CHAPTER-IV

4. ECOLOGY OF SPIDERS

4.1 Spiders Web

The term ecology deals with the detailed knowledge of the natural history of an organism under study. Hence in order to study the ecology of spiders note on their natural history were made which includes their foraging strategies; life cycle; parental care and their predators. One of the most important characteristic features of spiders is their ability to produce silk threads which are produced by spinning glands located at the posterior part of abdomen. In case of wandering spiders there are four different kinds of silk glands whereas in case of highly developed orb weavers there is presence of seven to eight silk glands viz., aggregate gland, cylindrical gland, flagelliform gland, minor ampullate gland, major ampullate gland, aciniform gland and piriform gland (Foelix, 2011). These silk glands are associated with spinnerets from where the silk is thrown out. There are few insect orders (Lepidoptera, Hymenoptera and Neuroptera) which also produce silk but it is restricted only to a single stage of life cycle i.e. from cocoon formation till pupation. Cocoon silk in insects contains two structural proteins i.e., fibroin, heavy and light chains, together with a family of sericin proteins to glue the fibroin (Jim & Kaplan, 2003), whereas spider silks are fine fibers produced from fibrous-protein solutions and are made up of protein polymers of amino acids (Lewis, 2006).

All spiders have ability to produce silk which is used for various purposes like for making egg sac (cocoon), for lining their nests, for ballooning, silk used during mating, for making draglines and also for building webs to capture prey.

Depending upon the foraging strategies of spiders, they have been categorized into eight different ecological guilt structures namely, Stalkers, Ambushers, Foliage runners, Ground runners, Sheet web-builders, Tangle weavers, Orb weavers and Space web-builders (Uetz et al., 1999). These eight guilds can be broadly classified under two

categories: weavers and non-weavers. Out of this, weavers include those spider families which construct webs to capture their prey. Webs constructed by spiders are of different types depending on their shape and structure namely, orb-webs, funnel web, triangular web, irregular web, sheet web, tangle web, tube web and tent web (Figure 172-185). In these webs spider acts as sit-and-wait predators as soon as any vibrations in the web are felt they rush near the insect and knock down its movements by throwing strands of silk. The basic orb-web structure consist of radial threads, frame threads and sticky spirals out of which radial threads & frame threads are supporting threads in web stability whereas sticky spirals helps in capturing prey (Foelix, 2011).

Figure 172. Orb-web of *Eriovixia poonaensis*

Figure 173. Orb-web of *Gea subarmata*

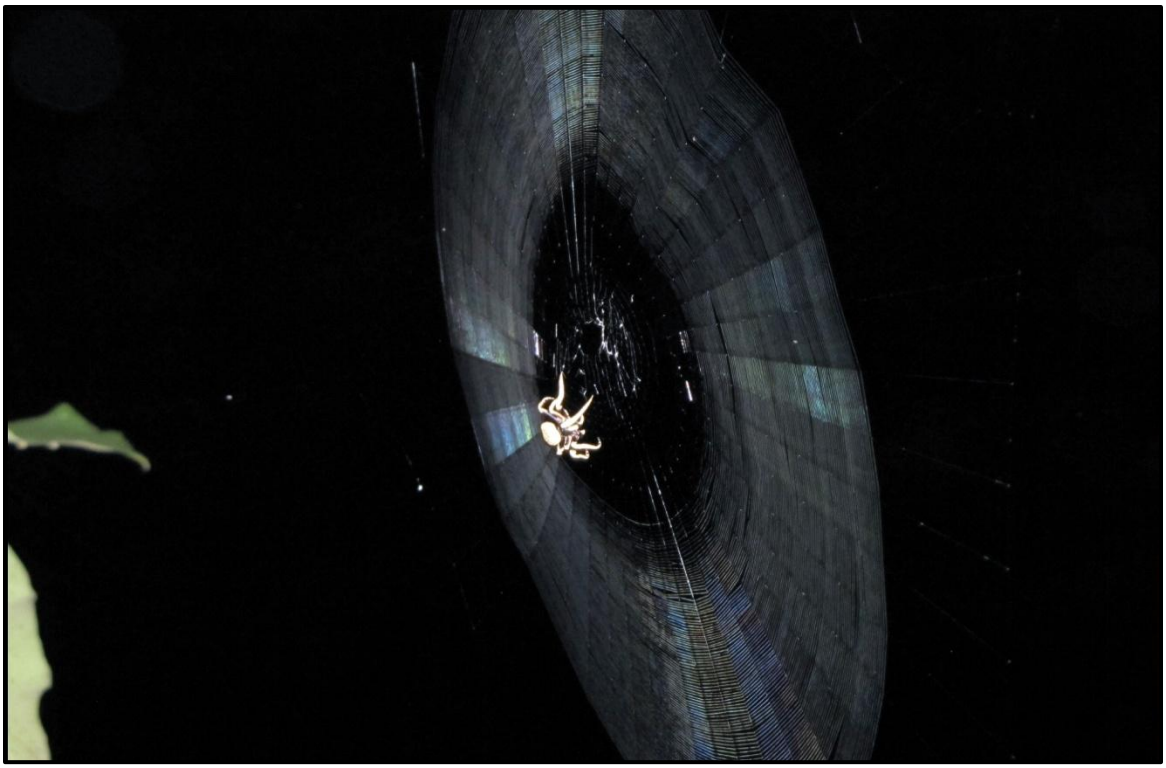


Figure 174. Orb-web of *Poltys nagpurensis*

Figure 175. Tent-web of *Cyrtophora citricola*

Figure 176. Retreat of *Araneus mitificus*

Figure 177. Sheet-web of *Stegodyphus sarasinorum*

Figure 178. Tube-web of *Stegodyphus pacificus*

Figure 179. Funnel-web of *Hippasa lycosina*

Figure 180. Sheet-web of Lycosid Spider

Figure 181. Tube-web of Lycosid Spider

Figure 182. Retreat of *Plexippus paykulli*

Figure 183. Single strand web of *Tetragnatha maxillosa*

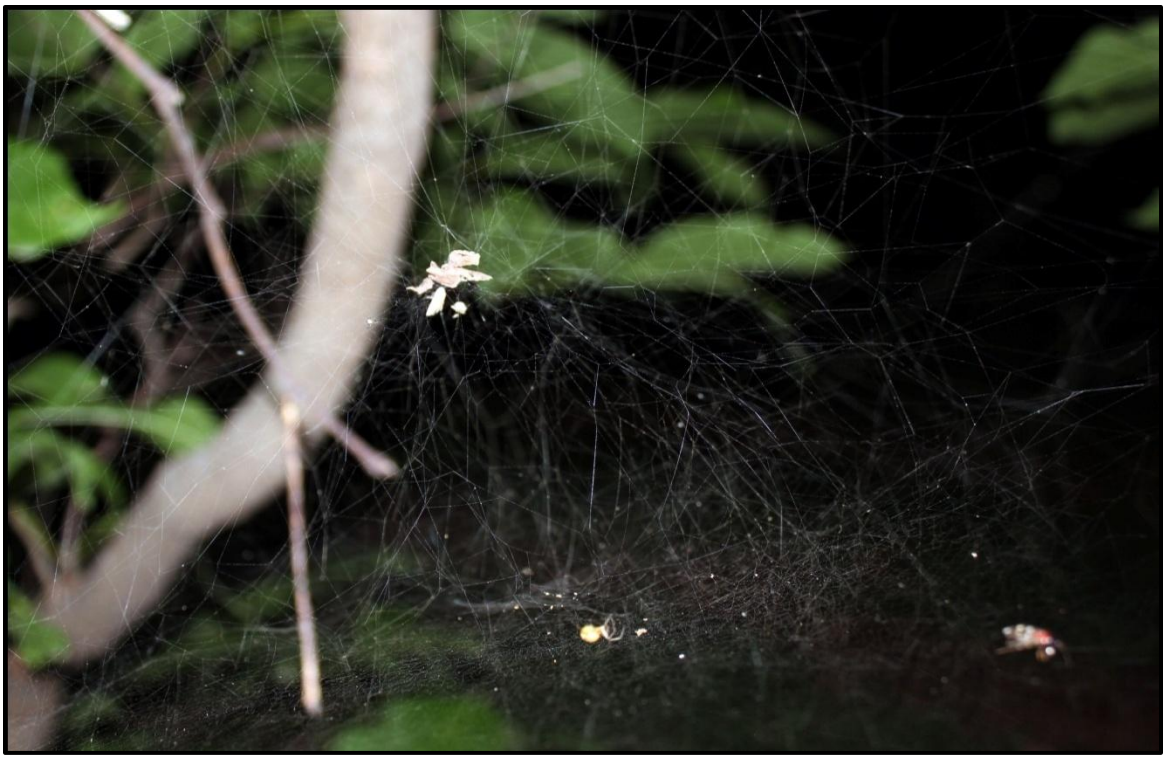


Figure 184. Cob-web of *Parasteatoda mundula*

Figure 185. Tangle-web

The art of building geometrically complex webs by spiders is their inborn instinct which varies amongst species and amongst the individuals of same species. But the crucial orb-web characteristics related to a particular species is well maintained (Witt & Baum, 1960). Construction of web involves lot much of energy and time, once the web is completed it cannot be modified easily, so for better foraging success each spider has to make a wise decision prior to construction of web (Pasquet & Leborgne, 1997). Other than prey availability there are factors like web support, wind direction, temperature, humidity and silk supply which influence the pattern and site selection for web construction (Vollrath et al., 1997). But along with these factors one of the most important factor observed was their previous prey capture experiences which compels them to construct asymmetrical webs instead of symmetrical ones; alteration in size of web and time of web construction (Adams, 2000; Heiling & Herberstein, 1999).

Efficiency of prey capture is directly related to individuality of web and also on the vibrations created by struggling prey in helping spiders to locate its prey efficiently (Saravanan, 2006; Vollrath, 1992). Therefore web design plays an important role as it acts as trap for its prey. Thus looking into the importance of web for the survival of spiders, we studied the web structure and efficiency of web constructed by *Neoscona vigilans* (Blackwall, 1865) in capturing prey. *N. vigilans* was considered for the web morphometry and prey catch efficiency studies as it is the most common species found in the southern tropical dry deciduous forest. Also this spider starts constructing their webs during dusk and consumes them in the following morning. They are basically nocturnal and relay on prey entangled in their web during night hours.

