The Study Of Spider Diversity And Its Importance In Agricultural Field As A Biocontrol From The Lasalgaon Region, Tal-Niphad, Dist-Nashik. (M.S.) India.

Shambharkar R. M.

N.V.P. Mandals, Arts, Commerce and Science College, Lasalgaon, Tal-Niphad, Dist-Nashik (M.S.) India.

Date of Submission: 01-10-2023 Date of Acceptance: 10-10-2023

ABSTRACT:

The study of the spiderdiversity in the given region of this group of arthropods animal. This arthropods animals no more study in the given region so, no more data available to review for the study. This research paper provides the primary information about the spider in the Lasalgaonregion in the Nashik District (M.S.) India. The study of spiders in the different local areas during the June 2022to July 2023. The total number of species...15.....of spider species are seen with ...09......families during the study.

This data are helpful for the future researchers in the state of Maharashtra in the given areas in according to the spidersarthropods.

Keywords: Spiders, Diversity, Arthropods. Lasalgaon, Khangaon, Pimpalgaon Najik, Near Shiv river

I. INTRODUCTION:

The spiders are more diversified invertebrate fauna are occurred in the region of Lasalgaon area. Spiders are found in the worldwide region, its abundantly occur in the terrestrial ecosystem. The spiders are very important role in the food chain in the ecosystem. The shelters of the spider are catch different types of the insects and used as food. There are 42,055 species of spiders are occurred in the worldwide. The spiders are generally occurred in the terrestrial ecosystem. There is no more information record in according to spiders in the given region. (Gavali C.S. et.al.2019),(Suraj. R. et.al. 2020).

The Lasalgaon come under the Nashik district of Maharashtra , all over the around green farm , more and more , different types of insects are occurred in the area of this region , so availability of food for the spiders and its altimetry help to the farmers to control the diseases. The spiders are

carnivorous to eat various disease spreading pest, like thrips; at the time of movements the pests the pest come in the contact of spider traps it will be not escape so, the spider attack and kill and eat it. The sustainable ecosystem maintain in the nature. The conservation of the spidersits most important surveys to study of spiders its very needful and important in the given region.

The study of the spider diversity it is most important for conservation because they ultimately help to the farmer and maintain to the ecosystem. The various types of agricultural pest attack on the agricultural crops, with the help of spider trap the spider attacked on the trapped pest and utilized as food. Ultimately decreasing the number of pest, so its help to the farmer to quality and quantity of agricultural crops.

II. MATERIALS AND METHODS: Collection Method:

1) Cryptic searching:

The various species of spider habitats on leaf of the plants and plant residues and moss . Most of the sampling collected from plant residues and on the plant leaf and bark.

2) Ground hand collection:

Some species are crowing on the ground it's very easy to sampling collection and analysis.

3) Arial hand collection:

Most of the species to make the trap for the purpose of food, various insects are accidently trap net of the spider. It's easy to collection and analysis.

Study Area:

The present research work was conducted from June 2022 to July 2023 at the different local areas in the city of Lasalgaon and near areas. The given spider specimen were collected N. V. P. Mandals Arts, Comm. and Science College, Lasalgaon, Rukmininagar, Station road, Holkarwadi, Nimgaonwakda, Pimpalgaon (Near Lasalgaon), Khangaon and near the **Shiv river**, the river passing in between the Lasalgaon and Pimpalgaon.

Sampling Method:

The spider specimen was collected by standard sampling technique as active searching, photograph with the help of Google lanceand hand pickling method. All activity takes place early in the morning as 8.00 to 11.00 A. M. All the specimen were collected as well and preserved in the 70% alcohol.

Identification:

The Spider specimen was identified with the help of Google lance and Keys by Tikader (8) were used for the spider identification.

III. RESULT AND DISSCUSSION:





A- Hognacarolinenesis



C- Rabidosarabida

B- Pardosamilvina



D- Argiopeaemula



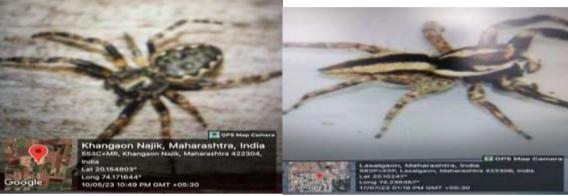
International Journal of Advances in Engineering and Management (IJAEM)

