

Insect Diversity In The Campus Of B.L.P. Govt. P.G. College Mhow (Dr. Ambedkar Nagar) And Their Role In Environment

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ABSTRACT

Biodiversity is a very important on the Earth. We know very well that different type of animals move on the Earth, Which is very important for human life. The current study is on the insect seen the campus of B.L.P. Govt. P.G. College Mhow during 2021. Mhow college is attached to Vindhyaachal mountain valley. Many kinds of creatures have been seen in this place and around insects seen during the study period are sometimes. I saw the insects like carpenter bee, long horned beetle, ants, butterfly, spiders, caterpillar, mosquitoes Fly, bees, moths, Drosophila, baraiya, Grasshoppers, Dragonfly, cockroaches, ladybug, scorpion and mantis etc. All of these insects are very important because of their diversity ecological role.

Keywords :- diversity, insects, college, Mhow, environment, role.

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I. Introduction:-

We know that this is the biodiversity is not distributed evenly on the earth.

Biodiversity is the biological variety and variability of life on the earth. Biodiversity provides foundation ecosystem. The diversity of animals has its own important in biodiversity. Insects are the most species rich group on the earth. Insects also play numerous play numerous crucial rolls in ecosystem functioning and the global economy. Insects are very important as primary or secondary decomposers. They pollinate many flowers, fruits and vegetables. "Insects diversity explore variety of insects at all levels starting from genetic variants back belong to a single spaces. Insects are important because of their diversity ecological role and influence on agriculture, human health and natural resources. They serve beneficial ecological role in the nature system. Insects cycle nutrients, disappears seeds, pollinate plants, maintain soil structure, soil fertility and provide a major food source for other animals. Butterfly, moths and bees are dependent on very specific native plant species. Present study is on the insects seen in the campus of B.L.P. Govt. P.G. College Mhow (M.P.) during 2021. Many kinds of creatures have been seen in this play and around insects seen during the study period are sometimes.

Study area:-

The B.L.P. Govt. P.G. College campus is present study area. Mhow college is known as Dr. Ambedkar nagar because nobel man was born in mhow. It is situated in the Indore district (M.P.). Mhow is located 23 km (14m) south west of indore. Ambedkar nagar (MHOW) stands for military headquarters of war. This cantonment town was founded in 1818 by John macalm. According to hindu religious text, Janapav kuti near Mhow is said to be the birth place of parashurama, an avatar of Vishnu mhow has a very pleasant climate. Many tourist sports are situated in and around Ambedkar nagar (mhow).

II. Observation and discussion:-

The following insects were observed during the study in the college campus at B.L.P. Govt. P.G. College Mhow – 2021.

1. Carpenter bee
2. Long horned beetle
3. Ants (carpenter ants)
4. Fire ants
5. Butterfly's
6. Spider
7. Caterpillar

8. Mosquitoes
9. House fly
10. Baraiya
11. Grasshopper
12. Dragonfly

Carpenter bee :-

I have seen a carpenter bee in the campus of Mhow college. Its zoological name is xylocopa latipes and family is apidae. It was a large size. The common name for all black species of xylocopa is carpenter bee. Its wing was metallic blue – green and purple in colour. They feed on nectar and pollen of flower.

Long horned beetle :-

Its zoological name is erambycidae. Commonly known as long horned or longicorns and family is cerambycidae. It has extremely long antennae which is longer than the beetle's body. It is in black or brownish colour. It is 6-25 mm long. It has wood boring habits.

Carpenter ant :-

Carpenter ant is commonly seen in college campus. Its zoological name is camponotus and family formicidae. It is black in colour. Their body is divided into three parts (1) Head (2) Thorax and (3) Abdomen. It has albed antenna. One node present on adults waist. It is 8 to 25 mm long. It shows social behaviour. It bites very fast.

Fire ants :-

It is also seen in general in the college campus. It is red in colour. Fire ant is approximately 0.5 - 0.14 mm long. It builds colonies. Its body divided into 3 part head, Thorax and abdomen. Its zoological name is solenopsis and family formicidae. These ants are most active in the summer season. It is more aggressive and particularly problematic. It hurts a lot when bitten.