The web structure of *Neoscona vigilans* includes hub, with a large hole in the center (an "open hub") (Figure 186); strengthening zone and free zone not very distinct. Number of sticky spirals varies from a range of 36 to 58; Number of radii ranges from 22 to 26 in number. Out of 15 webs observed, most of the individuals of *N. vigilans* (80%) were found to prefer upside down orientation (Figure 187) while resting in the hub. All upside down oriented spiders preferred to construct symmetrical webs (Figure 188) which allow them to attack entangled prey in very short duration. (Nakata & Zschokke, 2010) also got

similar observation when they studied the preference of upside down orientation in spiders of the genus Cyclosa and concluded that upside down facing spiders were able to knock down their prey significantly faster as compared to spiders facing upwards.

Only 20% of the spiders preferred asymmetrical web (Figure 189) and they were found to change their orientations either upwards, sideways or upside down depending on the area of prey capture. The reason for such behavior was that, these spiders were comparatively smaller in size than the spiders oriented upside down and hence there capture area was smaller in size which reduces the number of prey captured. Therefore these spiders don't want to miss on to any of the prey entangled in their webs by orienting randomly. Also there are other additional factors like energy consumed in constructing larger web, which influence the spiders to construct asymmetric webs for better prey capture efficiency (Coslovsky & Zschokke, 2009).

When the spider size was correlated with web diameter, we found a strong positive correlation (Graph 6). This implies that as the spider size increases their requirement for prey also increases and hence they construct larger webs with large capture area, which in turn increases the chances of more prey getting entangled in their webs. Here it also implies that for constructing larger webs it needs more space in-between the branches of vegetation/trees where they usually constructs there webs.

To confirm the assumption we correlated the spider body size with height of web which was measured from the ground level to the centre point of hub. Here also we observed strong positive correlation (Graph 7) which suggests that as the height increases they get larger area to construct their webs. This is due to the reason that the branches of the vegetation or trees don't have much complex branching at the mid level of their heights which benefits these spiders for their web construction. It also implies that at higher heights the possibility of capturing large sized insects increases then webs at lower heights, and with increased web size, the daily number of prey trapped in the web increases resulting into long-term endurance of spider (Venner & Casas, 2005).

To prove this assumption and to see the prey capture efficiency of web, a correlation study between the mesh width and prey size was done. We found a negative correlation

(Graph 8) which implies that the size of prey entangled in the web does not depend on the mesh width. Rather it depends on the sticky nature of the capture area which helps them to retain their prey for longer time so that they can approach and knock down the prey entangled in the web (Agnarsson & Blackledge, 2009).

Web constructed by *N. vigilans* was found to be efficient in capturing insects ranging from Dipterans to Ephemeropteran, Neuropteran, Coleopteran, Hemipteran, Orthopteran, Lepidopteran and Odonates irrespective of the mesh size and web asymmetry. Despite the fact that the narrow mesh size is efficient in capturing even the small sized insects but this efficiency will not be considered if the availability of prey is abundant (Watanabe, 2001). In case of orb-weavers their web structure defines their efficiency of prey capture and ultimately results into efficient bio-control agent.

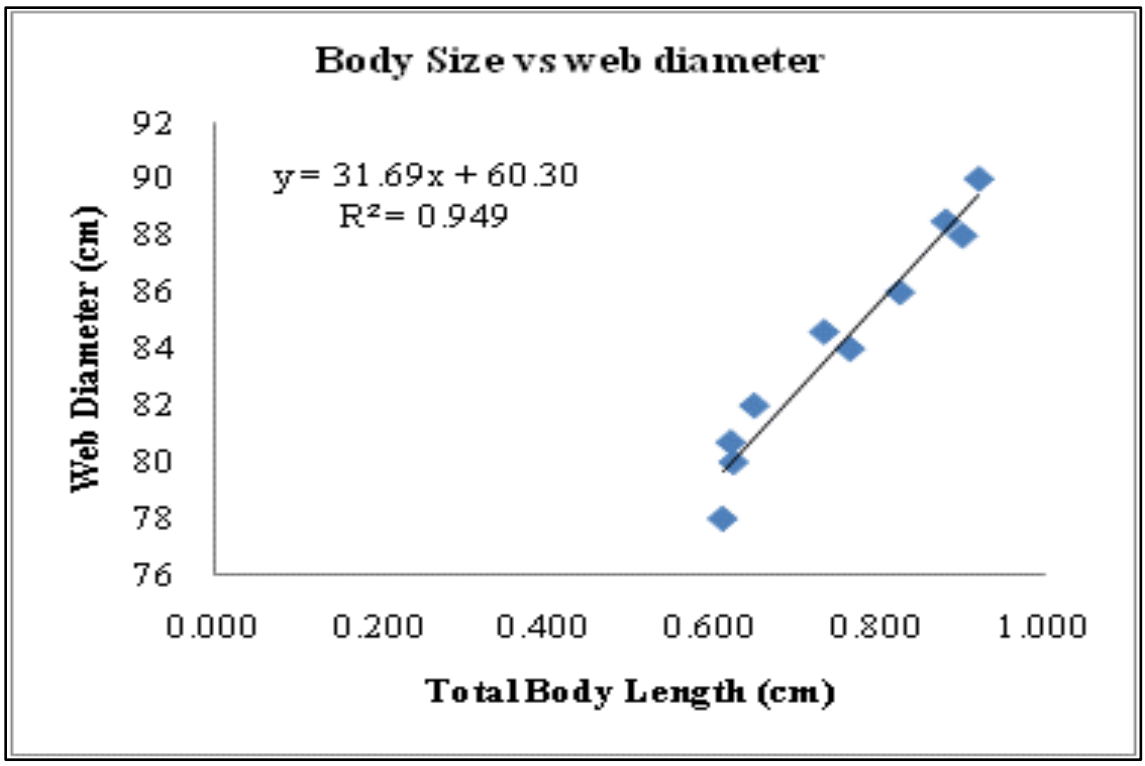
From economic point of view, the spiders do not actually eat all the insects captured in the web but rather destroys them and helps in keeping check on insect populations (Bilsing, 1920). Due to such economic reasons the studies on species specific web structure and its prey capture efficiency becomes important. Efficiency of the prey capture depends not only on web characteristics but also on the biology of insect to some extent. Hence, it was concluded that for prey capture *N. vigilans* construct webs at different heights and of different sizes but always maintain the basic web structure (i.e. number of radii, number of spirals, web symmetry, web orientation and mesh width).

Figure 186. Web of *Neoscona vigilans* showing open hub

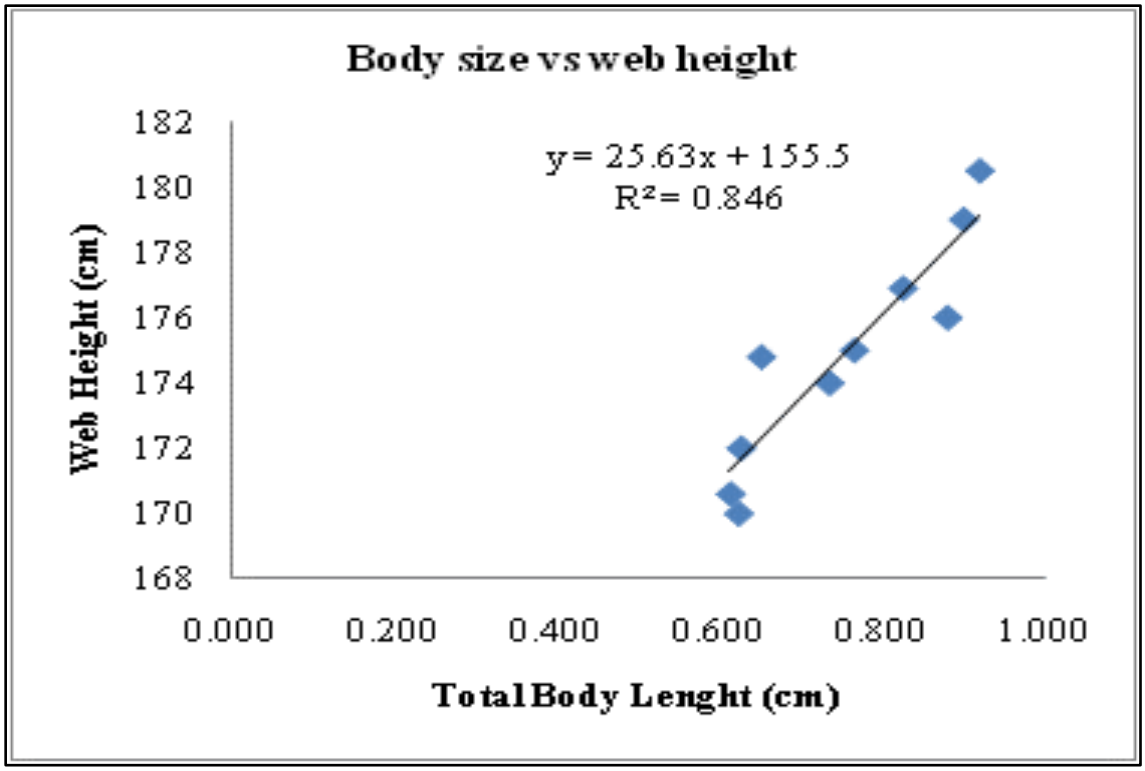
Figure 187. Web of *Neoscona vigilans* showing upside down orientation of spider

