

PRELIMINARY REPORT ON THE INSECT FAUNA

Insects are the dominant group of organisms on earth in terms of both taxonomic diversity (50% of all described species) and ecological function. As far as diversity of the insects is concerned, insect species are distributed unevenly among the higher taxonomic groups. Five orders stand out for their high species richness, which include Coleoptera (beetles), Diptera (flies), Hymenoptera (wasps, ants and bees), Lepidoptera (butterflies and moths), and Hemiptera (the true bugs). Among these, beetles comprise almost 40% of described insect species i.e. more than 3,00,000 species. During the present investigations, the insect diversity of the campus was studied through visual observations for a period of six months. Early morning and evening visits were planned during the study period as the insects are more active during this period. The insects were then identified with the help of available standard literature such as Borrer, *et al.* (1992), Gullan & Cranstan (2000), Mauro, *et al.* (1987), Gunathilagaraj, *et al.* (1998), Haribal (1992), Mani (1995), Pradhan (1992) and Saxena (1992).

OBSERVATIONS

I. Order: Lepidoptera

The butterflies and moths are common insects and are well known to everyone. They are most readily recognized by the scales on the wings. Most of the body and legs are also covered with scales. The principal characters used in identifying adult Lepidoptera are those of the wings (venation, method of wing union, wing shape and scaling). Other characters used include the characters of the antennae, mouth parts, ocelli, legs, and frequently some general features such as size and color.

Details of the Lepidoptera species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Pieridae	<i>Eurema hecabe</i>	Common grass yellow	1
	<i>Catopsilia sp.</i>	Common emigrant	2,3
Papilionidae	<i>Papilio polytes</i>	Common mormon	4
Lycaenidae	<i>Chilades pandava</i>	Jewel butterfly	5
	<i>Talicauda nyseus</i>	Red Pierrot	6
	<i>Spindasis vulcanus</i>	Common silverline	7
Nymphalidae	<i>Tirumala sp.</i>	Beautiful tiger	8
	<i>Melanitis</i>	The great evening brown	9



1. *Eurema hecabe*



2. *Catopsilia sp.*



3. *Catopsilia sp.*



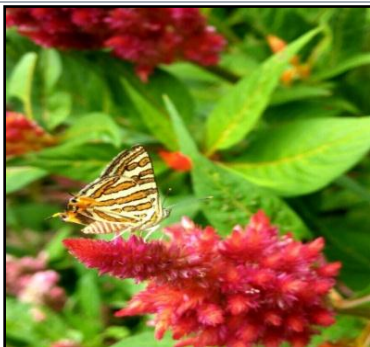
4. *Papilio polytes*



5. *Chilades pandava*



6. *Talicada nyseus*



7. *Spindasis vulcanus*



8. *Tirumala sp.*



9. *Melanitis*

II. Order: Hymenoptera

Hymenoptera is a large order of insects, comprising the sawflies, wasps, bees, and ants. This is the most beneficial order from the human point of view. It contains great many species that are of value as parasites or predators of insect pests and it contains the most important pollinators of plants, the bees. The Hymenoptera are very interesting group in terms of their biology. They exhibit a great diversity of habitat and complexity of behavior in the social organization.

Details of the Hymenoptera species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Apidae			
Subfamily			
Bombinae	<i>Xylocopa sp.</i>	Bumble bee	10
Apinae	<i>Apis mellifera</i>	Honey bee	11
	<i>Apis indica</i>	Honey bee	12
Formicidae	<i>Solenopsis sp.</i>	Black ant	13
Vespidae	<i>Vespula sp.</i>	Yellow wasp	14



10. *Xylocopa sp.*



11. *Apis mellifera*



12. *Apis indica*



13. *Solenopsis sp.*



14. *Vespula sp.*

III. Order: Coleoptera

Coleoptera is the largest order in the class Insecta. As adults, most beetles have a hard, dense exoskeleton that covers and protects most of their body surface. The front wings, known as elytra, are just as hard as the rest of the exoskeleton. They fold down over the abdomen and serve as protective covers for the large, membranous hind wings. At rest, both elytra meet along the middle of the back, forming a straight line that is probably the most distinctive characteristics of the order. The principle characters of beetles used in identification are those of the head, antennae, thoracic sclerites, legs, elytra, and abdomen. Occasionally, characters such as size, shape, and colour are used.

Details of the Coleoptera species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Malachiidae	<i>Anthocomus fasciatus</i>	Soft winged flower beetle	15
Pyrochroidae	<i>Pyrochroa serraticornis</i>	Cardinal Beetle	16
Coccinellidae	<i>Coccinella sp.</i>	Ladybird beetle	17
Cleridae	<i>Trichodes alvearius</i>	Soldier Beetle	18
Meloidae	<i>Mylabris pustulata</i>	Orange blister beetle	19



15. *Anthocomus fasciatus*



16. *Pyrochroa serraticornis*



17. *Coccinella sp.*



18. *Trichodes alvearius*



19. *Mylabris pustulata*

IV. Order: Hemiptera

The Hemiptera or true bugs are an order of insects comprising some 50,000 to 80,000 species of groups such as the cicadas, aphids, plant hoppers, leaf hoppers, and shield bugs. Most hemipterans feed on plants, using their sucking and piercing mouthparts to extract plant sap. Some are parasitic while others are predators that feed on other insects or small invertebrates. They live in a wide variety of habitats, generally terrestrial, though some species are adapted to life in or on the surface of fresh water. Two pairs of wings are usually present, the anterior pair of wings most often of harder consistency than the posterior pair.

