Climatic Factors Lecture four

Temperature

Temperature is a physical quantity that expresses hot and cold.

Effect of temperature on Forest

Solar energy is the main source of heat that trees need.

The **leaves**, **branches** and other parts of the tree absorb heat from the air in the event that its temperature is lower than the temperature of the outside air, and conversely, it gives heat to the surrounding air when its temperature is higher.

Freezing

Freezing is divided according to its origin into two parts:

Local frost

This type of freezing occurs on clear and cloudless nights near the Earth's surface due to convective streams. This freeze affects the surface of the soil between several centimeters and two meters.

Advection frost

The blowing of cold polar winds over large areas leads to a drop in temperatures to below zero degrees Celsius in all the wide areas, causing freezing of the vegetative parts of the plant.

High temperatures

The effect of high temperatures on trees appears in the form of solar blight (summer sunscald) or an increase in evaporation, and then delays the growth of seedlings.