

**SPIDERS OF BISHOP MOORE COLLEGE
MAVELIKARA, KERALA**

*Project Submitted to the University of Kerala in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science*

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CERTIFICATE

This is to certify that this project entitled “Spiders of Bishop Moore College, Mavelikkara, Kerala” is an authentic record of the work carried out by ASHIK R., SAYANA SALEEM, ANAGHA M. PRASANNAN, ASHOL K. L., NISHANA N., SREELEKSHMI S. and VARSHA, B.Sc. Zoology (VI semester) student under my supervision and guidance and that no part of this report has been submitted earlier for any other degree or diploma.



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DECLARATION

I do hereby declare that this project entitled “Spiders of Bishop Moore College, Mavelikkara, Kerala” is the bonafide work carried out by me under the supervision and guidance of Ms. Jyothi Tilak, Guest faculty, Department of Zoology, Bishop Moore College, Mavelikara for the partial fulfillment of the requirements for the degree of Bachelor of Science and that no part of this project work has been submitted earlier for award by any other degree, diploma or recognition of any university.

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INTRODUCTION

Spiders are the invertebrate belongs to the class *Arachnida* of the phylum Arthropoda. These are the animal possess jointed appendages & chitinous exoskeleton. Spiders constitute the largest order of arachnids. The order *Araneae* ranks seventh in total species diversity among all other groups of organisms. In India there are about 1,686 spider species found out of the total species of 44,906 recorded throughout the world. They belong to two infra orders (Mygalomorphae & Araneomorphae), 60 families & 438 genera.

Spiders are abundant and wide spread in almost all ecosystems and constitute one of the most important components of the global biodiversity. Spiders are clearly an integral part of global biodiversity since they play many important roles in ecosystems as predator and source of food for other creatures. Furthermore spiders have already established themselves as model organisms in biochemical behavioural and ecological research (Sebastian & Peter, 2009). Spiders have a very significant role in ecology by being exclusively predatory and there by maintaining ecological equilibrium. Spiders are air breathing arthropods that have eight legs and chelicerae with fangs that inject venom. They are the largest order of arachnids and rank seventh in species diversity among all other groups of organisms. They are extremely important to agriculture & horticulture. They are predators & their main preys are insects. Their population can be huge. Possibly in excess of five million per hectare in temperate grass land. Consequently they have enormous impact on agricultural productivity & are essential natural pest controllers. They are one of the diverse and functionally important predators. Hence, spiders can play a very important role in regulating the terrestrial arthropod populations.

The members of the class Arachnida are generally characterised by two body region, cephalothorax (prosoma) and abdomen (opisthosoma). Four pairs (8) segmented legs are attached to cephalothorax. There is also a pair of pedipalps which look like small legs, at the front of the body. In most adult male spiders the pedipalp are swollen at the end & contains complicated structures which is used for mating. The spiders are unique as they possess spinnerets, which are situated near the hind end of the abdomen. The spinnerets produce silk which can used for number of purposes, including making a web, wrapping up prey, protecting eggs, helping the spider move from one area to another & in even used for

communication. All spiders have fangs which are used to bite the prey, and most of them have venom glands. However majority of spiders have fangs too small to penetrate human skin, and so are harmless.

They are considered as biological control agents as they help in maintaining the ecological balance in the nature by feeding on the small insects and in return these spiders are being eaten by birds and other bigger insects (Bhattacharya et al., 2017). The body of spiders is divided into two parts comprising the cephalothorax and abdomen where the cephalothorax has 4 pair of legs and the abdomen does not have any segments (Sebastian & Peter, 2017). Spiders can't eat solid food, so they have to liquefy the food by using digestive juices and then consume this liquid food (Dharmaraj et al., 2017).

Spiders are one of the most diverse, abundant and ubiquitous groups of arthropods. Spiders are found worldwide and distributed over every continent except Antarctica. They are also known as wandering spiders, ambushing spiders, web-building spiders etc. Spiders play important roles in terrestrial ecosystems, they prey upon many insect pests and other invertebrates. Despite having a great ecological importance, spiders are largely neglected and poorly studied group of invertebrates.

