Lathyrophthalmus arvorum* (FABRICIUS, 1786)

Material examined: China: Kiangsu prov., Nankin, 21.06.1966, 1 female; Kwantung prov., Kanton, 27-29.11.1965, 1 male, 1 female, 8.12.1965, 1 male.

Distribution: China, Japan, Oriental Region, Australia, Micronesia, Hawaii (KNUTSON et al. 1975).

12. *Lathyrophthalmus quinquestriatus* (FABRICIUS, 1794)

Material examined: China: Kwantung prov., Kanton, 27.11.1965, 1 male.

Distribution: India, Japan, Oriental Region. Known from China (WALKER, 1849).

*Eristalis* LATREILLE, 180413. *Eristalis arbustorum* (LINNAEUS, 1758)

Material examined: China: Hopeh prov., near Beijing, 11.11.1965, 1 female.

Distribution: Palaearctic, Nearctic and Oriental Regions. Known from Far East of Russia, Korea, Taiwan and nord China (VIOLOVITSH, 1960).

14. *Eristalis cerealis* FABRICIUS, 1805

Material examined: China: Kiangsu prov., Hangcon, 23.11.1965, 1 male, 1 female; Hupeh prov., Wuhan, 11.12.1965, 1 male, 3 females.

Distribution: Asia and Oriental Region. Known from Far East of Russia, China, Korea, Japan and India.

15. *Eristalis tenax* (LINNAEUS, 1758)

Material examined: China: Hupeh prov., Wuhan, 11.12.1965, 3 males.

Distribution: Cosmopolitan species, widely distributed in Far East of Russia, Mongolia, Korea, China and Japan.

*Mesembrius* RONDANI, 185716. *Mesembrius flaviceps* (MATSUMURA, 1905)

Material examined: China: Hupeh prov., Wuhan, 2.05.1966, 1 male.

Distribution: Far East of Russia (Primorye), Korea and Japan (PECK 1988).

Tribe: *Milesini**Syritta* LE PELETIÉR et SERVILLE, 182817. *Syritta orientalis* MACQUART, 1842

Material examined: China: Kwantung prov., Kanton, 27.09.1965, 1 male.

Distribution: Oriental Region : India, Singapore, Java.

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