The average home is not the ideal place to grow plants because, as a rule, light is poor, temperatures are too high, and plants must get along with the condition of the soil within the container and the food they find there. Many plants, however, can be kept growing in the house if a few simple rules are followed and the plants' requirements considered.

Light

Because some plants grow in less light than others, this factor should be considered in selecting a plant for a special place. In most homes three intensities of light are found, each of which is suitable for certain plants. These lights are (1) the sunny part of the day, which is suitable for nearly all flowering plants; (2) bright light, which is just out of the sun and in an unshaded north window—suitable for plants which flower for only a short time, ferns, and many foliage plants; (3) shade, which is light of enough intensity to be used by most of the day—suitable for sansevieria, peperomias, philodendron, and palms. Bright, artificial light may replace the first two intensities, but to be effective, it should shine on the plants at least 10 hours each day.

Temperature

Most house plants grow best at temperatures ranging between 65° and 75° F. during the day and 10 degrees lower at night. Flowering plants will last longer with night temperatures around 55° F.

Watering

This is one of the most important cultural practices involved in growing house plants, and it is closely related to room temperature. Plants should be checked each morning to see if the soil is dry. You should water thoroughly, but only when necessary. Using water of room temperature. Small containers and rapidly growing plants may need watering each day while others may go two to three more days without adding water. Careful attention will soon acquaint you with any plant's need for water.

Soils

Soils used for house plant culture should be moderately fertile, porous for water drainage and air penetration, and should contain humus enough to be friable and easily worked. A good mixture can be made using 3 parts good garden loam, 2 parts peat-leaf mold, and 1 part sand.

Fertilizers

Fertilizers should be applied sparingly, and only when the plant is actively growing. Diluted liquid fertilizer (fish oil, manure water) may be applied every 2 to 3 weeks. A low-analysis commercial fertilizer (10-10-10, 2-1 teaspoon per 5-inch pot) can be applied 2 to 3 times per year. Fertilizer does not offset the effects of poor light, high temperatures, or other factors causing poor growth. It seldom benefits a sick plant and over-fertilization may kill or seriously injure plants. Tea, castor oil, and other remedies and stimulants are of no value other than for the small amounts of fertilizer they might supply.

Containers

Containers should provide good drainage, be easily cleaned, complement rather than detract from the beauty of the plant, and be constructed for easy plant removal. The size of the container should be in proportion to the size of the plant.

Dust

Leaves covered with a film of dust cannot function normally. They should be cleaned top and bottom once or twice a month with a damp cloth or sponge or by carefully syringing the foliage at the sink with water of room temperature. Do not syringe foliage of African violets, gloxinias, and other hairy-leaved plants. Routine washing will also help keep plants free from insect pests.
Pruning and shaping

Many plants have a tendency to become spindly, weak, and unsightly during the winter months. Geraniums, coleus, and fuchsias are common offenders. These plants will respond favorably to frequent pinching or cutting back, which aids in stimulating new short growth, resulting in more symmetrical plants. Wilted flowers and foliage and seed pods should also be removed.

Symptoms

Dying of foliage from the base upwards may be due to lack of light, improper watering, or high temperature.

Yellowing of foliage may be caused by over-fertilization, over-watering, poor drainage, or poor light.

Rotting at the base may be caused by fungi or bacteria, and a house plant thus affected should be discarded.

Dead areas on edges of leaves result from mechanical injury, roots damaged by fertilizers, or improper watering.

Dead spots in the leaf may result from excess sunlight, dry soil, disease, or insect injury.