Figure 188. Symmetrical web of *Neoscona vigilans*

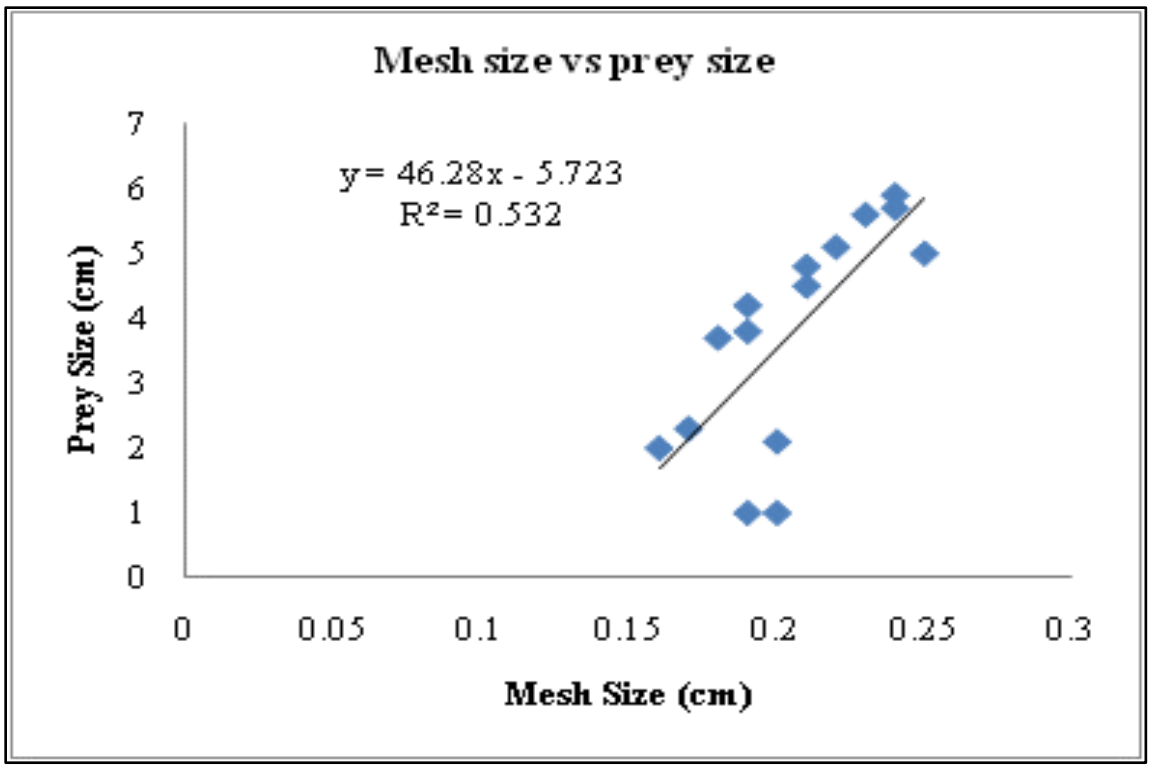
Figure 189. Asymmetrical web of *Neoscona vigilans*



Graph 6. Body size of *Neoscona vigilans* versus its web diameter



Graph 7. Body size of *Neoscona vigilans* versus its web height from ground level



Graph 8. Mesh size in web of *Neoscona vigilans* versus prey size caught in web

4.2 Reproduction in Spiders

Spiders are dioecious i.e. they have separate sexes. Males are usually smaller in size as compared to females and therefore require fewer molts to get mature. Spider males matures early than females and as soon as they get matured after final molt, they don't feed instead they spin a sperm web, place a drop of sperm in that and then insets its padipalp in sperm web by which sperms are sucked in by capillary action, this is called padipalp charging process. Shortly after padipalp charing these males starts searching females which are ready to mate. On spotting female which has under gone last molt, the male starts with courtship behavior so that females does not mistaken them for prey. In some species of spider's, males directly crawls on the females and mate (as in family Thomisidae), whereas in spiders belonging to family Araneidae, males pull the strings of female web generating vibrations in a different pattern which does not matches with the vibrates created by entangled prey. If the female is also ready to mate it will respond back

to the signals of male followed by mating. In case of non-weaver spiders, visual signals plays important role in courtship and acceptance by female (Figure 197-119).

Shortly after copulation, the female is ready to lay eggs. The number of eggs varies from one to thousands of eggs depending upon the species. Females never lay eggs directly exposed to the environment but are protected by forming silk cocoon over it. The silk used in the formation of cocoon protects the enclosed offsprings from predators, parasitoids and temperatures fluctuations during their early stage of life (Zhao et al., 2005). Each spider species constructs their own unique shape and size of cocoon depending on the habitat and environmental conditions. The shape of cocoons varies from species to species namely, simple flat multilayered silk (Salticidae), spherical shaped (Lycosidae), star shaped (Uloboridae); arrow shaped and bell shaped (Theridiidae) (Figure 200-205). Along with energy spent in the formation of cocoon there are few species of spiders which not only guards their eggsac, or protected them from predators, they also actively care for the newly hatched spiderlings like in case of Lycosid females carry their hatchlings on their back almost for a week, in case of scytodids the females hunt and brings the prey to their retreat so as to feed their spiderlings etc (Figure 206-215). The detailed species specific natural history information regarding each spider documented from the study site is provided in (Table 42 & 43)

4.3 Ecological Roles of Spiders

Spiders are known to feed on insects and keeps check on insect populations. They are also good biological indicators for monitoring biodiversity (Uniyal & Quasin, 2010). Their ability of ballooning helps them to disperse from disturbed habitat to an undisturbed habitat indicating the stress of environmental change or disturbance. The presence and absence of spiders in a particular habitat indicates the health of that particular habitat. Jambughoda Wildlife Sanctuary harbors good diversity of spiders proving it to be apt habitat for the survival of spiders and other fauna.

Spiders also play an important role in balancing the food chain as they are insect feeders (Figure 190-196). Few spiders were also observed to feed on other spider species (Figure 216-218). Equally they are prey for other vertebrates and invertebrates. They are

observed to be fed by ants (Figure 220), wasps (Figure 221), lizards, birds (Figure 222) and also sometimes get infested with mites (Figure 219). Similar observations were made by (Blackledge & Pickett, 2000) on predation of orb-weaving spiders by mud-dauber wasp. The web of spiders acts as trap for the insects on which it feeds but on the other hand these webs are been used by some species of birds like paradise fly catcher, weaver bird etc to glue their nest material (Figure 223). These birds were also been observed to feed their hatchlings with spiders as they are good source of protein for them. In other words, spiders act as prey and predator as well as provide ecological services in balancing the food chain and ecosystem.

Figure 190. ***Argiope anasuja*** **feeding on Coleopteran**

Figure 191. ***Eriovixia excelsa*** **feeding on Hymenopteran**

Figure 192. Colonial feeding of *Stegodyphus sarasinorum* on Colepoteran

Figure 193. *Hersilia savignyi* feeding on Hymenopteran

Figure 194. ***Telamonia dimidiata*** **feeding on Dipteran**

Figure 195. ***Heteropoda bhaikakai*** **feeding on Isopteran**

Figure 196. ***Latrodectus hasseltii*** **feeding on Coleopteran**

Figure 197. ***Hersilia savignyi*** **Mating Behavior**

Figure 198. ***Crossopriza lyoni*** **Mating Behavior**

Figure 199. ***Thomisus sp.*** **Mating Behavior**

Figure 200. Uneven shaped eggsac of *Argiope anasuja*

Figure 201. Eggsac of *Cheiracanthium inornatum*

Figure 202. Falt cocoon of *Hersilia savignyi*

Figure 203. Bell shaped eggsac of Theridiid Spider

Figure 204. Star shaped eggsac of *Uloborus krishnae*

Figure 205. Spiderlings of *Telamonia dimidiate* its retreat

Figure 206. ***Cyrtophora citricola*** **guarding its eggsac**

Figure 207. ***Stegodyphus sarasinorum*** **with its eggsac**

Figure 208. ***Hersilia savignyi*** **with its eggsac**

Figure 209. ***Lycosa sp.*** **with spiderlings on its back**

Figure 210. ***Oxyopes birmanicus*** **guarding its cocoon**

Figure 211. ***Pisaura podilensis*** **guarding its eggsac in Nursery web**

Figure 212. ***Menemerus bivittatus*** **guarding its cocoon**

Figure 213. ***Heteropoda bhaikakai*** **guarding its eggsac**

Figure 214. ***Latrodectus hasseltii*** **guarding its eggsac**

Figure 215. ***Rhomphaea projiciens*** **guarding its arrow shaped eggsac**

Figure 216. ***Hyllus semicupreus*** **feeding on Araneid spider**

Figure 217. ***Scytodes fusca*** **feeding on Clubionid spider**

Figure 218. ***Scytodes fusca*** **feeding on** ***Plexippus paykulli***

Figure 219. ***Scytodes fusca*** **infested by Parasitic Mite**

Figure 220. ***Stegodyphus sarasinorum*** **web occupied by Ants**

Figure 221. Wasp dragging paralyzed Lycosid spider

Figure 222. Leaf Bird feeding on *Cheiracanthium sp.*

Figure 223. Spider's web used by Paradise Flycatcher to Glue the Nest material

Table 42. Ecological parameters for spider species from Jambughoda Wildlife Sanctuary