Details of the Hemiptera species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Pyrrocoreidae	<i>Pyrrhocoris sp.</i>	Cotton stainer	20
Pentatomidae	<i>Erthesina fullo</i>	Yellow spotted stink bug	21
Myridae	<i>Lygus sp.</i>	Tarnished plant bug	22
Coreidae	<i>Acanthocoris scabrator</i>	Squash bug	23
	<i>Cletus sp.</i>	Leaf footed bug	24



20. *Pyrrhocoris sp.*



21. *Erthesima sp.*



22. *Lygus sp.*



23. *Acanthocoris sp.*



24. *Cletus sp.*

V. Order: Odonata

Odonata is an order of carnivorous insects, encompassing the dragonflies (Anisoptera) and the damselflies (Zygoptera). Dragonflies are generally larger, and perch with their wings held out to the sides; damselflies have slender bodies, and hold their wings over the body at rest.

Details of the Odonata species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Aeshnidae	<i>Pantala flavescens</i>	Wandering Glider	25
Coenagrionidae	<i>Ceriagrion sp.</i>	Coromandel Marsh Dart	26



25. *Pantala flavescens*



26. *Ceriagrion sp.*

VI. Order: Orthoptera

Orthoptera is an order of insects that comprises the grasshoppers, locusts and crickets. Orthopterans have a generally cylindrical body, with elongated hind legs and musculature adapted for jumping. They produce sound (known as "stridulation") by rubbing their wings against each other or their legs.

Details of the Orthoptera species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Acrididae	<i>Poicelocera picta</i>	Printed grasshopper	27
Tettigoniidae	<i>Ruspolia</i>	Long horned grasshopper	28



27. *Poicelocera picta*



28. *Ruspolia Sp.*

VII. Order: Diptera

This is one of the largest insect orders in the world and includes many familiar insects such as mosquitoes, midges, sand flies, house flies and blowflies. Many species of Diptera are important due to the role they play in disease transmission, which includes such things as mosquitoes that spread malaria in many underdeveloped countries. Diptera can be distinguished by one pair of membranous wings and hind wings reduced to small club like structures called halteres.

Details of the Diptera species recorded from College campus

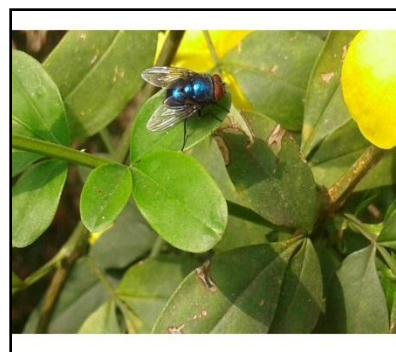
Family	Scientific Name	Common Name	Fig. No.
Muscidae	<i>Musca domestica</i>	Housefly	29
Syrphidae	<i>Allograpta sp.</i>	Hoverfly	30
Calliphoridae	<i>Calliphora erythrocephala</i>	Blow fly/blue bottle fly	31
Culicidae	<i>Culex pipiens</i>	Common house mosquito	32
	<i>Aedes aegypti</i>	Yellow fever mosquito	33



29. *Musca domestica*



30. *Allograpta sp.*



31. *Calliphora erythrocephala*



32. *Culex sp.*



33. *Aedes sp.*

VIII. Order: Isoptera

This order includes social and polymorphic insects like termites living in large communities composed of reproductive forms together with numerous apterous, sterile soldiers and workers. Wings are very similar, elongate and membranous, superposed flat over the back when at rest, and capable of being shed by means of basal fractures.

Details of the Isoptera species recorded from College campus

Family	Scientific Name	Common Name	Fig. No.
Termitidae	<i>Odontotermes</i> sps.	White ants	34



34. *Odontotermes sp.*



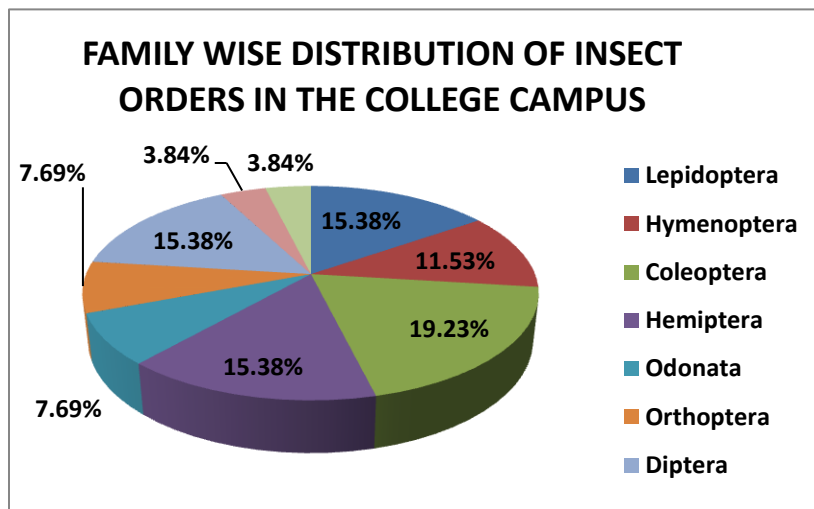
35. *Mantis religiosa*

IX. Order: Mantodea

Mantises are an order (Mantodea) of insects that contains over 2,400 species in about 430 genera in 15 families. The largest family is the Mantidae ("mantids"). Mantises are distributed worldwide in temperate and tropical habitats. They have triangular heads with bulging eyes supported on flexible necks. Their elongated bodies may or may not have wings, but all Mantodea have forelegs that are greatly enlarged and adapted for catching and gripping prey. Their upright posture, while remaining stationary with forearms folded, has led to the common name praying mantis.

Details of the Mantodea species recorded from the College campus

Family	Scientific Name	Common Name	Fig. No.
Mantidae	<i>Mantis religiosa</i>	Mantis	35



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