Other Modes of Nutrition in Plants

Most of the plants have chlorophyll and can make their own food. But there are some plants that do not have chlorophyll and cannot make their own food. They are called heterotrophs.

Parasite:

A plant that lives on or inside another organism and derives food from it is called a parasite. For example, Cuscuta (Amarbel) does not have chlorophyll, it cannot synthesize its own food. It takes readymade food from the plant on which it is climbing. The tree on which the Cuscuta plant climbs is called the host.

Insectivorous plant:

The plants which eat insects are called insectivorous plants.

Insectivorous plants are green and carry out photosynthesis to obtain part of food required by them.

But they do not get nitrogen from the soil in which they grow. So, they feed on insects to obtain the nitrogen needed for their growth. They are also known as carnivorous plants.

In insectivorous plants leaves are specialized to catch insects.

Insectivorous plants are called partial heterotrophy. They have chlorophyll to carry out photosynthesis and they feed insects to get nitrogen. So, they are called partial heterotrophy.

Saprophytes:

1. The non-green plant which obtains their food from dead and decaying organic matter are called saprophytes.

   Example: Fungi such as mushrooms, bread moulds, and yeast are saprophytes. They derive their food from dead and decaying organic matter. Fungi such as mushrooms, bread moulds, and yeast are saprophytes.

2. They secrete digestive juices on the dead and decaying organic matter and convert it into solution and they absorb the nutrients from this solution.

3. Fungal spores are present in the air. When these spores land on a humid object in hot conditions, they grow into new fungus plants.

4. We should keep shoes, leather objects, pickles, etc. in an air tight container. Fungal spores are present in the air and grow fast in hot and humid conditions especially during the rainy season.

Symbiotic relationship:

The mode of nutrition in which organisms live together and share shelter and nutrients is called a symbiotic relationship. For example, Lichens is a symbiotic relationship between algae and fungi.

Algae are autotrophic plants, they contain green coloured chlorophyll pigment. Fungi are non-green saprophytic plants. The fungus provides shelter, water and minerals to the algae and, in return, the algae provide food that is prepared by photosynthesis. In this relationship, both algae and fungi get benefit from one another, so this is a symbiosis relationship.