

Spiders fauna from G.V.I.S.H. Campus, Amravati (M.S.)

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Abstract

The spiders from G.V.I.S.H. Campus, Amravati (M.S.) were collected from first week of August to last week of November 2008, using insect nets, tapping sticks, umbrella, pit fall trap etc. During the study 470 specimens were collected from different area of campus. 35 species belonging to 12 families were identified. Family Araneidae represented 7 species, Salticidae represented 6 species, Oxyopidae and Eracidae represented 4 species, Therididae and Thomisidae represented 3 species each, families Lycosidae and Pholcidae represented 2 species, families Clubionidae, Philodromidae, Tetragnathidae, Uloboridae, represent single species. The population of spiders was abundant. Species richness and diversity was high during the month of September and October, the population of species *Stegodyphus* was observed largely during the month of November.

Keywords:- *Spiders, Araneae, Species diversity, Insect*

Introduction

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. They are widespread and found in all types of habitats. Spiders are carnivorous creatures, feeding on insects and small Arachnids, which is one of most abundant predatory groups. More than 37777 species of spiders belonging to 3496 genera, under 109 families are known from all over the world. From the Indian subcontinent, 1035 species of spiders belonging to 240 genera under 46 families are known. Spiders inhabit diverse habitats, they may be found on or near water, in or on the ground, from underground caves to the top of mountains, on or under the bark of trees, found on tall grasses, on bushes, inside human habitations etc.

The spider varies greatly in their size and shape. They also show great variations in colours, mostly mimics their surroundings in body form and colours. Some spiders resembles other animals, some time ant-like spiders, beetle-like spiders confuses with insects, but can be distinguished from insects by

having four pairs of legs, one pair of pedipalp, six or eight pairs of simple eyes etc. All spiders possess spinnerets and produce silk, which is used in many ways. Hunting spiders do not built any web, but the silk produced is having specific use for them. Web spiders use its silk to ensnare the trapped prey. Poison glands are found in most of the spiders, which open by a pore near the tip of each cheliceral fang. Spiders use their venom to kill or subdue the prey and as mean of defense. Most of the spiders are not dangerous to human being. The spiders are present everywhere and are exclusively carnivorous, prey mainly on insects. They are one of the most important biological agents in nature, which help in keeping the insect population in control. A large number of spiders are found in cultivated fields and must be preying on a large number of insect pests of crops. Spiders may be a significant enemy of insect pests. The main aim of present study was to investigate spiders fauna of G.V.I.S.H. campus, Amravati (M.S.)

Materials and Method

To observe and investigate the spiders fauna of G.V.I.S.H. Campus, Amravati (M.S.), spiders specimen were collected during the first week of

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September to last week of November 2008. Spiders were collected from different areas of campus, such as Botanical garden, Apsara Uddyan, Bohsala Auditorium, social forest, Boys hostel, fencing etc. For collection of spiders insect nets, pitfall trap, stroking sticks, umbrellas were used. The specimens were put in to 70 % alcohol, labeled and identified according to Tikader (1962, 1973, 1982). Before preservation the photographs were taken in different views, to get the clear eye position, pattern and shades of cephalothorax and abdomen, hair and spines pattern etc.

Results and Discussion

During this study 470 specimens were collected from campus of G.V.I.S.H. Amravati (M.S.). 35 species belonging to 12 families were observed and identified (Table 1). Among the specimens most of the individuals were adult and only few males were observed. The most abundant species were observed from families Araneidae and Salticidae. Species of *Stegodypus* belonging to family Eracidae was abundant during early November and their webs were observed having more than 300-400 eggs, all over the fencings and trees like *Tamarindus*, *Zizipus*, *Bougainvillia* etc.

Table 1: Spiders recorded from G.V.I.S.H. Campus Amravati (M.S.)

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| <p>i) Family:-Araneidae (Orb-web spiders)</p> <ol style="list-style-type: none"> 1) <i>Araneus</i> sp. (Female) 2) <i>Araneus mitifica</i> (Female) 3) <i>Araneus shillongensis</i> (Female) 4) <i>Argiope</i> sp. (Female) 5) <i>Cyclosa</i> sp. (Female) 6) <i>Neoscona theis</i> (Female) 7) <i>Neoscona</i> sp. (Female) <p>ii) Family:- Clubionidae</p> <ol style="list-style-type: none"> 8) <i>Clubiona</i> sp. (Female) <p>iii) Family:- Erasidae</p> <ol style="list-style-type: none"> 9) <i>Stegodypus</i> sp. (Female) | <ol style="list-style-type: none"> 10) <i>Stegodypus</i> sp. (Female) NEW 11) <i>Stegodypus prakashii</i>. (Male) 12) <i>Stegodypus sarasinorum</i> (Female) <p>iv) Family:- Lycosidae (Wolf spiders)</p> <ol style="list-style-type: none"> 13) <i>Hyppasa</i> sp. (Female) 14) <i>Lycosa</i> sp. (Female) <p>v) Family:- Oxyopidae (lynx spiders)</p> <ol style="list-style-type: none"> 15) <i>Oxyopus Chittrae</i>. (Female) 16) <i>Oxyopus pankaji</i>. (Female) 17) <i>Oxyopus pawani</i>. (Female) 18) <i>Oxyopus</i> sp. (Female) <p>vi) Family:- Philodromidae</p> <ol style="list-style-type: none"> 19) <i>Philodromous</i> sp. (Female) <p>vii) Family:- Pholcidae</p> <ol style="list-style-type: none"> 20) <i>Pholcus</i> sp. (Female) 21) <i>Pholcus</i> sp. (Female) <p>viii) Family:- Salticidae</p> <ol style="list-style-type: none"> 22) <i>Euophrys</i> sp. (Female) 23) <i>Marpissa</i> sp (Female) 24) <i>Phidippus</i> sp. (Female) 25) <i>Phidippus</i> sp. (Male) 26) <i>Plexipus</i> sp. (Female) 27) <i>Telamonia dimidiata</i> (Female) <p>ix) Family:- Tetragnathidae (Long-)</p> <ol style="list-style-type: none"> 28) <i>Tetragnatha mandibulata</i> (Female) <p>x) Family:- Therididae</p> <ol style="list-style-type: none"> 29) <i>Leucauge decorata</i> (Female) 30) <i>Leucauge</i> sp. (Female) 31) <i>Theridion</i> sp. (Female) <p>xi) Family:- Thomisidae (Crab spiders)</p> <ol style="list-style-type: none"> 32) <i>Thomisus</i> sp. (Female) 33) <i>Thomisus</i> sp (Male) 34) <i>Xisticus</i> sp. (Female) <p>xii) Family:- Uloboridae</p> <ol style="list-style-type: none"> 35) <i>Uloborus</i> sp. (Female) |
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Conclusion

The spiders were found to be living in different types of habitat. The spiders belonging to families



Thomisidae, Salticidae, Araneidae, Tetragnathidae, Oxyopidae and Errasidae were mainly found in campus vegetation. Spiders living in residential places included those belonging to families Pholcidae, Uloboridae and Salticidae. Most spiders were found living on the ground, under the stones or in vegetation exhibiting some kind of colouration for camouflage. No exceptionally poisonous spiders was found among the species recorded in the campus. The spiders are exclusively carnivorous and hence help naturally to control insect pests.

References

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