Introduction to the plant physiology

Plant physiology is a branch of plant science that aims to understand how plants live and function or to know all the processes occur inside the plant.

What is the plant?

Is a photosynthetic multicellular eukaryotic organism that is highly adapted to growth and reproduction on the land.

Cellulose is a major polysaccharide found in the cell walls of non–vascular and vascular plants, and in both of the groups a cell plate is formed during cell division.

It has an alternation of a diploid spore–producing generation (sporophytic) and a haploid gamete–producing generation (gametophytic) in its life cycle Meiosis in all plant species.

Why study plant physiology?

What are the benefits of plant?

1- To know how plants act at the cell, tissue, organ and the whole plant level.
2- to understand how plants, live and function or to know all the processes that are occurring in plant.
3- produce food (Photosynthesis).
4- Economic, building material for decorate our homes both inside and out, fuel.
5- protect environment and improve air quality (release oxygen and moisture into air).
6- Reduced soil erosion.
7- Pharmaceuticals and human health.

(Growth rate)

Growth is defined as an increase in the number, size, and volume of cells.

Growth rate Is increased growth per unit time.

Growth is measured by a variety of parameters some of which are:

1- Increase in fresh weight 2- Dry weight 3- Length

4- Area 5- Volume 6-Cell number

The period of growth is generally divided into three phases, namely:

1- Meristematic

2- Elongation

8- Maturation

Process

1. Cell Division

2. Cell Enlargement

3. Cell Differentiation

Factors that need to growth plant:

1-water 2- nutrient 3- light - air 4-salt (dissolved) ...

Practical part

Materials: plants, water, needle, dish or glass water, ruler or balance.

Procedure:

Part1:

Part2:

Results and Measurement: