



Other Modes of Nutrition in Plants

Introduction

Most plants have chlorophyll and can synthesize their own food through photosynthesis.

Some plants lack chlorophyll and depend on other organisms for nutrition.

These plants are known as heterotrophs, and their mode of nutrition is called heterotrophic nutrition.

Types of Heterotrophic Nutrition in Plants

Heterotrophic plants are classified into two main types:

- i. **Parasitic Nutrition**
- ii. **Saprotrophic Nutrition**

Parasitic Nutrition

A parasite is an organism that derives nutrients from another living organism, known as the host.

Example: Cuscuta (Amarbel)— a rootless plant that wraps around a host plant and extracts nutrients.

It is often referred to as Devil's Hair due to its tangled structure.

Example: Mistletoe— has green leaves but its roots penetrate the host tree's bark to absorb water and minerals for photosynthesis.

Saprotrophic/Saprophytic Nutrition

Saprophytes are non-green plants that obtain nutrients from dead and decaying organic matter.

The process by which saprophytes derive food is known as saprotrophic nutrition.

Examples:

Fungi: such as moulds, mushrooms, and yeast.

Certain bacteria: known as saprophytic bacteria.