



RRECORD OF SOME SPIDERS (ARACHNIDA: ARANEAE) FOUND IN GHODAZARI, CHANDRAPUR DISTRICT, MAHARASHTRA

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Abstract:

Spiders are important biocontrol agents in terrestrial ecosystems. An attempt has been made to study the spider diversity of Ghodazari in Chandrapur district of Maharashtra. The present study has revealed thirteen species of spiders in twelve genera of nine families, viz., Scytodidae, Pholcidae, Oecobiidae, Hersiliidae, Tetragnathidae, Araneidae, Lycosidae, Oxyopidae and Sparassidae. The recorded species include both hunting spiders and orb-web weavers.

Keywords: Arachnida, Araneae, Fauna, Ghodazari, Spider.

INTRODUCTION

Spiders belong to order Araneae of class Arachnida. They come in various sizes, sport numerous colours and are found in different terrestrial habitats. According to the World Spider Catalogue version 16.5 (2015), 45618 species of spiders belonging to 3958 genera in 114 families are known from the world. According to Sanyal and Tandon (1998), 1035 species of spiders in 240 genera of 46 families are known from the Indian subcontinent. Tikader (1963) and, Tikader and Malhotra (1974) have described some spiders from Maharashtra. Tikader (1980, 1982) reported some spiders from Central India. Gajbe (2004) has reported 107 species of spiders from Jabalpur, in Central India.

Materials and Methods:

During a zoological excursion on 15 Dec. 2012, spider diversity was studied around Ghodazari Lake located in Nagbhid taluka of Chandrapur district in Maharashtra state. Spiders were observed and collected from deciduous forest vegetation surrounding the lake. The collected specimens were preserved in 70% ethyl alcohol in glass vials. The species were identified with the help of the cited scientific literature by the comparison of morphological features.

Results:

A total of 13 species of spiders belonging in 12 genera of 9 families under order Araneae of class Arachnida have been recorded in the present study. A systematic account of the identified species is as follows:

Family Scytodidae

1. *Scytodes alfredi* Gajbe, 2004

2004. *Scytodes alfredi* Gajbe, Rec. zool. Surv. India, Occ. Pap. 227: 20.

Remarks: Found on vegetation hunting insects.

Distribution: India: Madhya Pradesh.

Family Pholcidae

2. *Artema atlanta* Walckenaer, 1837 (Pic. 1)

1981. *Artema atlanta*: Tik. and Biswas, Rec. zool. Surv. India, Occ. Pap. 30: 18.

Remarks: Makes irregular cob-webs in buildings for trapping insect prey.

Distribution: India: Maharashtra, Madhya Pradesh, Uttar Pradesh, West Bengal, Punjab, Rajasthan. Elsewhere: Sri Lanka, Myanmar.

Family Oecobiidae

3. *Oecobius putus* O. P. -Cambridge, 1876

1981. *Oecobius putus*: Tik. and Biswas, Rec. zool. Surv. India, Occ. Pap. 30: 12.

Remarks: Makes tiny webs in corners of walls in houses.

Distribution: India: Madhya Pradesh, Tamil Nadu, Maharashtra, West Bengal. Elsewhere: Egypt, Libya, Yemen, Tanzania, and Pakistan.

Family Hersiliidae

4. *Hersilia savignyi* Lucas, 1836 (Pic. 2)

1981. *Hersilia savignyi*: Tik. & Biswas, Rec. zool. Surv. India, Occ. Pap. 30: 47.

Remarks: Found in camouflage colouration on the bark of trees.

Distribution: India: Chhattisgarh, M.P., Karnataka, Maharashtra, U.P., T.N., Orissa,

Bengal, Jharkhand, Bihar, Assam. Elsewhere: Sri Lanka, Philippines.

Family Tetragnathidae

5. *Leucauge decorata* (Blackwall, 1864) (Pic. 3)

1982. *Leucauge decorata*: Tikader, Fauna of India, Spiders, 2(1): 78.

Remarks: Found near water, makes orb-webs for trapping insects.

Distribution: India: Madhya Pradesh, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh, West Bengal, Meghalaya, Sikkim, Assam, Bihar, Orissa, Gujarat, Pondicherry. Elsewhere: Sri Lanka, Myanmar, and Pakistan.

6. *Nephila pilipes* (Fabricius, 1793) (Pic. 4)

1982. *Nephila maculata*: Tikader, Fauna of India, Spiders, 2(1): 97.

Remarks: Makes very large orb-webs between trees for trapping insects.

