

Control of insect pest with the help of spiders in the orange fields of chandur bazar tahsil, district Amravati, Maharashtra State

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Abstract

Spiders are among the most abundant insectivorous predators of Terrestrial ecosystem. Spiders are one of the most diverse animal groups in the World. Spiders are carnivorous creature. Spider plays an important role in regulating insect pests in the Agricultural Ecosystem. They mostly feed on insects, even though they may also feed on various other kinds of prey. Spider's predatory capacity can have an effect in decreasing densities of insect pests, when they are used to balance the effect of insecticides and Pesticides. If pesticides are avoided, spiders can invariably take shelter in the fields, feed on the pests and increase the productivity.

The constant use of a wide range of pesticides has caused many side effects, like loss of biodiversity, the problem of secondary pests, insecticide resistance, residual toxicity, the recovery of insect pests and Environmental Pollution. Spiders consume a large number of small creatures and do not injure vegetation. Predatory arachnids such as Spiders are important biological control agents. During the present study I have reported 94 Species belonging to 19 Families and 53 Genera of Spiders in Orange fields of Chandur Bazar Tahsil, District Amravati, Maharashtra State. Spiders of Families Araneidae, Clubionidae, Corinnidae, Eresidae, Gnaphosidae, Hersilidae, Linyphiidae, Lycosidae, Miturgidae, Oxyopidae, Philodromidae, Pholsidae, Salticidae, Scytodidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Uloboridae were recorded during the investigation.

Some spiders are among the most effective predators of leafhoppers, caterpillars, and other pests. Aphids are rarely important pests of Oranges. Some Spiders and Spider lings are main control agents of aphids. Due to destroying the pest or insects, spiders are friends of farmer. Spiders are important Pests control agents.

Spiders are beneficial to human beings in the sense that they feed not only on the pests of agro ecosystem but also the pest of man such as cockroaches, flies, Mosquitoes. In households, a particular spider as the giant crab spider has been known as an effective in controlling cockroaches and other insect pests found in the domestic environment. Predatory arachnids such as spiders are an important group of biological control agents.

Keywords: insect pest, spider, orange fields, chandur bazar

1. Introduction

Spiders are among the most abundant insectivorous predators of Terrestrial ecosystem. Spiders are one of the most diverse animal groups in the World. Spiders are carnivorous creature. Spider plays an important role in regulating insect pests in the Agricultural Ecosystem. They mostly feed on insects, even though they may also feed on various other kinds of prey.

There are 41,835 spiders species are found all over the world in almost every kind of habitat. They mainly prey on insects, even though they may also feed on various other kinds of prey.

Spiders are beneficial to human beings in the sense that they feed not only on the pests of agro ecosystem but also the pest of man such as cockroaches, flies, Mosquitoes. In households, a particular spider as the giant crab spider has been known as an effective in controlling cockroaches and other insect pests found in the domestic environment. Predatory arachnids such as spiders are an important group of biological control agents. Spiders are main predators of pests of Orange.

They have usually been treated as an important biological control agent, because there is ecological role of spiders in pest control. Use of chemical pesticides has killed natural predators in the agro ecosystems and also disturbing the natural fauna. Several toxic insecticides and pesticides are recommended to control pests in Orange field. These chemicals insecticides and pesticides are destroying the vegetation. The constant use of a wide range of pesticides has caused many side effects, like loss of biodiversity, the problem of secondary pests, insecticide resistance, residual toxicity, the recovery of insect pests and Environmental Pollution. Spiders consume a large number of small creatures and do not injure vegetation. Predatory arachnids such as Spiders are important biological control agents.

2. Materials and methods

A survey of Spiders was carried out in Orange Fields of Chandur Bazar Tahsil, District Amravati during July 2016 to January 2017. Spiders were collected from different areas of Orange Fields. For collection of spiders direct searching, collected by Insect nets, Pit fall trapping, beating steak and umbrellas were used. The Spiders Specimens were identified according to standered literature ^[1]. The photographs were taken in different views, to get the clear eye position, pattern and shades of cephalothorax and abdomen, spines and hairs pattern.

3. Results and discussion

During the present study I have reported 94 Species belonging to 19 Families and 53 Genera of Spiders in Orange fields of Chandur Bazar Tahsil, District Amravati, Maharashtra State. Spiders of Families Araneidae, Clubionidae, Corinnidae, Eresidae, Gnaphosidae, Hersilidae, Linyphiidae, Lycosidae, Miturgidae, Oxyopidae, Philodromidae, Pholsidae, Salticidae, Scytodidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Uloboridae were recorded during the investigation. For details I have arranging the data in a Table.1 given below:

Table 1: Schematic representation of 94 Species of spiders reported from Orange fields of Chandur Bazar Tahsil, District Amravati, Maharashtra

Sr. No.	Family	Genera	Species
1	Araneidae	11	21
2	Clubionidae	02	04
3	Corinnidae	01	02
4	Eresidae	01	02
5	Gnaphosidae	05	08
6	Hersilidae	01	02
7	Linyphiidae	02	05
8	Lycosidae	04	07
9	Miturgidae	02	04
10	Oxyopidae	04	06
11	Philodromidae	02	03
12	Pholsidae	02	04
13	Saltisidae	07	10
14	Scytodidae	01	03
15	Sparassidae	01	01
16	Tetragnathidae	01	02
17	Theridiidae	02	04
18	Thomisidae	03	05
19	Uloboridae	01	01
Total		53	94

4. Conclusion

Spider's predatory capacity can have an effect in decreasing densities of insect pests, when they are used to balance the effect of insecticides and Pesticides. Some spiders are among the most effective predators of leafhoppers, caterpillars, and other pests. Aphids are rarely important pests of Orange. Some Spiders and Spider lings are main control agents of aphids. Due to destroying the pest or insects, spiders are friends of farmer. Most spiders feeds on insects that's why productivity of crop gets increased, hence spiders are important Pests control agents.

5. References

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