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
Family: Araneidae Clerck, 1757					
1.	*Araneus mitificus* (Simon, 1886)	Orb Weavers	Spider rests in the siliken retreat constructed in the rolled leaf attached to web with a string of silk, at rest the tips of their front legs are in contact with a single thread which runs directly to the centre of the web	Immobilize the prey entangled in the web and than feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
2.	*Argiope aemula* (Walckenaer, 1841)	Orb Weavers	Vertical wheel like orb web with lines radiating from the hub, the hub is hollow and the web is decorated with either two diagonally placed zig-zag bands or four bands forming 'X' shape	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
3.	*Argiope anasuja* Thorell, 1887	Orb Weavers	Vertical wheel like orb web with lines radiating from the hub, the hub is hollow and the web is decorated with either two diagonally placed zig-zag bands or four bands forming 'X' shape	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
4.	*Chorizopes sp.*	Orb Weavers	Constructs fine orb webs between green leaves and rest in the centre of webs	Paralyze the prey and than feeds on it	Hymenoptera
5.	*Cyclosa confraga* (Thorell, 1892)	Orb Weavers	Constructs orb webs having stabilimentum made of remains of	Immobilize the prey entangled in the web and than feeds on it	Diptera, Ephemeroptera, Hymenoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
			insect prey and debris, when disturbed spider falls down		
6.	*Cyclosa hexatuberculata* Tikader, 1982	Orb Weavers	Constructs vertical orb webs decorated with oval circular zigzag pattened silk in the centre where the spider rests	Immobilize the prey entangled in the web and than feeds on it	Diptera, Ephemeroptera, Hymenoptera
7.	*Cyclosa moonduensis* Tikader, 1963	Orb Weavers	Constructs vertical orb-webs with open hub and the spider hangs at the side by a string of silk	Immobilize the prey entangled in the web and than feeds on it	Diptera, Ephemeroptera, Hymenoptera
8.	*Cyclosa spirifera* Simon, 1889	Orb Weavers	Constructs vertical orb-webs with open hub	Immobilize the prey entangled in the web and than feeds on it	Diptera, Ephemeroptera, Hymenoptera
9.	*Cyrtophora cicatrosa* (Stoliczka, 1869)	Orb Weavers	Principle structure of the web appears to be dome shaped or tent shape with sheet web below, spider rests in the middle of the dome shape	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Hymenoptera, Lepidoptera
10.	*Cyrtophora citricola* (Forsskål, 1775)	Orb Weavers	Principle structure of the web appears to be dome shaped or tent shape with sheet web below, spider rests in the middle of the dome shape	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Hymenoptera, Lepidoptera
11.	*Eriovixia excelsa* (Simon, 1889)	Orb Weavers	Constructs vertical, round webs with closely placed spirals and the spider rests in the close hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
12.	*Eriovixia laglaizei* (Simon, 1877)	Orb Weavers	Constructs vertical, round webs with closely placed spirals and the	Captures the prey entangled in the web, wrap them in silk and feeds	Diptera, Ephemeroptera, Hemiptera, Lepidoptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
			spider rests in the close hub	on it	Neuroptera, Orthoptera
13.	*Eriovixia poonaensis* (Tikader & Bal, 1981)	Orb Weavers	Constructs vertical, round webs with closely placed spirals and the spider rests in the close hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
14.	*Gasteracantha kuhli* C. L. Koch, 1837	Orb Weavers	Constucts large vertical orb-webs with open hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Orthoptera
15.	*Gea subarmata* Thorell, 1890	Orb Weavers	Constructs inclined orb-web, circular in shape with spirals closely place, close hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
16.	*Larinia chloris* (Audouin, 1826)	Orb Weavers	Construct vertical orb-webs with radials and spirals closely placed, open hub where the spider rests	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
17.	*Lipocrea fusiformis* (Thorell, 1877)	Orb Weavers	Construct vertical orb-webs with radials and spirals closely placed, open hub where the spider rests	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
18.	*Neoscona mukerjei* Tikader, 1980	Orb Weavers	Constructs large vertical orb-webs, these webs are either symmetrical or asymmetrical with open hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
19.	*Neoscona nautica* (L. Koch, 1875)	Orb Weavers	Constructs large vertical orb-webs, these webs are either symmetrical or asymmetrical with open hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
20.	*Neoscona theisi*	Orb Weavers	Construc ts large vertical orb-	Captures the prey entangled in the	Diptera, Ephemeroptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Walckenaer, 1841)		webs, these webs are either symmetrical or asymmetrical with open hub	web, wrap them in silk and feeds on it	Hemiptera, Lepidoptera, Neuroptera, Orthoptera
21.	*Neoscona vigilans* (Blackwall, 1865)	Orb Weavers	Constructs large vertical orb-webs, these webs are either symmetrical or asymmetrical with open hub	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
22.	*Poltys bhabanii* (Tikader, 1970)	Orb Weavers	Constructs large vertical or inclined orb-webs, with closely place spirals and open hub where the spider rests	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
23.	*Poltys columnaris* Thorell, 1890	Orb Weavers	Constructs large vertical or inclined orb-webs, with closely place spirals and open hub where the spider rests, during day time spider rests on twings of trees and looks like blunt twig fully camouflaged	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
24.	*Poltys nagpurensis* Tikader, 1982	Orb Weavers	Constructs large vertical or inclined orb-webs, with closely place spirals and open hub where the spider rests	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
25.	*Singa sp.*	Orb Weavers	Constructs fine orb-webs between green leaves and rest in the centre of webs	Captures the prey entangled in the web, wrap them in silk and feeds on it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
26.	*Thelacantha brevispina*	Orb Weavers	Constucts large vertical orb-webs with open hub	Captures the prey entangled in the web, wrap them in silk and feeds	Diptera, Coleoptera, Ephemeroptera, Hemiptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Doleschall, 1857)			on it	Lepidoptera, Neuroptera, Orthoptera
Family: Clubionidae Wagner, 1887					
27.	*Clubiona drassodes* O. Pickard-Cambridge, 1874	Foliage Runners	Constructs silken retreat oblong in shape in the folded broad leaf.	These are aggressive spiders and uses their front legs to detect and capture prey while reting in retreat or hunting on foliage	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
28.	*Clubiona filicata* O. Pickard-Cambridge, 1874	Foliage Runners	Constructs silken retreat oblong in shape in the folded broad leaf.	These are aggressive spiders and uses their front legs to detect and capture prey while reting in retreat or hunting on foliage	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
29.	*Clubiona foliata* Keswani & Vankhede, 2014	Foliage Runners	Constructs silken retreat oblong in shape in the folded broad leaf.	These are aggressive spiders and uses their front legs to detect and capture prey while reting in retreat or hunting on foliage	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
30.	*Clubiona pashabhaii* Patel & Patel, 1973	Foliage Runners	Constructs silken retreat oblong in shape in the folded broad leaf.	These are aggressive spiders and uses their front legs to detect and capture prey while reting in retreat or hunting on foliage	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
Family Corinnidae Karsch, 1880					
31.	*Castianeira zetes* Simon, 1897	Ground Runners	Wandering spiders, inhabits in leaf litter	Ant mimic spiders, prefers to hunt on ground	Hymenoptera, Isoptera
Family: Ctenidae Keyserling, 1877					
32.	*Ctenus narashinhai*	Ground Runners	Wandering spiders, inhabits in	Prefer to hunt their prey on	Hymenoptera, Isoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	Patel & Reddy, 1988		leaf litter	foliage or on the soil surface, rarely higher up	
Family: Eresidae C. L. Koch, 1845					
33.	*Stegodyphus pacificus* Pocock, 1900	Sheet Web-Builders	Construct sheet web with tube like retreat, either with single or multiple enterances	Feeds on prey intangled in web, they are colonial feeders and mostly lives in colony	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
34.	*Stegodyphus sarasinorum* Karsch, 1892	Sheet Web-Builders	Construct sheet web with tube like retreat, either with single or multiple enterances	Feeds on prey intangled in web, they are colonial feeders and mostly lives in colony	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Odonata, Orthoptera
Family: Eutichuridae Lehtinen, 1967					
35.	*Cheiracanthium inornatum* O. Pickard-Cambridge, 1874	Foliage Runners	During day time these spiders hides themselves in as sac-like retreat constructed in green folded leaf	Hunt for prey during night time, prefers to hunt for prey on foliage surface or on twings and branches of tree	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
36.	*Cheiracanthium melanostomum* (Thorell, 1895)	Foliage Runners	During day time these spiders hides themselves in as sac-like retreat constructed in green folded leaf	Hunt for prey during night time, prefers to hunt for prey on foliage surface or on twings and branches of tree	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
37.	*Cheiracanthium triviale* (Thorell, 1895)	Foliage Runners	During day time these spiders hides themselves in as sac-like retreat constructed in green folded leaf	Hunt for prey during night time, prefers to hunt for prey on foliage surface or on twings and branches of tree	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
38.	*Cheiracanthium sp.* 1	Foliage Runners	During day time these spiders	Hunt for prey during night time,	Diptera, Coleoptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
			hides themselves in as sac-like retreat constructed in green folded leaf	prefers to hunt for prey on foliage surface or on twings and branches of tree	Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
39.	*Cheiracanthium sp.* 2	Foliage Runners	During day time these spiders hides themselves in as sac-like retreat constructed in green folded leaf	Hunt for prey during night time, prefers to hunt for prey on foliage surface or on twings and branches of tree	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
Family: Gnaphosidae Pocock, 1898					
40.	*Drassodes sp.*	Ground Runners	Found on soil surface and in leaf litter	Ground hunting spiders	Hymenoptera, Isoptera
41.	*Haplodrassus sp.*	Ground Runners	Found on soil surface and in leaf litter	Ground hunting spiders	Hymenoptera, Isoptera
42.	*Megamyrmaekion ashae* Tikader & Gajbe, 1977	Ground Runners	Found on soil surface but some are foliage dwellers, living in rolled leaf retreats	Ground hunting spiders	Hymenoptera, Isoptera
43.	*Scopoides kuljitae* (Tikader, 1982)	Ground Runners	Found on soil surface but some are foliage dwellers, living in rolled leaf retreats	Ground hunting spiders	Hymenoptera, Isoptera
44.	*Scopoides sp.*	Ground Runners	Found on soil surface and in leaf litter	Ground hunting spiders	Hymenoptera, Isoptera
45.	*Trachyzelotes jaxartensis* (Kroneberg, 1875)	Ground Runners	Found on soil surface but some are foliage dwellers, living in rolled leaf retreats	Ground hunting spiders	Hymenoptera, Isoptera
46.	*Zelotes mandae*	Ground Runners	Found on soil surface but some	Ground hunting spiders	Hymenoptera, Isoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	Tikader & Gajbe, 1979		are foliage dwellers, living in rolled leaf retreats		
Family: Hersiliidae Thorell, 1870					
47.	*Hersilia aadi* Pravalikha, Srinivasulu & Srinivasulu, 2014	Ground/Bark Runners	Wandering tree-trunk-dwellers	Hunt on prey resting on bark, they are sit and wait predators	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Neuroptera, Orthoptera
48.	*Hersilia savignyi* Lucas, 1836	Ground/Bark Runners	Wandering tree-trunk-dwellers	Hunt on prey resting on bark, they are sit and wait predators	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Neuroptera, Orthoptera
49.	*Murricia hyderabadensis* Javed & Tampal, 2010	Ground/Bark Runners	Wandering tree-trunk-dwellers	Hunt on prey resting on bark, they are sit and wait predators	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Neuroptera, Orthoptera
Family: Liocranidae Simon, 1897					
50.	*Oedignatha sp.*	Ground Runners	Ground-dwelling spiders inhabiting forest litter	Cursorial hunting spiders	Hymenoptera, Isoptera
Family: Lycosidae Sundevall, 1833					
51.	*Evippa sp.* 1	Ground Runners	Ground dwelling spiders, usually seen in leaf litter	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
52.	*Evippa sp.* 2	Ground Runners	Ground dwelling spiders, usually seen in leaf litter	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
					Lepidoptera, Orthoptera
53.	*Hippasa lycosina* Pocock, 1900	Ground Runners	Construct sheet webs draped over grasses or lower vegetation at ground level, with a silken narrow funnel retreat	Uses funnel eb to capture prey, the spider waits for its prey at the enterance of funnel and as soon as the prey comes in range it captures and feeds on it	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
54.	*Lycosa poonaensis* Tikader & Malhotra, 1980	Ground Runners	Constucts burrows in loose sand	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
55.	*Lycosa sp.*	Ground Runners	Constucts burrows in loose sand	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
56.	*Pardosa birmanica* Simon, 1884	Ground Runners	Ground dwelling spiders, usually seen in leaf litter	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
57.	*Pardosa sumatrana* (Thorell, 1890)	Ground Runners	Ground dwelling spiders, usually seen in leaf litter	Prefers to hunt on ground	Diptera, Coleoptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera
Family: Oecobiidae Blackwall, 1862					
58.	*Oecobius putus* O. Pickard-Cambridge, 1876	Ground Runners	Constructs star-shaped mesh webs over crevices on rocks and walls	Feeds on prey trapped in their webs	Hymenoptera
Family: Oonopidae Simon, 1890					
59.	*Brignolia sp.*	Ground Runners	Ground dwelling spiders	Cursorial hunting spiders	Hymenoptera, Isoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
60.	*Unidentified Species* 1	Ground Runners	Ground dwelling spiders	Cursorial hunting spiders	Hymenoptera, Isoptera
Family: Oxyopidae Thorell, 1870					
61.	*Hamadruas sikkimensis* (Tikader, 1970)	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
62.	*Oxyopes ashae* Gajbe, 1999	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
63.	*Oxyopes bharatae* Gajbe, 1999	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
64.	*Oxyopes birmanicus* Thorell, 1887	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
65.	*Oxyopes pankaji* Gajbe & Gajbe, 2000	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
66.	*Oxyopes sp.* 1	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera and other foliage spiders
67.	*Oxyopes sp.* 2	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
68.	*Oxyopes sp.* 3	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
69.	*Peucetia akwadaensis* Patel, 1978	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
70.	*Peucetia viridana (Stoliczka, 1869)*	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
71.	*Peucetia yogeshi* Gajbe, 1999	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera
72.	*Peucetia sp.*	Stalkers	Non-web builders, foliage dwelling spiders	Foliage hunting spiders	Diptera, Hemiptera, Lepidoptera, Orthoptera and *Leucauge decorata*
Family: Palpimanidae Thorell, 1870					
73.	*Unidentified Species* 2	Ground Runners	Ground dwelling spiders	Cursorial hunting spiders	Feeds on tiny spiders inhabiting in their habiat
Family: Philodromidae Thorell, 1870					
74.	*Tibellus elongatus* Tikader, 1960	Ambushers	Foliage dwelling spiders	Prefers to hunt on prey by waiting on foliage or bark fully camouflage with the surroundings	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Orthoptera
Family: Pholcidae C. L. Koch, 1850					
75.	*Crossopriza lyoni* (Blackwall, 1867)	Space Web-Builders	Loose, untidy web, under large leaves in the forest, also in neglected corners of houses	Feeds on prey intangled in the untidy webs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Orthoptera
76.	*Pholcus fragillimus* Strand, 1907	Space Web-Builders	Constructs sheet or space webs and are found in a wide variety of habitats but frequently in dark and damp places such as caves, under stones and fallen logs.	Feeds on prey intangled in the untidy webs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Orthoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
77.	*Pholcus phalangioides* (Fuesslin, 1775)	Space Web-Builders	Constructs sheet or space webs and are found in a wide variety of habitats but frequently in dark and damp places such as caves, under stones and fallen logs.	Feeds on prey intangled in the untidy webs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Orthoptera
Family: Pisauridae Simon, 1890					
78.	*Hygropoda mahendriensis* Vankhede, Keswani & Rajoria, 2013	Ambushers	Constructs three-dimentional web with sheet like structure at the bottom an with curled or folded leaves suspended in the middle, spider hides in the leaf retreat, webs usually 5-10 meters from stream	Hunt at the surface of water by resting at the periphery of flowing stream with front legs streach and touching the water	Dipteran larvae, Coleoptera, Hemiptera, Lepidoptera, Odonate larve, Orthoptera
79.	*Nilus phipsoni* (F. O. Pickard-Cambridge, 1898)	Ambushers	Constructs three-dimentional web with sheet like structure at the bottom, spider hides in the leaf retreat, webs usually 5-10 meters from stream	Hunt at the surface of water by resting at the periphery of flowing stream with front legs streach and touching the water	Dipteran larvae, Coleoptera, Hemiptera, Lepidoptera, Odonate larve, Orthoptera and Small Crabs
80..	*Perenethis venusta* L. Koch, 1878	Ambushers	Constructs three-dimentional web with sheet like structure at the bottom, spider hides in the leaf retreat, webs usually 5-10 meters from stream	Hunt at the surface of water by resting at the periphery of flowing stream with front legs streach and touching the water	Dipteran larvae, Coleoptera, Hemiptera, Lepidoptera, Odonate larve, Orthoptera
81.	*Pisaura podilensis* Patel & Reddy, 1990	Ambushers	Constructs nursery web attached withfew leaves where the spiderlings will hatch	Hunt at the surface of water by resting at the periphery of flowing stream with front legs streach and touching the water	Dipteran larvae, Coleoptera, Hemiptera, Lepidoptera, Odonate larve, Orthoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
Family: Prodidomidae Simon, 1884					
82.	*Prodidomus sp.*	Ground Runners	Ground dwelling spiders	Cursorial hunting spiders	Hymenoptera, Isoptera,
Family: Salticidae Blackwall, 1841					
83.	*Epocilla sp.*	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera
84.	*Harmochirus brachiatus* (Thorell, 1877)	Stalkers	Found on walls, foliage, tree trunks and under bark	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera
85.	*Hasarius adansoni* (Audouin, 1826)	Stalkers	Found on walls, foliage, tree trunks	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
86.	*Hyllus semicupreus* (Simon, 1885)	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera and *Neoscona sp.*
87.	*Marpissa tigrina* Tikader, 1965	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
88.	*Marpissa sp.*	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
89.	*Menemerus bivittatus*	Stalkers	Found on walls, foliage, tree	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Dufour, 1831)		trunks		Lepidoptera, Neuroptera
90.	*Myrmarachne tristis* (Simon, 1882)	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Hymenoptera, Isoptera
91.	*Myrmarachne sp.* 1	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Hymenoptera, Isoptera
92.	*Myrmarachne sp.* 2	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Hymenoptera, Isoptera
93.	*Phintella vittata* (C. L. Koch, 1846)	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Hymenoptera, Isoptera
94.	*Plexippus paykulli* (Audouin, 1826)	Stalkers	Found on walls, foliage, tree trunks	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
95.	*Plexippus petersi* (Karsch, 1878)	Stalkers	Found on walls, foliage, tree trunks	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
96.	*Portia sp.*	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
97.	*Rhene albigera* (C. L. Koch, 1846)	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
98.	*Stenaelurillus sp.*	Stalkers	Ground dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
99.	*Telamonia dimidiata*	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Simon, 1899)				Hemiptera, Isoptera, Lepidoptera, Neuroptera
100.	*Thyene imperialis* (Rossi, 1846)	Stalkers	Foliage dwelling spiders	Cursorial hunting spiders	Diptera, Ephemeroptera, Hemiptera, Isoptera, Lepidoptera, Neuroptera
Family: Scytodidae Blackwall, 1864					
101.	*Scytodes fusca* Walckenaer, 1837	Foliage Runners	Foliage-dwelling spitting spiders build nest in rolled leaf with strongly adhesive silk	These are known as spitting spiders as they immobilize their prey by spraying jets of sticky glue-venom mixture through their fangs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera and Clubionid spiders
102.	*Scytodes pallida* Doleschall, 1859	Foliage Runners	Foliage-dwelling spitting spiders build nest in rolled leaf with strongly adhesive silk	These are known as spitting spiders as they immobilize their prey by spraying jets of sticky glue-venom mixture through their fangs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
103.	*Scytodes thoracica* (Latreille, 1802)	Foliage Runners	Foliage-dwelling spitting spiders build nest in rolled leaf with strongly adhesive silk	These are known as spitting spiders as they immobilize their prey by spraying jets of sticky glue-venom mixture through their fangs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
104.	*Scytodes sp.*	Foliage Runners	Foliage-dwelling spitting spiders build nest in rolled leaf with strongly adhesive silk	These are known as spitting spiders as they immobilize their prey by spraying jets of sticky glue-venom mixture through their fangs	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
Family: Sicariidae Keyserling, 1880					
105.	*Loxosceles rufescens* (Dufour, 1820)	Ground Runners	Crevice dwelling spiders, constructs untidy mesh webs inside the crevice	Cursorial hunting spiders	Coleoptera, Hemiptera, Lepidoptera, Orthoptera
Family: Sparassidae Bertkau, 1872					
106.	*Heteropoda bhaikakai* Patel & Patel, 1973	Foliage Runners	Wandering spiders found on soil surface, leaf litter or in caves	Prefers to hunt on gound and in leaf litter	Diptera, Coleoptera, Hemiptera, Isoptera, Lepidoptera, Orthoptera
107.	*Heteropoda venatoria* (Linnaeus, 1767)	Foliage Runners	Wandering spiders found on soil surface, leaf litter or in caves	Prefers to hunt on gound and in leaf litter	Diptera, Coleoptera, Hemiptera, Isoptera, Lepidoptera, Orthoptera
108.	*Olios bhavnagarensis* Sethi & Tikader, 1988	Foliage Runners	Wandering foliage dwelling spiders, often construct silken retreat on underside of leaf or in rolled leaf	Prefers to hunt on foliage and on tree trunk	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
109.	*Olios gravelyi* Sethi & Tikader, 1988	Foliage Runners	Wandering foliage dwelling spiders, often construct silken retreat on underside of leaf or in rolled leaf	Prefers to hunt on foliage and on tree trunk	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
110.	*Olios milleti* (Pocock, 1901)	Foliage Runners	Wandering foliage dwelling spiders, often construct silken retreat on underside of leaf or in rolled leaf	Prefers to hunt on foliage and on tree trunk	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
111.	*Olios wroughtoni*	Foliage Runners	Wandering foliage dwelling spiders, often construct silken	Prefers to hunt on foliage and on	Diptera, Coleoptera, Ephemeroptera, Hemiptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Simon, 1897)		retreat on underside of leaf or in rolled leaf	tree trunk	Lepidoptera, Neuroptera, Orthoptera
112.	*Olios sp.*	Foliage Runners	Wandering foliage dwelling spiders, often construct silken retreat on underside of leaf or in rolled leaf	Prefers to hunt on foliage and on tree trunk	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
Family: Stenochilidae Thorell, 1873					
113.	*Stenochilus hobsoni* O. Pickard-Cambridge, 1870	Ground Runners	Free roaming, ground and bark dwelling spiders	Prefers to hunt on gound and in leaf litter	Hymenoptera, Isoptera
Family: Tetragnathidae Menge, 1866					
114.	*Guizygiella indica* (Tikader & Bal, 1980)	Orb Weavers	Builds horizontal or inclined orb webs with open hub, sometimes lower web not complete	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
115.	*Guizygiella melanocrania* (Thorell, 1887)	Orb Weavers	Builds horizontal or inclined orb webs with open hub, sometimes lower web not complete	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
116.	*Guizygiella shivui* (Patel & Reddy, 1990)	Orb Weavers	Builds horizontal or inclined orb webs with open hub, sometimes lower web not complete	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
117.	*Leucauge decorata* (Blackwall, 1864)	Orb Weavers	Builds horizontal or inclined orb webs with open hub often in low vegetation near water	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
118.	*Tetragnatha extensa*	Orb Weavers	Builds horizontal or inclined orb	Feeds on prey entangled in web	Diptera, Ephemeroptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
	(Linnaeus, 1758)		webs with open hub often in low vegetation near water and hide on the under surface of nearby leaf or grass blade during day time	and also sometimes hunt resting on nearby foliage	Hemiptera, Lepidoptera, Neuroptera, Orthoptera
119.	*Tetragnatha mandibulata* Walckenaer, 1841	Orb Weavers	Builds horizontal or inclined orb webs with open hub often in low vegetation near water and hide on the under surface of nearby leaf or grass blade during day time	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
120.	*Tetragnatha maxillosa* Thorell, 1895	Orb Weavers	Builds horizontal or inclined orb webs with open hub often in low vegetation near water and hide on the under surface of nearby leaf or grass blade during day time	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
121.	*Tylorida ventralis* (Thorell, 1877)	Orb Weavers	Builds inclined orb webs with open hub often in low vegetation near water and hide on nearby twigs with legs streached longitudinally	Feeds on prey entangled in web and also sometimes hunt resting on nearby foliage	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
Family: Theridiidae Sundevalla, 1833					
122.	*Argyrodes argentatus* O. Pickard-Cambridge, 1880	Space Web-Builders	Web with only a single line or a few lines	Feeds on prey trapped in sticky silk lines	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
123.	*Cephalobares globiceps* O. Pickard-Cambridge, 1870	Space Web-Builders	Build irregular webs, spider rests within a retreat made of debris or leaf suspended in the centre above the sheet	Captures prey entangled in the web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
124.	*Coleosoma blandum* O. Pickard-Cambridge, 1882	Space Web-Builders	Build irregular webs, spider rests within a retreat made of debris or leaf suspended in the centre above the sheet	Captures prey entangled in the web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
125.	*Euryopis sp.*	Space Web-Builders	Web with only a single line or a few lines	Feeds on prey trapped in sticky silk lines	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
126.	*Latrodectus hasseltii* Thorell, 1870	Space Web-Builders	Constructs untidy cob-web in the crevices or space under stones	Feeds on prey entangled in the web	Diptera, Coleoptera, Ephemeroptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera, Neuroptera, Orthoptera
127.	*Meotipa picturata* Simon, 1895	Space Web-Builders	Web with only a single line or a few lines	Feeds on prey trapped in sticky silk lines	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
128.	*Parasteatoda mundula* (L. Koch, 1872)	Space Web-Builders	Three-dimentional web, often with a rolled leaf retreat suspended in the centre	Feeds on prey trapped in the web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
129.	*Rhomphaea projiciens* O. Pickard-Cambridge, 1896	Space Web-Builders	Web with only a single line or a few lines	Feeds on prey trapped in sticky silk lines	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
130.	*Steatoda sp.* 1	Space Web-Builders	Build irregular webs in the holes and crevices of tree	Captures prey entangled in the web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera, Orthoptera
131.	*Steatoda sp.* 2	Space Web-	Build irregular webs in the holes	Captures prey entangled in the	Diptera, Ephemeroptera, Hemiptera, Lepidoptera,