Spiders play an important role in regulating smaller invertebrate's population in an ecosystem (Riechert, 1974). They are excellent predators, and their preying feature has proved to be helpful to men in agro-ecosystem. They suppress the abundant number of the pest in field and vegetation by preying on them and thus protecting the plantation (Sharma, 2014). They act as natural pest control to the crop, eating away small pests which destroy the crop. Spider in the home or nearby also acts as disease controller, as they prey on various disease spreading insects, mosquitoes, flies, cockroaches etc. controlling the spread of disease by limiting their population. Spiders also have few medical uses as well, that's why it is an interesting topic of research for scientists. Spider venom is known to act as a painkiller and in few reports, it is also stated that it may be helpful in treating strokes, muscular dystrophy etc. (Saez et al., 2010).

OBJECTIVES

Collection and identification of spiders in the campus.

REVIEW OF LITERATURE

Spiders comprise one of the largest orders of animals. The spider fauna of India has never been studied in its entirety despite of contributions by many arachnologists since Stoliczka (1869). The pioneering contribution on the taxonomy of Indian spiders is that of European arachnologist Stoliczka (1869). Review of available literature reveals that the earliest contribution by Blackwell (1867); Karsch (1873); Simon (1887); Thorell (1895) and Pocock (1900) were the pioneer workers of Indian spiders. They described many species from India. Tikader (1980, 1982), described spiders from India. Tikader (1980) compiled a book on Thomisidae spiders of India, comprising two subfamilies, 25 genera and 115 species. Pocock (1900) and Tikader (1980, 1987) made major contributions to the Indian Arachnology, have high lightened spider studies to the notice of other researcher.

Tikader (1987) also published the first comprehensive list of Indian spiders, which included 1067 species belonging to 249 genera in 43 families. According to world spider catalogue there are Spiders of protected areas in India, are studied by Gajbe (1995a) in Indravati Tiger Reserve and recorded 13 species. Rane and Singh (1977) recorded five species and Gajbe (1995b) recorded 14 species from Kanha Tiger Reserve, Madhya Pradesh. From the last three decades, contribution of Gajbe (1995-2003) to the field of spiders is noteworthy. He described 147 new spider species from different habitats of India. He published 69 papers on Araneid, Gnaphosid, Lycosid, Thomisid and Oxyopid spiders and also State Fauna series (2007, 2008a, 2009).

The updated spider checklist given by Keswani et al. (2012) of SGB Amravati University Arachnology laboratory shows 1686 species from 438 genera and 60 families. Gajbe (2003) prepared a checklist of 186 species of spiders in 69 genera under 24 families distributed in Madhya Pradesh and Chhattisgarh. Patel (2003) described 91 species belonging to 53 genera from Parambikulam Wildlife Sanctuary, Kerala. Manju Silwal et al. (2003) recorded 116 species from 66 genera and 25 families of spiders from Puma wildlife Sanctuary, Dangs, Gujarat. Sivaperuman et al., (2004) studied the spiders in Desert National

Park, Rajasthan. Bastawade (2004) described arachnid fauna of orders Araneae, Scorpionida and Solifugi from Melghat Tiger Reserve, Amravati, Maharashtra State.

MATERIALS AND METHODS

STUDY AREA

The study area covers the College Campus itself. The campus has a latitude 9.2414° N and a longitude 76.5558° E.

COLLECTION AND IDENTIFICATION OF SPIDERS

The study was carried out for a period of three months from January to March 2022. Spiders were observed and collected from different timings of the day, mostly for afternoon. All out-search methods were used for collecting the spiders. Specimens were collected by walking through the habitat and searching visually for spiders, their web or retreat. Collection was conducted mainly by handpicking and sweeping method. Spiders were collected from the ground stratum and from the terminals of plants. Specimens collected were transported to the laboratory and were preserved in 70% alcohol. Preserved specimens were examined under a stereo zoom microscope in the laboratory. Further, identified by following “Handbook Indian Spiders” and “Spiders of India” by Sebastian and Peter and also by the help of experts in the field.

RESULTS

The present study focused mainly on the genus level identification of the collected specimens. The study revealed 7 families and 12 genera. Species level identification is limited to few genera only. The systematic position and common characters of family and genera were described indicating their guilds. Photographs of the collected genera were included. The list given below indicating the family, genus, species (wherever possible) and guild of the collected specimen.

Table.1- List showing the details of spiders identified from the campus.

