

Decomposition

Before you Begin

What is decomposition?

It is a process by which natural/organic material are broken down into a more simple organic matter. After a living organism dies, the body of the organism begins to decay and becomes a source of food for smaller organisms such as insects, animals and birds. This natural process is called “decomposition”.

Importance of decomposition in nature

Decomposition is an essential process in nature, playing an important part in the breaking down of natural matter, recycling it and making it available for the other organisms to gain nutrients from. In nature, plants and animals decompose, or break down into their principal nutrients with the help of insects, bacteria, and other microorganisms. These decomposers play an extremely important role in nature and without them the Earth would be piled high with dead things. Once decomposition occurs, the nutrients are absorbed back into the soil where they play an important part in soil health. This nutrient-rich soil is then available to nourish new plants, which in turn nourish animals along the food chain.

How do things decompose?

Decomposition begins after an organism dies. The prime decomposers (those organisms who help decompose matter) are bacteria and fungi. There are many birds like crows and vultures who are also decomposers. The large-sized decomposers are also called scavengers. Insects and worms like mites, flies, worms, etc. also help decompose organic matter. This decomposed matter turns into a nutrient rich material boosting soil health.

Plant decomposition

Decomposition of plants occurs in various stages. In the first stage, the plant starts losing water. During this phase, bacteria and fungi absorb most of the energy nutrients from the plant. Whatever is left of the plant is then decomposed by other insects and organisms.

Food decomposition

Food is also decomposed in a very similar manner to that of plants. Spoiled or wasted cooked food starts decomposing faster than the food. The decomposition of cooked food starts a few hours after preparation.

Decomposition in animals

Fungi play a secondary role in the decomposition of animals. Other animals and birds play a primary role in decomposing the body of a dead animal. These include bacteria, scavengers such as crows, vultures and carrion feeders like dung beetles who bury the animal excreta into the soil enriching it with nutrients.

