

## Short Communication

# Taxonomic Studies of Syrphidae of Peshawar–Pakistan

MUHAMMAD SALEEM, MUHAMMAD JALAL ARIF AND ANJUM SUHAIL

Department of Agricultural Entomology, University of Agriculture, Faisalabad–38040, Pakistan

### ABSTRACT

The adult syrphids were collected during the years 1997 to 1999 from 19 localities of the Peshawar Division. The specimens were identified into 12 species belonging to 10 genera under the two subfamilies i.e., Syrphinae and Milesinae. This fauna has been explored for the first time from Peshawar Division, N.W.F.P. province (Pakistan).

**Key Words:** Syrphidae; Diptera; Taxonomy

### INTRODUCTION

Syrphidae is one of the largest families of the order Diptera, which comprises the popularly called hover flies or flower flies. Hover flies are an attractive group of day flying insects and include many destructive and familiar species. Among many interesting attributes is their famous precision at hovering. They have the ability to keep the body motionless in the air for quite a period of time during flight. This is the most significant character of these flies, coupled usually with their yellow banded abdomens.

Bigot (1892) published a catalogue of the oriental Diptera, in which he listed the Indian syrphid flies. Keiser (1958) published notes on 56 species belonging to 18 genera of subfamily Eristalinae from Ceylon. Coe (1964) identified 127 species alongwith 28 new ones under 29 genera from Nepal. Okuno (1967) identified 21 species of the genus *Sphaerophoria* St. Frageu et Serville from Japan. Patel (1969) described diagnostic characters of 13 species of syrphids from Gujrat (India). Vockeroth (1969) revised 37 genera of the tribe Syrphini of the world, giving their descriptions distribution and synonymy. Telford (1970) identified 27 species from North Mexico under the genus *Eristalis* Latreille, giving synonymy and diagnostic keys for their identification. Knutson *et al.* (1975) published the synonymic catalogue, which included 771 species under 84 genera from the Oriental region. Ghorpad (1979) studied 13 species under five genera of the tribe Eristalini from India. Kapoor and Kohli (1985) collected and identified 260 species under 63 genera and eight tribes from India. Datta and Charaborti (1985, 1986a,b) identified 68 species of the family Syrphidae from various parts of India. Agarwal (1987) described nine species of aphidophagus syrphids from the Northeast India. Kumar and Kapoor (1992) collected and identified 29 species giving descriptions of the four new ones of the tribe Syrphini from the East Punjab (India). Barkalove and Pek (1994) described five new species of the subgenus *Nigrochelusia* from the middle Asia.

### MATERIALS AND METHODS

The adult syrphid flies were collected with the help of an insect collection hand net during the years 1997-99. The collected specimens were placed in ordinary paper envelopes after killing them in a cyanide bottle in order to bring them to the laboratory. The collection thus brought was placed in a desiccator (having water at its bottom) for about 24 h in order to soak and soften them. Thereafter, they were pinned and their wings and legs set on appropriate setting boards to facilitate their morphological studies. On drying, they were properly labeled and preserved in collection boxes. The boxes were treated with BHC powder, and naphthalene balls mounted on pins, were also placed in them to keep the pests away. For identification, the specimens mounted on revolving stage and examined under a wild M3B. Heerbrugg binocular microscope having three magnifications of 6.4X x 10X, 16X x 10X, 40X x 10X. The identification was done upto the specific level with the help of relevant literature.

### RESULTS

The present investigation regarding the syrphid fauna of the Peshawar Division has richly yielded 12 species, which are arranged in 10 genera and two subfamilies. Their checklist is given below:

#### Subfamily Syrphinae

##### Tribe Syrphini

##### Genus *Xanthogramma* Shiner

1. *Xanthogramma citrinum* Brunetti

##### Genus *Syrphus* Fabr

2. *Syrphus ribesii* Linnaeus

##### Genus *Episyrphus* Matsumura and Adachi

3. *Episyrphus balteatus* DeGeer

##### Tribe Bacchini

##### Genus *Xanthandrus* Verral

4. *Xanthandrus comtus* Harris

##### Genus *Platycheirus* Lapeletier and Serville

5. *Platycheirus albimonus* Fabricius

**Tribe Paragini**

**Genus *Paragus* Latreille**

6. *Paragus luteus* Brunetti

**Subfamily Milesiinae**

**Tribe Milesini**

**Genus *Milesia* Latreille**

7. *Milesia sexmaculata* Brunetti

8. *Milesia verticalis* Brunetti

**Tribe Eristalini**

**Genus *Eristalinus* Rondani**

9. *Eristalinus aeneus* Scopoli

10. *Eristalinus sepulchralis* Linnaeus

**Genus *Eristalis* Latreille**

11. *Eristalis tenax* Linnaeus

**Tribe Xylotini**

**Genus *Xylota* Meigen**

12. *Xylota nursei* Brunetti

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