Sl. No.	FAMILY	GENUS	SPECIES	GUILD
1	Araneidae	<i>Argiope</i>	<i>A.pulchella</i>	orb-weaver spiders
			<i>Argiope sp.</i>	orb-weaver spiders
2	Hersiliidae	<i>Hersilia</i>	<i>Hersilia sp.</i>	Ambushers
3	Philodromidae	<i>Philodromus</i>	<i>Philodromus sp.</i>	Ambushers
		<i>Tibellus</i>	<i>Tibellus sp.</i>	Ambushers
4	Pholcidae	<i>Uthina.</i>	<i>Uthina sp.</i>	orb-weaver spiders
		<i>Crossopriza</i>	<i>Crossopriza sp.</i>	orb-weaver spiders
5	Salticidae	<i>Plexippus</i>	<i>P.petersi</i>	Stalkers
		<i>Phintella</i>	<i>P.vittata</i>	Stalkers
		<i>Epocilla</i>	<i>Epocilla sp.</i>	Stalkers
6	Sparassidae	<i>Heteropoda</i>	<i>H.venatoria</i>	Ambushers
		<i>Olios</i>	<i>Olios sp.</i>	Ambushers
7	Therididae	<i>Theridion</i>	<i>Theridion sp.</i>	Scattered line weavers

SYSTEMATICS

Family ARANEIDAE Clerck, 1758.

Characters: Carapace variable, thoracic region separated from cephalic region by oblique depression. Eyes less variable in size in different genera, eight in number and arranged usually in two rows. Sternum heart-shaped or triangular, narrowing behind, thus coxae IV nearly contiguous, labium with swollen distal edge. Maxillae widest distally and generally not longer than wide. Chelicerae strong, vertical and not divergent armed with two sets of strong teeth. Leg long and strong. Pedipalp with a single claw in female, Abdomen variable in size and shape. Most of the spiders construct orb-webs; spiders hang in the web head down.

Distribution : Cosmopolitan.

Genus *Argiope* Audouin, 1826.

Kingdom : Animalia

Phylum : Arthropoda

Class : Arachnida

Order : Araneae

Family : Araneidae

Genus : *Argiope*

Characters: Cephalothorax fiat, clothed with metallic white pubescence; ocular quadrangle much longer than wide. Eyes of posterior row very strongly procurved, laterals contiguous. Abdomen usually longer than wide, varying in shape, posterior half wider than anterior. Legs stout, armed with hair and spines. Males relatively very small. These species of the genus frequently decorate their *orb* with white silken ribbons arranged symmetrically.

Distribution: All temperate countries of the world.

The genus *Argiope* includes rather large spiders that often have a strikingly coloured abdomen. These spiders are distributed throughout the world. Most countries in tropical or temperate climates host one or more species that are similar in appearance. The etymology of *Argiope* is from a Latin word *argentum* meaning silver. The carapace of *Argiope* species is

typically covered in silvery hairs, and when crawling in the sun, they reflect it in a way that gives them a metallic, white appearance.

***Argiope pulchella* Thorell, 1881.**

The female is larger than the male, being 8 to 10 mm (0.3 to 0.4 in) while the male is 4 to 6 mm (0.16 to 0.24 in). The female cephalothorax is slightly longer than it is wide and is clad in a white, silky pubescence. The two central eyes are surrounded by black rings and are situated on a prominent tubercle. The chelicerae are brown and rather small. The legs are long and robust, clad with spines and hairs and banded in brown and yellow. The abdomen is pentagonal, overlaps the cephalothorax a little and is slightly longer than it is wide. The dorsal surface is pubescent and is bright yellow in color with three horizontal black bands. The ventral surface is brown with two longitudinal white patches.

FAMILY HERSILIIDAE Thorell, 1869

The family Hersiliidae includes small to medium-sized spiders with very long posterior lateral spinnerets. Such structures are used in a characteristic hunting behaviour in which the spider holds the spinnerets over the prey, and then rotates at great speed around the prey, fixing it to the substratum.

Characters: Cephalothorax as long as wide, with cephalic region elevated, narrow and defined by a deep semi-circular sulcus; both rows of eyes strongly recurved. Legs except III pair, very long and slender; armed with three claws. Abdomen short, sub pentagonal, posterior spinnerets very long usually longer than the abdomen.

Distribution: Cosmopolitan

Genus *Hersilia* Audouin, 1826

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Hersiliidae
Genus : *Hersilia*

Characters: The *Hersilia* is a genus of spiders noted for their elongated posterior lateral spinnerets which can be as long as the abdomen in long-spinnered bark spiders and less in rock living species. Hersiliids are small to medium (4.5-12.5mm body length) dorso-ventrally flattened spiders, especially the arboreal genera.

