Climatic Factors Lecture three

Light

Light is a form of electromagnetic radiation, a type of energy that travels in waves, The visible spectrum or optical spectrum is the portion of the electromagnetic spectrum that is visible to the human eye. Electromagnetic radiation in this range of wavelengths is called visible light or simply light. A typical human eye will respond to wavelengths from **about 380 to about 750 nanometers.**

Light is ecologically classified to:

High light

the light falling on a horizontal area, it has importance in the growth of natural regeneration under the trees.

Low light

It is light reflected from a horizontal surface such as forest soil or the surface of water

side light

The light entering the forest from openings on its edges or sides is called lateral light

Stand light

It is the light inside, whether it comes from the top or the sides, and this light is important in the growth of plants on the surface of the soil and seedlings under trees

Effect of light on forest

Light affects the **longitudinal** growth of seedlings and forest trees!

intense light reduces longitudinal growth and conversely, increases longitudinal growth in the event that the light is little inside the forest.

While the **Diameter** growth of seedlings **increases** under the **light** and **decreases** in the seedlings growing under the **shade**

Trees growing in the **shade** are less resistant to **drought** than trees growing in the **light**, and this infers the importance of **light** in the field of the **quality** of **wood** produced in **stands** and **forests**