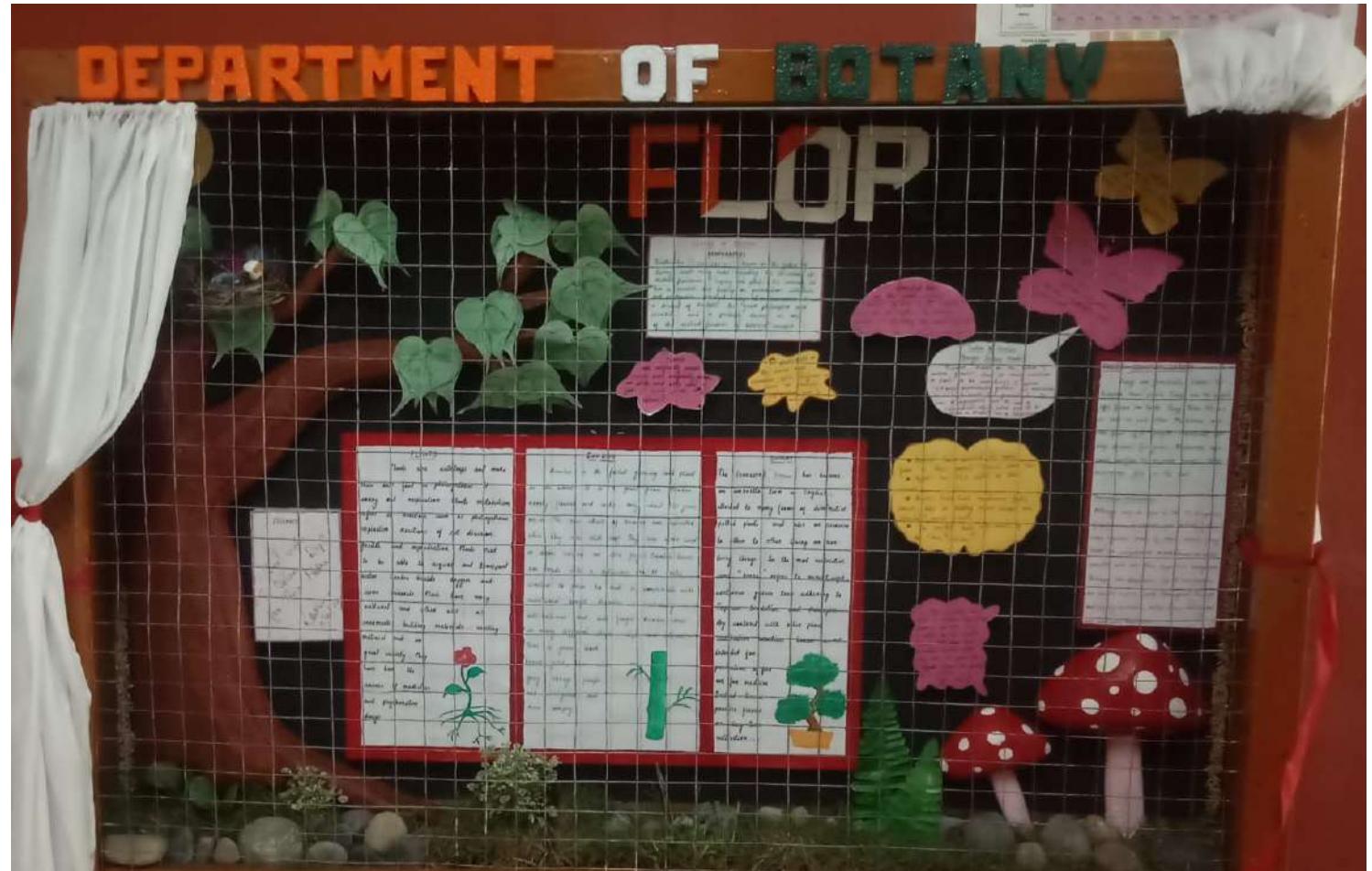


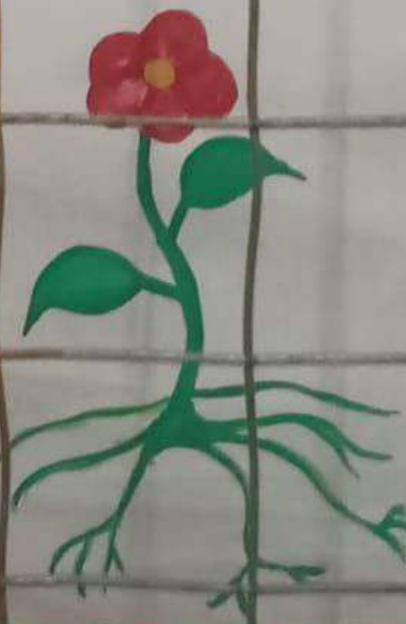
# DEPARTMENT OF BOTANY

## FLOW



## PLANTS

Plants are autotrophs and make their own food in photosynthesis. It carries out respiration. Plants metabolism refers to reactions such as photosynthesis, respiration, reactions of cell division, growth and reproduction. Plants need to be able to acquire and transport water, carbon dioxide, oxygen and some minerals. Plants have many cultural and other uses, as ornaments, building materials, writing material and, in great variety, they have been the source of medicines and psychoactive drugs.



## FACTS ABOUT MUSHROOM

Fungi are genetically closer to humans than plants. Fungi are the largest life forms on earth. Fungi allow three to talk to each other. Mushrooms are the fruit of a fungus. Mushrooms can stay dormant for years. Mushrooms can create airflow to disperse spores. Some mushrooms glow in the dark.

### Poisonous mushrooms

Although only a few of the 70-80 species of poisonous mushrooms are actually fatal when ingested, many of these deadly fungi bear an unfortunate resemblance to edible species and are thus especially dangerous.

Perhaps the deadliest of all mushrooms, the death cap is found throughout Europe and closely resembles edible straw mushrooms and Caesar's mushrooms.

Smallest tree  
in the world: dwarf  
willow, growing to a mere  
1.6 cm in height, the dwarf  
willow is arguably the world's tiniest

Father of Genetics  
Gregor Johann Mendel

Mendel, known as the "father of modern genetics", chose to study variations in plants in his monastery's 2 hectares (4.9 acres) experimental garden. His experiments led him to make two generalizations: the Law of Segregation and the Law of Independent Assortment, which later came to be known as Mendel's Law of Inheritance.

- Brazil has derived its name from a tree named "Brazil wood" tree.
- Apple has 26% water in their volume.
- Bear's head-tooth mushroom fights cancer, help in killing round worms and stimulate nerve growth.
- The cricket bats are made of the tail of willow.

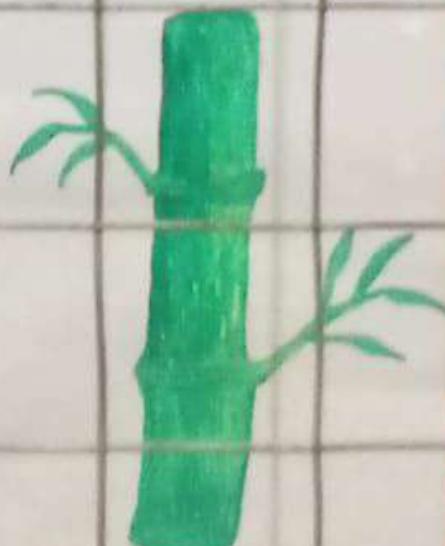
## FATHER OF BOTANY

### THEOPHRASTUS

Theophrastus (c. 371 - 286 BC), known as the father of Botany, wrote many books, including the 10-volume set, *Historia plantarum* (Enquiry into plants). His curiosity led him to research and findings on germination, cultivation and propagation - amongst many other discoveries. He was a student of Aristotle, the Greek philosopher and scientist, and is probably deemed as one of the earliest founders of botanical research ...

## BAMBOO

Bamboo is the fastest growing land plant in the world. It is a giant grass. Bamboos rarely flower and seeds, only about 100 years are so. The new shoots of bamboo are harvested while they are still soft. They are often used in Asian cuisine or stir-fried. Bamboo leaves are made into a delicious tea! It tastes similar to green tea and is comparable with nutritional benefits. Bamboo is naturally anti-bacterial and anti-fungal. Bamboo comes in many different shapes, sizes and colours. There is green, black, brown, gold, blue, white, grey, orange, purple, red, variegated and even stripy.



## BONSAI

The loanword "bonsai" has become an umbrella term in English, attached to many forms of diminutive potted plants, and also on occasion to other non-living things. In the most restrictive sense "bonsai" refers to miniaturized, container-grown trees adhering to Japanese tradition and principles.

By contrast with other plant cultivation practices, bonsai is not intended for production of food or for medicine.

Instead, bonsai practice focuses on long-term cultivation...