Distribution: India: M.P., Tamil Nadu, Karnataka, U.P., Assam, Sikkim, West Bengal, Maharashtra, Gujarat, Andaman and Nicobar Islands. Elsewhere: Sri Lanka, Myanmar, China, Australia, Malaysia, Japan, New Guinea.

Family Araneidae

7. *Argiope aemula* (Walckenaer, 1842) (Pic. 5)

1982. *Argiope aemula*: Tikader, Fauna of India, Spiders, 2(1): 119.

Remarks: Makes orb-webs with X-shaped stabilimentum.

Distribution: India: Chhattisgarh, Madhya Pradesh, Tamil Nadu, Maharashtra, West Bengal, Gujarat, Andaman and Nicobar Islands. Elsewhere: Sri Lanka, Myanmar, Indo and Austro-Malaysia.

8. *Cyrtophora cicatrosa* (Stoliczka, 1869) (Pic. 6)

1982. *Cyrtophora cicatrosa*: Tikader, Fauna of India, Spiders, 2(1): 178.

Remarks: Makes dome-shaped horizontal orb-web.

Distribution: India: Madhya Pradesh, Tamil Nadu, Maharashtra, West Bengal, Uttar Pradesh, Karnataka, Punjab, Gujarat, Andaman and Nicobar Islands. Elsewhere: Myanmar, New Guinea, Pakistan, and Austro-Malaysia.

9. *Neoscona mukerjei* Tikader, 1980

1982. *Neoscona mukerjei*: Tikader, Fauna of India, Spiders, 2(1): 248.

Remarks: Makes vertical orb-web in vegetation.

Distribution: India: Madhya Pradesh, Maharashtra, West Bengal.

10. *Neoscona nautica* (L. Koch, 1875) (Pic. 7)

1982. *Neoscona nautica*: Tikader, Fauna of India, Spiders, 2(1): 242.

Remarks: Makes vertical orb-web in vegetation.

Distribution: India: Madhya, Maharashtra, West Bengal, Gujarat, Meghalaya. Elsewhere: Myanmar, Pakistan, and North America.

Family Lycosidae

11. *Hippasa pisaurina* Pocock, 1900 (Pic. 8)

1980. *Hippasa pisaurina*: Tik. and Malhotra, Fauna of India, Spiders, 1(2): 300.

Remarks: Makes sheet-like web with escape hole over the ground.

Distribution: India: Madhya Pradesh, Maharashtra.

Family Oxyopidae

12. *Oxyopes pankaji* Gajbe and Gajbe, 2000 (Pic. 9)

2000. *Oxyopes pankaji* Gajbe and Gajbe, Rec. zool. Surv. India, 98(2): 123.

Remarks: Fast runner, found on vegetation looking for insect prey.

Distribution: India: Madhya Pradesh.

Family Sparassidae

13. *Heteropoda venatoria* (Linnaeus, 1767)

1931. *Heteropoda venatoria*: Gravely, Rec. Ind. Mus. Calcutta, 33: 251.

Remarks: Fast runner, found in buildings hunting insects.

Distribution: Pantropical.

Discussion:

Of the thirteen spider species in twelve genera of nine families recorded from Ghodazari, those belonging to the genera *Artema*, *Heteropoda* and *Oecobius* are found in buildings, whereas, the other species are found over vegetation. Spiders of the genera *Leucauge*, *Nephila*, *Argiope*, *Neoscona*, *Cyrtophora*, *Artema* and *Hippasa* make webs for catching insects, while other genera like *Heteropoda* and *Oxyopes* hunt the prey. *Nephila* and *Leucauge* spiders like to make their webs near water. *Nephila pilipes* makes the largest orb-webs between adjacent trees. Hunting spiders have better vision for catching prey as compared to orb-web spiders, which use webs for trapping flying insects.

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LEGENDS TO THE PICTURES IN PLATE I: SPIDERS OF GHODAZARI

(All photos by P. U. Gajbe)

(1) *Artema atlanta* (2) *Hersilia savignyi* (3) *Leucauge decorata* (4) *Nephila pilipes*
 (5) *Argiope aemula* (6) *Cyrtophora cicatrosa* (7) *Neoscona nautica* (8) *Hippasa pisaurina* (9) *Oxyopes pankaji*

PLATE I: SPIDERS OF GHODAZARI



1. *Artema atlanta*



2. *Hersilia savignyi*



3. *Leucauge decorata*



4. *Nephila pilipes*



5. *Argiope aemula*



6. *Cyrtophora cicatrosa*



7. *Neoscona nautica*



8. *Hippasa pisaurina*



9. *Oxyopes pankaji*

