Website: www.crsdindia.com/ajals.html



e-ISSN: 2455-6149

ORIGINAL ARTICLE

Thysanoptera (Insecta) Fauna of Agra, Uttar Pradesh

Vivek Singh

Department of Zoology, Dr. B.R.A. Government Degree College, Anaugi, Kannauj (U.P.) Email: viveksingh0980@gmail.com

Received: 28th April 2017, Revised: 20th May 2017, Accepted: 4th June 2017

ABSTRACT

Thysanoptera (Insecta) is a group of minute insects which play an important role in pollination but many species are pest of crop plants and carrier of various viruses and are responsible for plant diseases. In present study, total 11 species of Thysanopterans have been found from Agra belonging to 3 families i.e. Aeolothripidae, Thripidae 6 and Phlaeothripidae and 11 genera.

Key words: Thysanoptera, Fauna, Agra, Thrips

INTRODUCTION

Thysanopterans are important group of mostly minute insects that reside in diverse habitats. There are about 7,400 species of thrips are known throughout the world (Mound, 2009) and about 739 species are reported from India (Tyagi and Kumar, 2016).

Thrips are of economic importance as many species are pests of crops (Lewis, 1998) and vectors of viral diseases of plants. Agra (27.18°N 78.02°E) is a historical city of western Uttar Pradesh situated on the banks of river Yamuna. Agra has a semi-arid type of climate. It receives about 745 mm of precipitation annually. In present study I explored the Thysanoptera fauna of Agra.

MATERIALS & METHODS

Specimens were collected with the help of white tray and camel hair brush in collecting fluid which is composed of 10% Ethanol, Glacial acetic acid and Triton X-100 (Bhatti, 1999). The material can be kept preserved in above mentioned collecting fluid over a long period of time.

Studies on slide mounted specimens was done with the help of compound microscope.

RESULT AND DISCUSSION

A total of 11 species belonging to 3 families and 11 genera are recorded-

Suborder- Terebrantia

Family- Aeolothripidae

1. *Coleothrips collaris* (Preiesner, H. 1919)

Specimen collected- 5 males & 4 females from wild rose (Rosaceae) & Lantana camara.

Habitat- Flowers of a various species

2. Indothrips bhushani (Bhatti 1967)

Specimen collected-23 female and 10 males from *Azadirachta indica* on 07/06/2016.

Habitat- This species is found only in flowers of *Azadirachta indica*.

Family-Thripridae

Subfamily-Panchaetohripinae

3. Astrothrips stannardi (Bhatt 1967)

Specimen collected- 30 males and 16 females from *Lantana camara* (verbenaceae) and nearby bushes on 07.06.2016.

Habitat-Polphagous species.

4. Caliothrips indicus (Bangnall 1913)

Specimen collected- 9 females & 3 males from *Tagetes erecta* (compsitae) on 09.06.2016 & 04 females & 16 males from *Panicum sp.* (Poaceae) on 03.06.2016.

Habitat- Polyphagous, probably breed on *Tagetes sp.*

5. Rhipiphorothrips cruentatus (Hood 1919)

Specimen collected- 28 females & 12 males from *Terminalia arjuna* (Combretaceae) on 25.062016 and 31 females & 09 males from *Lantana camara* (verbenaceae) on 07.06.2016.

Subfamily-Thripinae

6. *Ayyaria chaetophora* (Karny 1926)

Speciman collected- 3 females & 14 males from *Parthenium sps* on 05.06.2016 and 21 females & 10 males from *Achyranthes aspera* on 23.06.2016.

Habitat- Polyphagous leaf feeding species.

7. Farnkliniella Schultzei (Schmutz 1913)

Specimen collected: 3 females and 11 males from *Parthenium hysterophosus* (Compositae) on 15.06.2016: 5 females & 18 males from *Lantana sps.* on 07.06.2016.

Habitat- Highly polyphagous, mostly present on various flowers.

8. Kurtomathrip morrilli (Moulton 1927)

Specimen collected- 14 females & 12 males from *Parthenium sps* (compositae) on 12.06.2016. Habitat- Lives on *Parthenium sp.*

Suborder-Tubulifera

Family-Phlaeothripidae.

9. *Apterygothrips pellucidus* (Ananthakrishan 1967)

Speciman collected- 2 females macropterous & 1 male micropterous from grass clumps on 05.06.2016.

Habitat- Unknown

10. Azaleothrips lineus (Bhatti 1995)

Specimen collected- 26 females and 09 males from *Ficus benghalensis* on 17.06.2016 & 06.06.2016 Habitat- *Ficus benghalensis*

11. *Gigantothrips elegans* (Ziminermann 1900) Specimen collected- 28 females & 21 males from *Ficus sp.* on 17.06.2016.

Habitat- Ficus species

REFERENCES

- Ananthakrishnan T.N. (1970): Indian Thysanoptera, CSIR, India, Zoological Monograph (1969). No. 171 pp, New Delhi.
- **2.** Bhatt J.S. (1999): Enigmatic complete anterior tentorium and tentorial body in adults of the onion thrips, *Thrips tabaci* (Thripidae) with review of the tentorium in the order Terebrantia. Thrips, 1: 15-30.
- **3.** Bhatti J.S. (1988): The orders Terebrantia and Tublifera of the superorder Thysanoptera (Insecta). A critical appraisal Zoology, 1(2): 167-240.
- 4. Bhatti J.S. (1990): Catalogue of Insects of the order Terebrantia from the Indian subregion. Zoology, 2: 205-352.
- **5.** Lewis T. (1998): Thrips as crop pests. CAB International, 744 pp.
- **6.** Mound L.A. (2009): World Checklist of Thysanoptera on CSIRO website.
- 7. Tyagi K. and Kumar V. (2016): Thrips (Insects: Thysanoptera) of India- an updated checklist. Halters, 7: 64-98.