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
		Builders	and crevices of tree	web	Neuroptera, Orthoptera
132.	*Yaginumena maculosa* (Yoshida & Ono, 2000)	Space Web-Builders	Build irregular webs, spider rests within a retreat made of debris or leaf suspended in the centre above the sheet	Captures prey entangled in the web	Hymenoptera, Isoptera
Family: Thomisidae Sundevall, 1833					
133.	*Amyciaea forticeps* (O. Pickard-Cambridge, 1873)	Ambushers	Lives in the colony of weaver ants	Moves along with the trail of weaver ant and feeds on them	Hymenoptera
134.	*Camaricus sp.*	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
135.	*Indoxysticus minutus* (Tikader, 1960)	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
136.	*Runcinia sp.*	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
137.	*Thomisus sp.* 1	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
138.	*Thomisus sp.* 2	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
139.	*Thomisus sp.* 3	Ambushers	Foliage dwelling spiders, sometimes hangs on silk tread of silk	Camoflage on flowers or foliage and wait for prey, as soon as prey is spotted attacks and capture it	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
Family: Titanoecidae Lehtinen, 1967					
140.	*Pandava laminata* (Thorell, 1878)	Sheet Web-Builders	Ground dwelling spiders also inahbits under bark and constructs flimsy webs underside of bark	Feeds on insects tapped in web or hides underside of bark	Hymenoptera, Isoptera
Family: Uloboridae Thorell, 1869					
141.	*Miagrammopes sp.*	Orb Weavers	Build webs made of one or more sticky threads connected to non-sticky resting threads attached to nearby substratum	Captures prey intangled in the sticky web	Diptera, Ephemeroptera, Hemiptera, Hymenoptera, Isoptera, Lepidoptera
142.	*Uloborus danolius Tikader, 1969*	Orb Weavers	Construct orb webs or reduced orb webs ranging from a section of an orb to a single line using cribellate silk	Feeds on prey intangled in the crebillate web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
143.	*Uloborus krishnae Tikader, 1970*	Orb Weavers	Construct orb webs or reduced orb webs ranging from a section of an orb to a single line using cribellate silk	Feeds on prey intangled in the crebillate web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
144.	*Uloborus sp.* 1	Orb Weavers	Construct orb webs or reduced orb webs ranging from a section of an orb to a single line using cribellate silk	Feeds on prey intangled in the crebillate web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera

Sr. No.	Scientific Name	Guilt Structure	Web Type/Habitat	Feeding Strategy	Prey (Insect orders)
145.	*Uloborus sp.* 2	Orb Weavers	Construct orb webs or reduced orb webs ranging from a section of an orb to a single line using cribellate silk	Feeds on prey intangled in the crebillate web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
146.	*Zosis geniculata* (Olivier, 1789)	Orb Weavers	Vertical, asymmetrical crebillate web, hub with zigzag stabilimentum where the spider rests	Feeds on prey intangled in the crebillate web	Diptera, Ephemeroptera, Hemiptera, Lepidoptera, Neuroptera
Family: Zodariidae Thorell, 1881					
147.	*Storena gujaratensis* Tikader & Patel, 1975	Ground Runners	Cursorial spiders, inhabits in leaf litter	Wandering hunters, hunt their prey on ground	Isoptera, Hymenoptera
148.	*Storena sp.*	Ground Runners	Cursorial spiders, inhabits in leaf litter	Wandering hunters, hunt their prey on ground	Isoptera, Hymenoptera

Table 43. Ecological parameters for spider species from Jambughoda Wildlife Sanctuary (Continued)

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
Family: Araneidae Clerck, 1757					
1.	*Araneus mitificus* (Simon, 1886)	Orb Weavers	Diurnal	Eggs are laid on or in the folded leaf retreat covered with a layer of silk	Female guards the cocoon till the spiderlings emerge
2.	*Argiope aemula* (Walckenaer, 1841)	Orb Weavers	Diurnal	Uneven shaped cocoon hanged attached to the lower surface of nearby leaf	Female observed to be resting in its hub, parental care not so prominent
3.	*Argiope anasuja* Thorell, 1887	Orb Weavers	Diurnal	Uneven shaped cocoon hanged attached to the corner spirals and spiderlings disperse through mother's web	Female observed to be resting in its hub, parental care not so prominent
4.	*Chorizopes sp.*	Orb Weavers	Diurnal	Dark colored cocoon attached to the under surface of green leaves, debris is found attached with the silk threads surrounding the cocoon	Female guards the cocoon till spiderlings disprese
5.	*Cyclosa confraga* (Thorell, 1892)	Orb Weavers	Diurnal	Cocoon attached to stabilimentum	Female guards the cocoon till the spiderlings emerge
6.	*Cyclosa hexatuberculata* Tikader, 1982	Orb Weavers	Diurnal	-	-
7.	*Cyclosa moonduensis* Tikader, 1963	Orb Weavers	Diurnal	Eggs are laid on or in the folded leaf retreat covered with a layer of	Female guards the cocoon till the spiderlings emerge

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
				silk	
8.	*Cyclosa spirifera* Simon, 1889	Orb Weavers	Diurnal	-	-
9.	*Cyrtophora cicatrosa* (Stoliczka, 1869)	Orb Weavers	Diurnal	Oval, dorsoventrally flatten coon, arranged horizontal in series within the inverted bell shaped web	Female guards the cocoon till the spiderlings emerge and disperse
10.	*Cyrtophora citricola* (Forsskål, 1775)	Orb Weavers	Diurnal	Oval, dorsoventrally flatten coon, arranged horizontal in series within the inverted bell shaped web	Female guards the cocoon till the spiderlings emerge and disperse
11.	*Eriovixia excelsa* (Simon, 1889)	Orb Weavers	Nocturnal	-	-
12.	*Eriovixia laglaizei* (Simon, 1877)	Orb Weavers	Nocturnal	Eggs laid on the underside of leaf and covered with fluffy mass of yellowish brown silk	-
13.	*Eriovixia poonaensis* (Tikader & Bal, 1981)	Orb Weavers	Nocturnal	-	-
14.	*Gasteracantha kuhli* C. L. Koch, 1837	Orb Weavers	Diurnal	-	-
15.	*Gea subarmata* Thorell, 1890	Orb Weavers	Diurnal	-	-
16.	*Larinia chloris* (Audouin, 1826)	Orb Weavers	Diurnal	Eggs are laid on or in the folded leaf or grass blade covered with a	Female guards the cocoon till the spiderlings emerge