Volume 5, Issue 9 Sep 2023, pp: 642-646 www.ijaem.net ISSN: 2395-5252



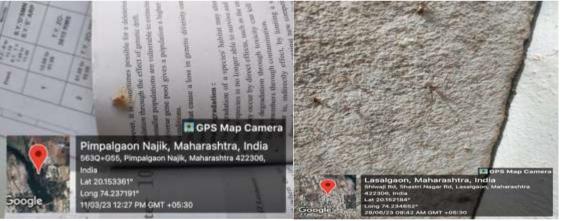
E- Tibellusoblongus

F- Argiopekeyserlingi



G- Nucteneaumbratica

H- Menemerusbivittatus



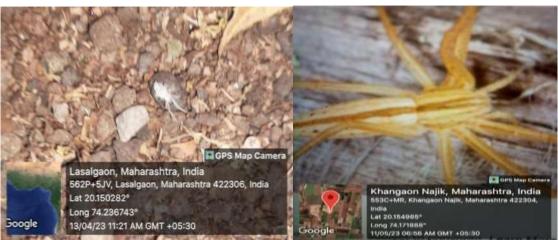
I-Telamonia dimidiate

J-Pholcusphalangioides



K-Latrodectusgeometricus

L-Leiobunumrotundum







O-Oxyopessalticus

No. of	No. of	Name of Family and species
Species	Families	
	1.	1. FamilyLycosidae
1		A- i) Hognacarolinenesis
2		B- ii) Pardosamilvina
3		C- iii) Rabidosarabida
	2.	2.Family-Araneidae
4		D- i) Argiopeaemula
5		E- ii) Tibellusoblongus
6		Fiii) Argiopekeyserlingi
7		G- iii) Nucteneaumbratica
	3.	3. Family-Saltacidae
8		H- i) Menemerusbivittatus
9		I- ii) Telamoniadimidiata
	4.	4. Family-Pholcidae
10		J - i) Pholcusphalangioides
	5.	5. Family-Theridiidae
11		K- i) Latrodectusgeometricus
	6.	6.Family- Sclerosomatidae
12		L- i) Leiobunumrotundum

International Journal of Advances in Engineering and Management (IJAEM)

Volume 5, Issue 9 Sep 2023, pp: 642-646 www.ijaem.net ISSN: 2395-5252

	7.	7.Family- Thomisidae
13		M- i) Thomisusspectabilis
	8.	8.Family- Philodromidae
14		N- i) Tibellusoblongus
	9	9.Family -Oxyopidae
15		O- i) Oxyopessalticus

Total ...15....species are representing ...09.....families was recorded during the time of study

The studies of spiders in concerns of beneficial of the farmers as well as some spiders are bites to the human beings and inject the venom in the body of the human beings. But there are no any published documents to clearlyconfirmation of the venomous informationbites by the spiders. Thespidersvenom are used for the treatment of some human diseases such as erectile dysfunction, strokes, Alzheimer's diseasesand cardiac arrhythmia. The species of the spiders are very much important for the study of medically important. This study was very important for new investigators concern study of spiders.

IV. CONCLUSION:

The present research study is the primary documents concern to study of spiders in the region . This research paper information about the spider in the Lasalgaoncity andnear area, District- Nashik, during the year of June 2022- July 2023.

REFERENCES:

- [1]. Alderweireldt, M.1994,a. Habitat manipulation increasing spider densities in agroecosystem:Possibilities for biological control?J.Appl. Ent., 118:10-16
- [2]. Gertsch, W.J.1979, American spiders, Van Reinhold, : 1-274
- [3]. Gravely, F.H.1924.Some Indian spiders of family Lycosidae.Rec.Indian Mus.,26: 587-611.
- [4]. Levi, H. W 1971b.The orb-weaver genera, Singa and Hyposinga in America (AraneaeAraneidae).
- [5]. Psyche, Camb., 78(4): 220-256.
- [6]. P.A. SEBASTIAN & K.V. PETER (Hrsg.) (2009): Spiders of India
- [7]. Paik, K. Y.1994b. A new species of the genus Lycosa(Araneae: Lycosidae) from Korea. Korean rachno. 10 (1-2): 23-30.
- [8]. Pocock, R.1.1899. Diagnosis of some new India Arachnida. J. Bombay Nat. Hist. Soc., 12: 744-752
- [9]. Savory, T. H. 1928 "The Biology of spider".P.376, Sidgwick and Jackson Ltd., London.

- [10]. Schaefer, M.A., Hille, A. and Uhl G.B. 2001. Geographical patterns of genetic subdivision in theceller spider Pholcusphalangiodes (Araneae). Heredity, 186(1):94-102.
- [11]. Sebastian, P.A., Mathew M.J., Pathummal B.S., Joseph, J. and Biju, C.R. 2005. The spider fauna of the irrigated rice ecosystem in Central Kerala, India, across different elevational ranges. The Journal of Arachnology, 33: 247255.
- [12]. Sherriffs, W.R. 1951. Some Oriental Spider of genus Oxyopesproc.Zool. Soc. Lond.,120-651.
- [13]. Singh N.P. and Sihag V.2011 Biodiversityt of Spider, Ritu Publication Jaipur, India.
- [14]. Stoliczka, E. 1889. Contribution towards the knowledge of polish spider fauna. Fragm. Faun Poland, 13(9): 175-186.
- [15]. Tikader, B.K. 1987. Handbook of Indian Spiders, Zoological Survey of India, Calcutta, India. pp251
- [16]. Tikader, B.K. 1980. Fauna of Indian spider (Araneae), part 1, Thomisidae. PP. 1-258.
- [17]. Vaibhav P.U. 2017.Spider diversity of Karnatak University Campus, Dharwa www.googlelence.com