

Beneficial and harmful insects:

Insects are of immense use to the human population in manifold ways. As of now we have known of silk moths and Lac insects. Some useful insects include honey bees, ladybugs, praying mantises, green lacewings, dragonflies and dung roller. Predacious insects which help to predate upon different pest insects save the crops from being damaged. Lady beetles feed on aphids which destroys cotton and other crops. The Blister beetles lay eggs in areas infested with locusts which on emerging destroy the egg capsules of Locusts.

In this curious world of insects are some who also destroy plants and raid crops like locusts, several lepidopteron, dipterans and coleopterans etc. Predatory insects which harm crops are those which swarm in large numbers and destroy crop areas. Some pests are Brown Plant hopper, Potato tuber moth, corn borers, leaf borers, stem borers, fruit borers etc in forms of Lepidopterans, coleopterans, hemipterans and homopternas which harm crops.



Predators of Pests:

Parasitoids are insects with an immature stage that develops on or in an insect host, and ultimately kills the host. Adults are typically free-living, and may be predators. They may also feed on other resources, such as honeydew, plant nectar or pollen.



Prominent insect parasites belong to the following groups: Tachinid Flies (Diptera) Ichneumonid Wasps (Hymenoptera) Braconid Wasps (Hymenoptera) Chalcid Wasps (Hymenoptera).

Disease causing insects:

Mosquitoes can spread diseases such as malaria, yellow fever, dengue fever. Tsetse flies spread sleeping sickness. Lice suck human blood and can cause sores, which if left untreated can become infected which may lead to blood poisoning.

Screw worm flies lay their eggs in the wounds of farm animals and pets. Horseflies and black flies suck blood and have painful bites, which can become infected. Houseflies spread germs and spoil meat by laying eggs in it.



For further details contact :
REGIONAL MUSEUM OF NATURAL HISTORY
PO-RRL, Acharya Vihar, Bhubaneswar-751013, Odisha
Telephone: 0674-2567114
Email: rmnhbhubaneswar@gmail.com



RAINBOW WORLD OF INSECTS

REGIONAL MUSEUM OF NATURAL HISTORY
क्षेत्रीय प्राकृतिक विज्ञान संग्रहालय
ଆଞ୍ଚଳିକ ପ୍ରାକୃତିକ ବିଜ୍ଞାନ ସଂଗ୍ରହାଳୟ
BHUBANESWAR

Introduction



In the whole animal kingdom existing on the planet, insects are a cosmopolitan, hugely diverse and almost omnipresent phyla, compose of 75 to 80 % of the species diversity. They are small in size and huge in numbers. But being tiny does not deter them from being extremely useful and significant in many life processes that make life possible on Earth. The total number of insect species as estimated by scientists goes up to 30 million while only 900 thousand species have been identified as yet.



They are endowed with compound eyes that give them mosaic vision and possess a nervous system to sense and feel. Insects have a distinct mating behaviour and can vary from producing luminescence to producing various sounds to attract mates like crickets, cicadas, bumble bees, locusts, fireflies who exhibit bioluminescence etc. Insects are individual or social who live in colonies and large social groups, like beetles, wasps, honey bees, ants and termites.



Insects are crucial components of many ecosystems, where they perform many important functions. Many beneficial garden insects actually improve soil, pollinate plants or kill off insects that harm plants.

Scavenging by Insects :



Insects which feed on dead and decayed organic matter are called scavengers. Dermestid beetles are popularly scavengers that have Scarabaeiform larvae which feed primarily on skin, flesh, plant remains and dead animals. Maggots of various dipterans and beetles are the fastest cleaners of flesh from the bones. Blow flies, harvester ants, flesh flies and wasps are others amongst other creatures who scavenge on various biological materials to shred it and biodegrade the same completely.



Camouflage:



Camouflage allows insects to blend in with their surroundings because they are either the same shape and/or color as their surroundings. Examples of camouflage in the insect world include, stick insects, katydids and camouflage moths, mantis, leaf insects, stick insects and oak leaf butterfly.



Mimicry:



Insect mimicry has been the best example of Natural selection in nature. Insects mimic different creatures or various species in their own forms. Danaid egg fly butterfly mimics the Plain tiger to protect itself from the predator. The great egg fly female also mimics the common crow butterfly to save itself similarly.



Unmatchable Architecture:



The architectural marvels of honey hives and wasp nests which have not been able to be replicated by human till date are some of the creations of these tiny wonders. As architects of various large colonies the termites, ants, wasps and bees have provided exemplary examples of being maestros at building biological marvels where temperature, humidity and air flow is maintained to rear young ones and also carry out other biological processes.