As viewed from above, the carapace is oval with the 8 eyes situated in two recurved rows, on a raised hump or tubercle. The anterior median eyes are largest. The oval abdomen is wider posteriorly with the posterior lateral spinnerets extending out parallel to each other. The inner edge of these spinnerets is lined with silk-producing tubules (spine-like spigots) as opposed to the distally placed spigots of most spiders.

Distribution: Africa, Madagascar, Oriental Region.

Hersilia, also known as long-spinnered bark spiders and two-tailed spider. It is a genus of tree trunk spiders that was first described by Jean Victoire Audouin in 1826. *Hersilia* is a diurnal, arboreal genus which can sometimes be found on nearby rocks. They do not spin webs or construct retreats. They have eight eyes. They are small to medium-sized spiders and are active day and night. They are very well camouflaged.

FAMILY PHILODROMIDAE, Thorell, 1870.

Philodromidae, also known as philodromid crab spiders and running crab spiders, is a family of araneomorph spiders first described by Tord Tamerlan Teodor Thorell in 1870. It contains over 600 species in thirty genera. Most are dull colored- brown, gray, yellowish or mottled with a leaf-like cardiac mark on the anterior dorsal abdomen, and seldom reach above 10 millimetres (0.39 in) long. None of the species build webs, but they do use silk for draglines and egg sacs.

It is superficially similar to the "true" crab spiders, but these families are not as closely related as previously thought. Philodromids tend to have few true setae (hairs or spines) on their bodies and lack the congruent eye tubercles of some crab spiders. Their second legs are usually the longer of the four pairs of walking legs. The most common genus is *Philodromus* which is widespread. Other common genera include the elongate grass-dwelling *Tibellus* and the widespread *Thanatus*, which includes the house crab spider that commonly captures flies on and in buildings.

GENUS *PHILODROMUS* Walckenaer,1826

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Philodromidae
Genus : *Philodromus*

Philodromus is a genus of philodromid crab spiders. Spiders in this genus are distinctively flattened. More than 250 described species are distributed throughout the Holarctic region, with few species reaching into more southern regions. Some are found in certain parts of Africa, with sporadic species occurring up to Australia. Only one species, *P. traviatus* is found in (northern) South America. 16 species occur in Central Europe. It is commonly known as 'running spiders', these are not considered to be harmful to humans.

GENUS *TIBELLUS*, Simon, 1875

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Philodromidae
Genus : *Tibellus*

It is a genus of slender crab spiders belong to order Araneae family philodromidae. Mostly distributed in Asia, Africa and America. Adult members of this genus can reach 4-15 mm of length and can mostly be encountered above the soil surface on low vegetation, foliage where they actively pursue their prey as they don't make webs. The basic colour of the body is light brown or pale yellow. It is elongate slender to carapace and the cylindrical abdomen show a large brown stripe in the midline of back. The long and thin legs are more or less equal in length and they usually are stretched out along grass stems or leaves. First two pairs joined forwardly stretched.

FAMILY PHOLCIDAE, C.L. Koch, 1850

Characters: Cephalothorax short, almost rounded; cephalic region elevated on the sides; thoracic region with deep median longitudinal groove; clypeus high. The anterior median eyes small, the rest large and forming a group on each side. Legs extremely long, thin and slender furnished with three claws. These spiders are sedentary in habit. They occur in trees and rocks, under stones and in common dark places in houses. The females always carry the cocoon in their chelicerae.

Genus *Uthina* Simon, 1893

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Pholcidae
Genus : *Uthina*

Characters: It is a group of haplogyne spiders with a medium sized body, a cylindrical abdomen, and very long legs. Pholcid spiders of the genus *uthina* (family Pholcidae) primarily occur in cave entrances, although they can be found in other well covered microhabitats, such as under rocks and leaf litter. Occasionally in rather open areas. They are widely distributed from the seychelles and Sri Lanka, across southeast Asia.

Genus *Crossopriza* Simon, 1893

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Pholcidae
Genus : *Crossopriza*

Characters: They are commonly known as tailed cellar spiders, tailed daddy longlegs spiders, and sometimes box spiders. They all possess extremely long fragile legs that can reach up to 6 cm (2.4 in) long and a body length of that ranges from 2.5 to 7 mm (0.098 to 0.276 in). Their abdomens are distinctly squarish when viewed from the side and their carapace is more or less circular when viewed from above. They also possess two kinds of sound-producing organs and have six eyes.