Butterfly :-

Its zoological name is rhopalocera and family hedyliidae. I have seen many colours of butterflies. Most of the monarch butterflies are found in this campus. It includes mont. Butterflies have large and brightly colour wings. It looks so beautiful. It has three major body parts (1) Head (2) Thorax and (3) Abdomen. Two compound eyes present on its head. It has two antennae. These are mostly seen around the college garden.

Spider :-

Spiders are often seen in college class rooms. Its zoological name is Araneae. It is black and brown in colour. They have eight legs and two body segments. It has fused head. They have two pincer like venomous appendages and three pair of spinnerets. Its length ranges from 0.3 to 4 inches.

Black hairy caterpillar :-

Its zoological name is spilosoma oblique and family erembyidae. It also known as fuzzy caterpillar or woolly bear. It has black head and black hair present all over the body. It has cylindrical body. Multiple segments are present on its body. Its body is divided into head, thorax and abdomen. It looks scary. It is found in the places where trees and plants are found more. "The dense and long hairs of caterpillars are generally believed to play an important role as a physical defense against predators (S. Sugicer and Kazuo Yamazaki 2014)".

Mosquito :-

Mosquitoes zoological name and family ceratopogonidae. Body size is small. It is black in colour. Mosquito has one pair of wings. It is divided into head, thorax and abdomen. It has large size of biting proboscis. Mosquito has elongated body, long fragile legs and elongated piercing mouth parts. Many mosquitoes are found in college building. It can spread dengue and malaria.

House fly :-

Its scientific name is musca domestica and family muscidae. Generally it is found at the work place of human. It is found at the work place of human. It is 5 to 7 mm long. It is grey in colour. One pair of compound eyes and antenna are present on its head.

Thorax bears a pair of wings and three pair of legs. There is a danger of spreading many types of infections from flies.

Baraiya :-

It is known as yellow wasp in India baraiya's zoological name is polister versicolor and family vespidae. It is also known as yellow paper wasp. It is a subtropical social wasp. They have yellow and transparent wings. They construct nest. Its body is elongated and segmented. It is a stinger and injects a poisonous venom that causes sudden pain.

Grasshopper :-

Its zoological name is pockilocerus pictns. It is 12 – 15 cm long. Its commonly brown, green and light yellow in colour. It has one pairs of compound eyes and antennae. It has two pairs of wing and three pairs of legs. Abdomen and thorax are segmented. I saw it in college garden.

Dragonfly :-

It is also known as devil's arrow and darner. Its body is elongated. It has two pairs of membranous wings. They are found in many colours. It has huge bulging eyes and multifaceted compound. They have a short antennae, 6 jointed legs. Its abdomen is segmented. It is also found in the garden area of the college.

III. The role of these insects in the environment

I have seen those insects as described above on study. It has been found that all these insects have an important role in the environment. Insects found on the earth are both beneficial and harmful to the environment. Carpenter bees are important pollinators in native plant communities, gardens and in some crops. They contribute a food source for birds and other wild life. The long horned beetle can affect ecology and economic activities. Carpenter ant decomposing wood back into soil. They maintain mutualistic relationships. Fire ants bite and sting. It causes a burning sensation but they are extremely effective in controlling plant feeding insects and arthropods. Butterflies are effective pollinators. They are the wild indicators of the ecosystem (M. Ghazanfar et al; 2016). Spider are the most important predators of insects and are part of every common ecosystem imaginable. Spider are a voracious biological control agent in the agricultural ecosystem (S.Saram et al; 2013). Caterpillars become change in butterflies or moths and they are important pollinators for different plants. Mosquitoes are pollinators but they cause some infections like dengue and malaria. The house flies play a role in creating more plants as pollinators and they are also scavengers paper yellow wasps are excellent predators of other pests. Grasshoppers play vital role in environment as predators, parasites and pathogens. Dragon flies play a significant role in controlling the insect population, especially pests such as mosquitoes and agricultural pests. All insects are important for ecosystem. We have to save them because these insects play a very important role for our environmental balance and ecosystem.

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