

Vocabulary Chapter 19 The Flowering Plant: Maintenance and Coordination

interdependent

The relationship among organisms in which they are dependent upon one another

Example: The lichen is interdependent because it consists of algae and fungi living together.

molecule

A particle consisting of two or more elements joined in a chemical bond

Example: Water is a molecule of the elements hydrogen and oxygen joined in a chemical bond represented by the symbol H₂O.

carbon dioxide

A common gas found throughout the natural environment

Example: Carbon dioxide is represented by the symbol CO₂.

environment

Everything living and non-living in an organism's immediate vicinity

Example: The environment of a starfish is the rocky shoreline of the ocean.

variable

A factor that can change (often by the experimenter's manipulation) during an experiment

Example: Light intensity and air temperature are variables in the experiment comparing plant growth rates.

limiting factor

A condition in the organism's environment that limits growth

Examples: light, heat, soil nutrients

photorespiration

A chemical process taking place in plants, for the most part on hot sunny days

differentiation

The process in which developing plant cells change and become specific tissues with specific functions for the plant

Examples: xylem and phloem

auxin

One of several plant growth hormones

agent orange

A plant hormone that was sprayed extensively during the Vietnam War in order to kill trees and expose the ground

cold storage

A process developed by fruit growers in which fruit is stored, and delayed ripening is made possible by use of plant hormones

Example: The cold storage of apples makes it possible to send freshly ripened apples to the market all year long .

gibberellin

A plant hormone that stimulates the elongation of stems

Example : Gibberellins were used by the nurseryman to produce superior vines.

trophism

The change in direction of the growth of a plant in response to light or gravity

Example: The plants in the window were “bending” towards the light source.

photoperiodism

The influence of light on a plant's ability to produce flowers

Example: Easter lilies are forced to bloom early in the nursery due to the influence of artificial light.