

SUMMER



VI- SUMMARY

Flies of the family Tipulidae (Diptera-Nematocera) are economically important, as many of their larvae are serious agricultural pests to cultivated crops.

The present work aims at collecting and studying the taxonomy of the family and the results are summarized as follows:

1-Collection of materials:

Collection of tipulid flies was carried out from March 1993 to January 1996 in 15 localities belonging to 15 governorates [Coastal Strip, Western desert, Lower Nile valley, Upper Nile valley, Eastern desert and Sinai].

Sweeping net and the ultra violet light trap were the methods of collection.

A total of 372 tipulid specimens of 10 species belonging to 9 genera under two subfamilies were collected.

The main hosts are wheat, maize, rice, barely, clover and meadows.

The highest occurrence of the most tipulid species recorded at harvesting seasons.

Regarding the total number of collected specimens of each species they could be arranged descendingly as follows:

Tipula oleracae Linnaeus was the most common species (143 specimens) followed by *Conosia irrorata* (Wiedemann) (78 Specimens) *Trimicra inconspicua* (Loew) (55 specimens), *Eeioptera septmetronis* Osten-Sacken (53 specimens), *Limnobia marginata* (Macquart) (21 specimens), *Dicranomyia ventralis* (Schummel) (11 specimens), *Helius longirostris* (Wiedemann) (7 specimens), *Gonomyia sexguttata* (Dale) (2 specimens) and lastly the two rare species *Gonomyia spuria* (Bergroth) and *Symplecta stictica* Meigen which represented by one specimen for each.

2- Morphological study:

A detailed morphological study of the two common adult tipulid species *Tipula oleracea* Linnaeus (Tipulinae) and *Conosis irrorata* (Wiedemann) (Limoniinae) has been carried out to clarify the important taxonomic characters which facilitate the identification of all taxa.

The result indicated that:

- Family Tipulidae is distinguished from other nematoceran families by the absence of ocelli, 2 anal veins reaching wing margin. presence of V-shaped transverse suture on mesonotum.
- Length of antennae. structure of mouth parts, wing venation male genitalia and female ovipositor facilitated the identification and classification of different members of Tipulidae.

All morphological characters are clarified with labeled drawings.

3- Taxonomical study:

This study included the following:

- New taxonomic status and general characters of family Tipulidae.
- Keys to subfamilies. tribes, genera and species of the family in Egypt.
- Synonyms and diagnosis of all genera and species.
- Labelled drawings for all represented species (adults) showing the most important characters that were used in keys and diagnosis. Also male and female genitalia were illustrated.

*Family Tipulidae is represented in Egypt by two subfamilies:

-Subfamily Tipulinae : represented by 2 genera and 2 species.

-Subfamily Limoniinae: represented by 8 genera and 10 species

included 3 genera *Dicranomyia* Stephen, *Limnobia* Meigen, *Erioptera* Meigen and 5 species *Dicranomyia ventralis* (Schummel), *Limnobia marginata* (Macquart), *Gonomya spuria* Bergroth, *Symplecta stictica* Meigen, *Erioptera septemtrionis* Osten Sacken. are recorded for the first time in Egypt.