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
				layer of silk	
17.	*Lipocrea fusiformis* (Thorell, 1877)	Orb Weavers	Diurnal	Eggs are laid on or in the folded leaf or grass blade covered with a layer of silk	Female guards the cocoon till the spiderlings emerge
18.	*Neoscona mukerjei* Tikader, 1980	Orb Weavers	Nocturnal	Eggs are laid on leaf surface covered with a layer of silk	Female guards the cocoon till the spiderlings emerge
19.	*Neoscona nautica* (L. Koch, 1875)	Orb Weavers	Nocturnal	-	-
20.	*Neoscona theisi* (Walckenaer, 1841)	Orb Weavers	Nocturnal	-	-
21.	*Neoscona vigilans* (Blackwall, 1865)	Orb Weavers	Nocturnal	Eggs are laid on leaf surface covered with a layer of silk	Female guards the cocoon till the spiderlings emerge
22.	*Poltys bhabanii* (Tikader, 1970)	Orb Weavers	Nocturnal	-	-
23.	*Poltys columnaris* Thorell, 1890	Orb Weavers	Nocturnal	-	-
24.	*Poltys nagpurensis* Tikader, 1982	Orb Weavers	Nocturnal	-	-
25.	*Singa sp.*	Orb Weavers	Diurnal	-	-
26.	*Thelacantha brevispina* (Doleschall, 1857)	Orb Weavers	Diurnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
Family: Clubionidae Wagner, 1887					
27.	*Clubiona drassodes* O. Pickard-Cambridge, 1874	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge
28.	*Clubiona filicata* O. Pickard-Cambridge, 1874	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge
29.	*Clubiona foliata* Keswani & Vankhede, 2014	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge
30.	*Clubiona pashabhaii* Patel & Patel, 1973	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge
Family Corinnidae Karsch, 1880					
31.	*Castianeira zetes* Simon, 1897	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with sheet of silk	-
Family: Ctenidae Keyserling, 1877					
32.	*Ctenus narashinhai* Patel & Reddy, 1988	Ground Runners	Nocturnal	Eggs are deposited on a solid substrate covered with silk	Egg sacs are either carried in the chelicerae or attached to the spinnerets

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
Family: Eresidae C. L. Koch, 1845					
33.	*Stegodyphus pacificus* Pocock, 1900	Sheet Web-Builders	Nocturnal	Uneven spherical or oval cocoon laid in its retreat	Female guards the cocoon till spiderlings disperse from the web
34.	*Stegodyphus sarasinorum* Karsch, 1892	Sheet Web-Builders	Nocturnal	Uneven spherical or oval cocoon laid in its retreat	Female guards the cocoon till spiderlings disperse from the web
Family: Eutichuridae Lehtinen, 1967					
35.	*Cheiracanthium inornatum* O. Pickard-Cambridge, 1874	Foliage Runners	Nocturnal	Loosely attached eggs within silk in a rectangular folded blade of grass	Female guards the cocoon till the spiderlings emerge
36.	*Cheiracanthium melanostomum* (Thorell, 1895)	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge
37.	*Cheiracanthium triviale* (Thorell, 1895)	Foliage Runners	Nocturnal	Loosely attached eggs within silk in a rectangular folded blade of grass	Female guards the cocoon till the spiderlings emerge
38.	*Cheiracanthium sp.* 1	Foliage Runners	Nocturnal	Loosely attached eggs within silk in a rectangular folded blade of grass	Female guards the cocoon till the spiderlings emerge
39.	*Cheiracanthium sp.* 2	Foliage Runners	Nocturnal	Eggs are deposited on or folded leaf surface in retreat covered with a sheet of silk	Female guards the cocoon till the spiderlings emerge

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
Family: Gnaphosidae Pocock, 1898					
40.	*Drassodes sp.*	Ground Runners	Nocturnal	-	-
41.	*Haplodrassus sp.*	Ground Runners	Nocturnal	-	-
42.	*Megamyrmaekion ashae* Tikader & Gajbe, 1977	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with a sheet of silk	-
43.	*Scopoides kuljitae* (Tikader, 1982)	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with a sheet of silk	-
44.	*Scopoides sp.*	Ground Runners	Nocturnal	-	-
45.	*Trachyzelotes jaxartensis* (Kroneberg, 1875)	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with a sheet of silk	-
46.	*Zelotes mandae* Tikader & Gajbe, 1979	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with a sheet of silk	-
Family: Hersiliidae Thorell, 1870					
47.	*Hersilia aadi* Pravalikha, Srinivasulu & Srinivasulu, 2014	Ground/Bark Runners	Diurnal	Flat, large, round cocoon attached to the bark of trees	Females guards the cocoon till the spiderlings emerge
48.	*Hersilia savignyi*	Ground/Bark	Diurnal	Flat, large, round cocoon attached	Females guards the cocoon till

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	Lucas, 1836	Runners		to the bark of trees	the spiderlings emerge
49.	*Murricia hyderabadensis* Javed & Tampal, 2010	Ground/Bark Runners	Diurnal	Flat, small round, many cocoons attached to the bark of tree	Females guards the cocoon till the spiderlings emerge
Family: Liocranidae Simon, 1897					
50.	*Oedignatha sp.*	Ground Runners	Nocturnal	-	-
Family: Lycosidae Sundevall, 1833					
51.	*Evippa sp.* 1	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its back till few molts
52.	*Evippa sp.* 2	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its back till few molts
53.	*Hippasa lycosina* Pocock, 1900	Ground Runners	Diurnal	-	-
54.	*Lycosa poonaensis* Tikader & Malhotra, 1980	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its back till few molts
55.	*Lycosa sp.*	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
					back till few molts
56.	*Pardosa birmanica* Simon, 1884	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its back till few molts
57.	*Pardosa sumatrana* (Thorell, 1890)	Ground Runners	Diurnal	Oval brownish colored eggsac attached to spinnerets	Female carries eggsac attached to the spinnerets and spiderlings are carried by female on its back till few molts
Family: Oecobiidae Blackwall, 1862					
58.	*Oecobius putus* O. Pickard-Cambridge, 1876	Ground Runners	Diurnal	Eggs are deposited on solid substratum covered with layer of silk	Female guards the cocoon by constructing silk retreat over it and stay within it till the spiderlings emerge
Family: Oonopidae Simon, 1890					
59.	*Brignolia sp.*	Ground Runners	Nocturnal	-	-
60.	*Unidentified Species* 1	Ground Runners	Nocturnal	-	-
Family: Oxyopidae Thorell, 1870					
61.	*Hamadruas sikkimensis* (Tikader, 1970)	Stalkers	Diurnal	Dorsoventrally flat, oval shaped cocoon attached to leaf surface, brownish-white in color	Female guards the cocoon till the spiderlings emerge
62.	*Oxyopes ashae* Gajbe, 1999	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf	Eggsas is guarded by the mother until the spiderlings

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
				or grass blade	hatch.
63.	*Oxyopes bharatae* Gajbe, 1999	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
64.	*Oxyopes birmanicus* Thorell, 1887	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
65.	*Oxyopes pankaji* Gajbe & Gajbe, 2000	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
66.	*Oxyopes sp.* 1	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
67.	*Oxyopes sp.* 2	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
68.	*Oxyopes sp.* 3	Stalkers	Diurnal	Usually eggs are laid in flat eggsac attached to a piece of leaf or grass blade	Eggsas is guarded by the mother until the spiderlings hatch.
69.	*Peucetia akwadaensis* Patel, 1978	Stalkers	Diurnal	-	-
70.	*Peucetia viridana (Stoliczka, 1869)*	Stalkers	Diurnal	-	-
71.	*Peucetia yogeshi*	Stalkers	Diurnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	Gajbe, 1999				
72.	*Peucetia sp.*	Stalkers	Diurnal	-	-
Family: Palpimanidae Thorell, 1870					
73.	*Unidentified Species* 2	Ground Runners	Nocturnal	-	-
Family: Philodromidae Thorell, 1870					
74.	*Tibellus elongatus* Tikader, 1960	Ambushers	Diurnal	Eggs are deposited on or inside the folded leaf, covered with sheet of silk	Female guards the cocoon till the spiderlings emerges out
Family: Pholcidae C. L. Koch, 1850					
75.	*Crossopriza lyoni* (Blackwall, 1867)	Space Web-Builders	Diurnal	Loosely attached eggs with silk, oval to oblong eggsac	Female holds the eggsac in its chelicerae till the spiderlings emerge
76.	*Pholcus fragillimus* Strand, 1907	Space Web-Builders	Diurnal	Loosely attached eggs with silk, oval to oblong eggsac	Female holds the eggsac in its chelicerae till the spiderlings emerge
77.	*Pholcus phalangioides* (Fuesslin, 1775)	Space Web-Builders	Diurnal	Loosely attached eggs with silk, oval to oblong eggsac	Female holds the eggsac in its chelicerae till the spiderlings emerge
Family: Pisauridae Simon, 1890					
78.	*Hygropoda mahendriensis* Vankhede, Keswani &	Ambushers	Nocturnal	Eggs are deposited in the folded leaf and sealed with silk	Females guards the folded leaf by sitting on it along the longitudinal fold of leaf till the

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	Rajoria, 2013				spiderlings emerge
79.	*Nilus phipsoni* (F. O. Pickard-Cambridge, 1898)	Ambushers	Nocturnal	-	-
80.	*Perenethis venusta* L. Koch, 1878	Ambushers	Nocturnal	-	-
81.	*Pisaura podilensis* Patel & Reddy, 1990	Ambushers	Nocturnal	Spherical off white eggsac	Females carries eggsac with its chelicerae and before eggs get hatched the eggsac is hanged in the nursery web constructed in the leafs, guards the spiderlings till few moltes
Family: Prodidomidae Simon, 1884					
82.	*Prodidomus sp.*	Ground Runners	Nocturnal	-	-
Family: Salticidae Blackwall, 1841					
83.	*Epocilla sp.*	Stalkers	Diurnal	-	-
84.	*Harmochirus brachiatus* (Thorell, 1877)	Stalkers	Diurnal	-	-
85.	*Hasarius adansoni* (Audouin, 1826)	Stalkers	Diurnal	Eggs are deposited on solid substratum covered with sheet of silk	Female guards the cocoon by constructing retreat over it
86.	*Hyllus semicupreus*	Stalkers	Diurnal	Eggs are deposited on solid	Female guards the cocoon by