FAMILY SALTICIDAE, Blackwall,1841.

Jumping spiders or the Salticidae are a family of spiders. Jumping spiders have some of the best vision among arthropods and use it in courtship, hunting, and navigation. Although they normally move unobtrusively and fairly slowly, most species are capable of very agile jumps, notably when hunting, but sometimes in response to sudden threats or crossing long gaps. Both their book lungs and tracheal system are well-developed, and they use both systems (bimodal breathing). Jumping spiders are generally recognized by their eye pattern. All jumping spiders have four pairs of eyes, with the anterior median pair being particularly large.

The jumping spiders are of medium or small size, with a short body and stout legs which are furnished with two tarsal claws. They are common on plants, logs, fences, and walls of buildings. They attract attention by their peculiar appearance; their short, stout legs, bright colours, conspicuous eyes and their quick jumping movements being very different from those of other spiders. They make use of the visual sense to hunt their prey in broad daylight, and are common in sunny areas. The members of this family can be easily recognised by the pulsar arrangement of their eyes and the relative size of the different pairs of eyes and have the keenest vision of all spiders. They also display the remarkable courtship behaviour.

Genus *Plexippus*, C.L.Koch, 1846.

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Salticidae
Genus : *Plexippus*

Characters: Majority of species has similar appearance, increased by invisibility of white spots of semitransparent setae and scales and gradual fading of colors of specimens preserved in alcohol.

***Plexippus petersi*, Karsch, 1878**

Characters: The male *Plexippus petersi* is between 6 and 10 mm (0.24 and 0.39 in) long and the female is slightly larger. The head bears four pairs of eyes, one pair is larger than the others, forward-facing and movable, while the remainder are small and fixed in position. The cephalothorax is longer than it is wide and is brown with two darker reddish-brown bands on the dorsal surface. The abdomen is twice as long as it is wide and is yellowish-brown dorsally with two longitudinal darker brown bands which are broken posteriorly to give a pair of orangish spots on either side; the ventral surface is yellowish-brown and the spinnerets are greyish-brown. The legs are yellowish-brown, streaked with darker brown and darker near the joints, and have blackish-brown leading edges.

Genus *Phintella*, Strand, 1906

Kingdom : Animalia

Phylum : Arthropoda

Class : Arachnida

Order : Araneae

Family : Salticidae

Genus : *Phintella*.

Characters: *Phintella* is a genus of jumping spiders that was first described by W. Bösenberg & Embrik Strand in 1906.

***Phintella vittata*, C. L. Koch, 1846**

They range in size from 2 to 22 mm (0.08 to 0.87 inch), although most are small to medium-sized. They are very common in the tropics, but some also live in northern and even Arctic regions. Though there are a few species that have hairy bodies, most species have few hairs.

Males and females of the species *Phintella vittata* are able to detect ultraviolet light from the so-called UVB band (315–280 nm) and have specialized surfaces on their bodies to reflect it.

Genus *Epocilla* Thorell, 1887.

Epocilla is a genus of jumping spiders that was first described by Tamerlan Thorell in 1887. The Oriental jumping spider genus *Epocilla* was erected by Thorell [1887], with *Epocilla praetextata* Thorell, 1887 as its generotype.

FAMILY SPARASSIDAE, Bertkau, 1872.

Huntsman spiders are large, long-legged spiders. They are mostly grey to brown, sometimes with banded legs. Many huntsman spiders, especially *Delena* (the flattest), and including *Isopeda*, *Isopedella* and *Holconia*, have rather flattened bodies adapted for living in narrow spaces under loose bark or rock crevices. This is aided by their legs which, instead of bending vertically in relation to the body, have the joints twisted so that they spread out forwards and laterally in crab-like fashion ('giant crab spiders'). Both Brown (*Heteropoda*) and Badge (*Neosparassus*) Huntsman spiders have less flattened bodies. Brown Huntsman (*Heteropoda* species) spiders are patterned in motley brown, white and black.

GENUS *HETEROPODA*, Latreille, 1804

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Sparassidae
Genus : *Heteropoda*

Species of heteropoda genus is a part of the Sparassidae family popularly known as the huntsman spider, comprising of about 1917 species in tropical Asia and Australia. Adult size they are big and largest species of this genus *Heteropoda maxima* or giant huntsman. it is 4.6 c.m in length and having a leg span of about 30 c.m. Brown is the dominant colour though the shadows of may vary like *Heteropoda davidbowie* has a reddish brown body. While the *Heteropoda maxima* appear yellowish brown. Legs of many species lack a particular pattern giving them a long hairy look. Eggs are small oval sac holds a minimum of 100 eggs. In

juvenile stage they have a lighter hue which gets darker upon maturation. Since they are a part of the Huntsman spider family most species of this genus do not make webs and hunt for their prey. Some of them are toxic venom which is dangerous for insects but not to humans, they bite when provoked. Their sting could be painful but will not be able to cause any long term problems.

***Heteropoda venatoria* Linnaeus, 1767.**

The adult has a flat, brown body 2 to 2.5 cm (0.8 to 1 inch) long, 7 to 10 cm (3 to 4 inches) wide, including the legs. The female may be slightly larger than the male, particularly in the abdomen, but the male has longer legs and larger tips on its pedipalps. The clypeus, the area just in front of the eyes, is cream or yellowish, and the carapace behind the eyes has a wide band which is usually tan in the female and cream in the male. The body is not very hairy, but the legs have erectile setae, each of which is marked with a black dot.

Genus *Olios* Walckenaer, 1837

Olios is the largest genus of huntsman spiders, containing 177 species. They are found throughout the world, with most species occurring in hot countries. The genus was first described by Charles Athanase Walckenaer in 1837.

FAMILY THERIDIDAE, Sundevall, 1833.

Members of this family make relatively large tangles of silk, often under leaves, under overhanging ledges, under rocks and debris, and in corners of buildings. The tangles are usually not “recycled” regularly and thus increase in size and complexity with the age of the spider. Some unusual species are specialists and they build very reduced webs. Theridiids have globose abdomens which are often shiny and round. They capture their prey by rapidly wrapping it in silk, then biting. Some of the most venomous spiders are members of this group (e.g., black widows). Most of our species are not considered dangerous to humans.

GENUS *THERIDION* Walckenaer, 1805

Kingdom : Animalia
Phylum : Arthropoda
Class : Arachnida
Order : Araneae
Family : Theridiidae
Genus : *Theridion*

Theridion is a genus of tangle - web spiders with almost 600 described species around the world. The genus *Theridion* was erected by Walckenaer in 1805. The members of this genus are small sized with oval or spherical abdomen without colulus. The genus is currently known by 586 valid species worldwide, of which 13 are known from India. Notable species are the Hawaiian happy face spider (*T. grallator*) named for the iconic symbol on its abdomen and *T. nigroannulatum*, one of few species that live in social groups.

Argiope pulchella.



Argiope sp.



Hersilia sp.



Uthina sp.



Crossopriza sp.



Philodromus sp.



Tibellus sp.



Plexippus petersi



Phintella vittata



Epocilla sp.



Heteropoda sp



Olios sp.



Theridion sp



PLATE 1- photographs of spiders observed in the Bishop Moore College Campus during the study period.

DISCUSSION AND CONCLUSION

The present study was conducted from January to March 2022 in the College Campus of Bishop Moore College, Mavelikkara. Specimens were collected by walking through the habitat and searching visually for spiders, their web or retreat. Collection was conducted mainly by handpicking and sweeping method. The collected specimens were brought to the laboratory and identified by using Microscopes. Further, identified by following “Handbook Indian Spiders” and “Spiders of India” by Sebastian and Peter and also by the help of experts in the field. All the identified specimens were photographed and plates were prepared. Later, specimens were preserved in 70% alcohol. From the study, eleven genera coming under seven families were identified. Families identified were Araneidae, Hersiliidae, Pholcidae, Philodromidae, Salticidae, Sparassidae and Therididae. Among them, Araneidae comprise only one genus namely *Argiope*. Hersiliidae comprise the genus *Hersilia*. Pholcidae included two genera *Uthina* and *Crossopriza*. Philodromidae with two genera namely *Philodromus* and *Tibellus*. Family Salticidae comprise two genera *Plexippus*, *Phintella* and *Epocilla*. Sparassidae includes *Heteropoda* and *Olios* while Therididae includes the genus *Theridion*. Coming to the characteristic guild feature, family Araneidae and Pholcidae showed orb-weaver spiders. Family Hersiliidae, Philodromidae and Sparassidae were identified by Ambushers, while Salticidae included stalkers. Family Therididae included spiders in the category of scattered line weavers.

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