

Diversity of Spiders in Agricultural Fields from Partwada Tahsil, District Amaravati (Maharashtra State)

Vairale, Amit B.

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Abstract

Spiders are one of the most important predators in the terrestrial ecosystem. The current study was conducted in the agricultural fields of district Amravati.

Keywords: Diversity | Spiders | Agricultural Fields

Introduction

Spiders are among the most abundant insectivorous predators of Terrestrial ecosystem. Order Araneae is a large group of animals, which is commonly called as Spiders. They are one of the most diverse animals group in the world. Spiders play an important role in insect pest control without any harm to agricultural field. Recently in agricultural fields reduced pesticide use and ecological sustainability have lead to increased interest in spiders as potential biological pest control agents. Considerably insect populations increase when release from predations by spiders. They are widespread and found in all types of habitats. Regularly use of pesticides in agricultural fields which decreases the spider populations.

Spider species abundance in agricultural Fields can be high as undisturbed natural ecosystem. Spiders act as pest control creature, which feeds on crop destructive insects. Spiders are beneficial bio-control agent of insect pest in agricultural fields. The Spiders varies greatly in their shape and size. A survey of Spiders was carried out in

For Correspondence:

Department of Zoology, Ghulam Nabi Azad Arts,
Commerce and Science College, Barshitakli, District
Akola, Maharashtra
Email: abvairale25@rediffmail.com

Agricultural fields of Partwada Tahsil, District Amaravati during 2016-17.

Material and Method

A survey of Spiders was carried out in Agricultural Fields of Partwada Tahsil, District Amaravati during 2016-17. Spiders specimens were collected from 2016-2017. Spiders were collected from different areas of Agricultural Fields of Partwada region. For collection of spiders direct searching, Pit fall trapping, collected by Insect nets, beating steak and umbrellas were used. The Spiders Specimens were put in 75% alcohol, labeled and identified according to Kaston spider book and Tikader 1962. Before preservation the photographs were taken in different views, to get the clear eye position, pattern and shades of cephalothorax, abdomen, spines and hairs pattern.

Observation and Result

A survey of Spiders was carried out in Agricultural Fields of Partwada Tahsil,

District Amaravati during 2016-17. During the present study survey we have reported 94 species of Spiders belonging to 14 Families and 32 genera. Spiders of Families Araneidae, Clubionidae, Eresidae, Gnaphosidae, Lycosidae, Miturgidae, Oxyopidae, Philodromidae, Salticidae, Scytodidae, Tetragnathidae, Theridiidae, Thomisidae, Uloboridae were recorded during the investigation.

Conclusion

Spider's predatory capacity can have an effect in decreasing densities of insect pests. Aphids are important pests of Agricultural Fields, which are destroyed by spiders. Spiders are used to balance the effect of Insecticides and Pesticides. Due to destroying pest, spiders act as natural biological control agent in agricultural fields. Spiders act as natural biological controller, so spiders are good friends of farmer.

Sr. No.	Family	Genera	Species
1	Araneidae	08	15
2	Clubionidae	01	04
3	Eresidae	01	02
4	Gnaphosidae	02	09
5	Lycosidae	03	12
6	Miturgidae	01	03
7	Oxyopidae	04	10
8	Philodromidae	01	02
9	Salticidae	05	14
10	Scytodidae	01	04
11	Tetragnathidae	01	02
12	Theridiidae	01	04
13	Thomisidae	02	11
14	Uloboridae	01	02
Total		32	94

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