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	(Simon, 1885)			substratum covered with sheet of silk	constructing retreat over it
87.	*Marpissa tigrina* Tikader, 1965	Stalkers	Diurnal	-	-
88.	*Marpissa sp.*	Stalkers	Diurnal	-	-
89.	*Menemerus bivittatus* (Dufour, 1831)	Stalkers	Diurnal	Eggs are deposited on solid substratum covered with sheet of silk	Female guards the cocoon by constructing retreat over it
90.	*Myrmarachne tristis* (Simon, 1882)	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
91.	*Myrmarachne sp.* 1	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
92.	*Myrmarachne sp.* 2	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
93.	*Phintella vittata* (C. L. Koch, 1846)	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
94.	*Plexippus paykulli* (Audouin, 1826)	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
95.	*Plexippus petersi*	Stalkers	Diurnal	Eggs are deposited on solid	Female guards the cocoon by

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	(Karsch, 1878)			substratum covered with sheet of silk	constructing retreat over it
96.	*Portia sp.*	Stalkers	Diurnal	Eggs are deposited on solid substratum covered with sheet of silk	Female guards the cocoon by constructing retreat over it
97.	*Rhene albigera* (C. L. Koch, 1846)	Stalkers	Diurnal	-	-
98.	*Stenaelurillus sp.*	Stalkers	Diurnal	Eggs are deposited on solid substratum covered with sheet of silk	Female guards the cocoon by constructing retreat over it
99.	*Telamonia dimidiata* (Simon, 1899)	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
100.	*Thyene imperialis* (Rossi, 1846)	Stalkers	Diurnal	Eggs deposited on or in the folded leaf, covered with silk layer over which the female construct retreat	Female guards the cocoon till the spiderlings emerge
Family: Scytodidae Blackwall, 1864					
101.	*Scytodes fusca* Walckenaer, 1837	Foliage Runners	Nocturnal	Dorsoventrally flattened, uneven round eggsac, off white in color	Female carries the eggsac in chelicerae, spiderlings are guarded and sometimes feed by female within the retreat constructed in the folded leaf
102.	*Scytodes pallida* Doleschall, 1859	Foliage Runners	Nocturnal	Dorsoventrally flattened, uneven round eggsac, off white in color	Female carries the eggsac in chelicerae, spiderlings are guarded and sometimes feed by

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
					female within the retreat constructed in the folded leaf
103.	*Scytodes thoracica* (Latreille, 1802)	Foliage Runners	Nocturnal	Eggs are attached loose with the silk, oval in shape, brownish black in color	Female carries the eggsac in chelicerae, spiderlings are guarded and sometimes feed by female within the retreat constructed in the folded leaf
104.	*Scytodes sp.*	Foliage Runners	Nocturnal	Dorsoventrally flattened, uneven round eggsac, off white in color	Female carries the eggsac in chelicerae, spiderlings are guarded and sometimes feed by female within the retreat constructed in the folded leaf
Family: Sicariidae Keyserling, 1880					
105.	*Loxosceles rufescens* (Dufour, 1820)	Ground Runners	Nocturnal	Eggs are deposited on hard substratum covered with silk layer	-
Family: Sparassidae Bertkau, 1872					
106.	*Heteropoda bhaikakai* Patel & Patel, 1973	Foliage Runners	Nocturnal	Dorsoventrally flat, circular eggsac, off white in color	Female guards the cocoon till the spiderlings emerge by holding the eggsac in chelicerae
107.	*Heteropoda venatoria* (Linnaeus, 1767)	Foliage Runners	Nocturnal	Dorsoventrally flat, circular eggsac, off white in color	Female guards the cocoon till the spiderlings emerge by holding the eggsac in chelicerae
108.	*Olios bhavnagarensis* Sethi & Tikader, 1988	Foliage Runners	Nocturnal	Eggs deposited on or inside folded leaf covered with a sheet	Female guards the cocoon within the silk retreat till the

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
				of silk over it	spiderlings emerge
109.	*Olios gravelyi* Sethi & Tikader, 1988	Foliage Runners	Nocturnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon within the silk retreat till the spiderlings emerge
110.	*Olios milleti* (Pocock, 1901)	Foliage Runners	Nocturnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon within the silk retreat till the spiderlings emerge
111.	*Olios wroughtoni* (Simon, 1897)	Foliage Runners	Nocturnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon within the silk retreat till the spiderlings emerge
112.	*Olios sp.*	Foliage Runners	Nocturnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon within the silk retreat till the spiderlings emerge
Family: Stenochilidae Thorell, 1873					
113.	*Stenochilus hobsoni* O. Pickard-Cambridge, 1870	Ground Runners	Nocturnal	Eggs are deposited under the bark covered with silk layer	Female guards the cocoon till spiderlings emerge
Family: Tetragnathidae Menge, 1866					
114.	*Guizygiella indica* (Tikader & Bal, 1980)	Orb Weavers	Nocturnal	-	-
115.	*Guizygiella melanocrania* (Thorell, 1887)	Orb Weavers	Nocturnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
116.	*Guizygiella shivui* (Patel & Reddy, 1990)	Orb Weavers	Nocturnal	-	-
117.	*Leucauge decorata* (Blackwall, 1864)	Orb Weavers	Diurnal	-	-
118.	*Tetragnatha extensa* (Linnaeus, 1758)	Orb Weavers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon
119.	*Tetragnatha mandibulata* Walckenaer, 1841	Orb Weavers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon
120.	*Tetragnatha maxillosa* Thorell, 1895	Orb Weavers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Female guards the cocoon
121.	*Tylorida ventralis* (Thorell, 1877)	Orb Weavers	Diurnal	-	-
Family: Theridiidae Sundevalla, 1833					
122.	*Argyrodes argentatus* O. Pickard-Cambridge, 1880	Space Web-Builders	Nocturnal	Oval bell shaped eggsac, brown in color, hanging in the cob-web	Female guards the eggsac till spiderlings emerge
123.	*Cephalobares globiceps* O. Pickard-Cambridge, 1870	Space Web-Builders	Nocturnal	-	-
124.	*Coleosoma blandum* O. Pickard-	Space Web-	Nocturnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	Cambridge, 1882	Builders			
125.	*Euryopis sp.*	Space Web-Builders	Nocturnal	-	-
126.	*Latrodectus hasseltii* Thorell, 1870	Space Web-Builders	Nocturnal	Spherical shaped eggsac, yellowish-white in color, female lays multiple eggs at one time	Female guards the eggsac till spiderlings emerge
127.	*Meotipa picturata* Simon, 1895	Space Web-Builders	Nocturnal	-	-
128.	*Parasteatoda mundula* (L. Koch, 1872)	Space Web-Builders	Diurnal	Spherical brownish egg sac, placed in the rolled leaf in the middle of cob-web	Female guards the eggsac till spiderlings emerge
129.	*Rhomphaea projiciens* O. Pickard-Cambridge, 1896	Space Web-Builders	Nocturnal	Arrow shaped, brown colored with black stripes, eggsac larger as compared to female spider	Female guards the eggsac till spiderlings emerge
130.	*Steatoda sp.* 1	Space Web-Builders	Nocturnal	-	-
131.	*Steatoda sp.* 2	Space Web-Builders	Nocturnal	-	-
132.	*Yaginumena maculosa* (Yoshida & Ono, 2000)	Space Web-Builders	Nocturnal	-	-
Family: Thomisidae Sundevall, 1833					
133.	*Amyciaea forticeps* (O.	Ambushers	Diurnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
	Pickard-Cambridge, 1873)				
134.	*Camaricus sp.*	Ambushers	Diurnal	-	-
135.	*Indoxysticus minutus* (Tikader, 1960)	Ambushers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Females were observed to guard the cocoon till the spiderlings emerge from eggs
136.	*Runcinia sp.*	Ambushers	Diurnal	-	-
137.	*Thomisus sp.* 1	Ambushers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Females were observed to guard the cocoon till the spiderlings emerge from eggs
138.	*Thomisus sp.* 2	Ambushers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Females were observed to guard the cocoon till the spiderlings emerge from eggs
139.	*Thomisus sp.* 3	Ambushers	Diurnal	Eggs deposited on or inside folded leaf covered with a sheet of silk over it	Females were observed to guard the cocoon till the spiderlings emerge from eggs
Family: Titanoecidae Lehtinen, 1967					
140.	*Pandava laminata* (Thorell, 1878)	Sheet Web-Builders	Nocturnal	Irregular oval, yellowish brown eggsac attached to sheet web constructed under the bark	Female guards the eggsac till spiderlings are hatched
Family: Uloboridae Thorell, 1869					
141.	*Miagrammopes sp.*	Orb Weavers	Nocturnal	-	-

Sr. No.	Scientific Name	Guilt Structure	Nocturnal/Diurnal	Type of Cocoon	Parental Care
142.	*Uloborus danolius Tikader, 1969*	Orb Weavers	Diurnal	Star shaped off white eggsac placed attached to the irregular web on the underside of leaf	Female guards the eggsac till the spiderlings hatch and remains with them till spiderlings gets dispersed
143.	*Uloborus krishnae Tikader, 1970*	Orb Weavers	Diurnal	Star shaped off white eggsac placed attached to the irregular web on the underside of leaf	Female guards the eggsac till the spiderlings hatch and remains with them till spiderlings gets dispersed
144.	*Uloborus sp.* 1	Orb Weavers	Diurnal	Star shaped off white eggsac placed attached to the irregular web on the underside of leaf	Female guards the eggsac till the spiderlings hatch and remains with them till spiderlings gets dispersed
145.	*Uloborus sp.* 2	Orb Weavers	Diurnal	Star shaped off white eggsac placed attached to the irregular web on the underside of leaf	Female guards the eggsac till the spiderlings hatch and remains with them till spiderlings gets dispersed
146.	*Zosis geniculata* (Olivier, 1789)	Orb Weavers	Nocturnal	Star-shaped eggsac hanging at the corner of female web, egg sac yellowish white in color	Female was observed resting in the hub while the eggsac stays at the corner of web, no proper parental care behavior observed
Family: Zodariidae Thorell, 1881					
147.	*Storena gujaratensis* Tikader & Patel, 1975	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with silk	-
148.	*Storena sp.*	Ground Runners	Nocturnal	Eggs are deposited on solid substratum covered with silk	-