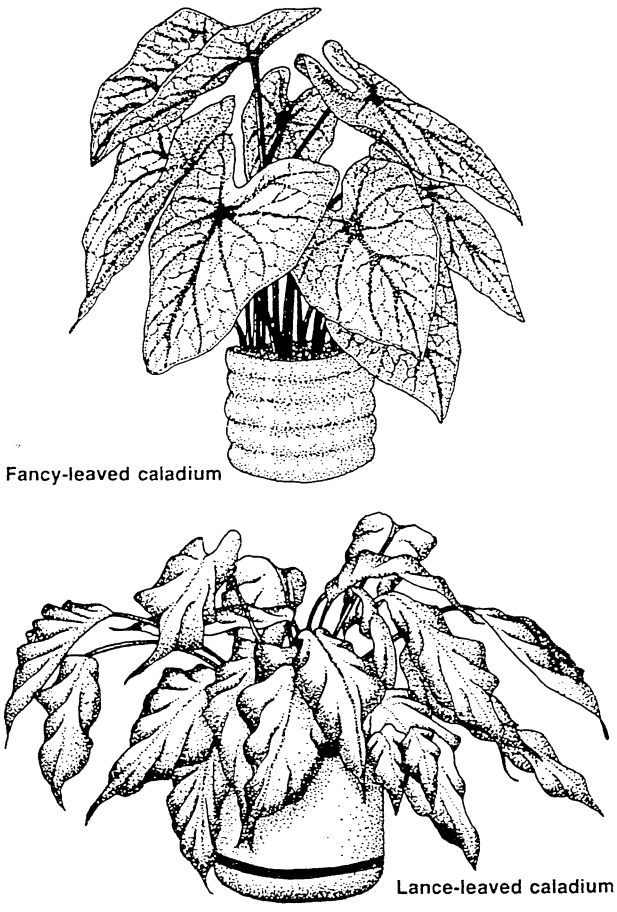

Figure 2. Two common types of caladiums based on leaf shape.

Insect and disease problems

Occasionally, root aphids or mealybugs proliferate on tubers during storage. If insects are detected on tubers, an appropriate insecticidal dip prior to planting will control the problem. Mites, whiteflies, aphids, mealybugs and lepidopterous larvae (caterpillars) may attack foliage of plants. However, these pests usually do not become severe. Since the turnover of caladiums is rapid, a scouting procedure and application of insecticides on demand is a better approach than preventive sprays.

Tubers should be examined for rot caused by fungal organisms or bacteria. Healthy tubers are firm and the fleshy part of the tuber is bright yellow. Internal discoloration, such as brown streaks or milky-white areas with a pungent odor, is an indication of infection. Severely infected tubers should be discarded. Preventative drenches of broad spectrum fungicides, especially those controlling pythium and fusarium, are beneficial in preventing tuber damage from fungal organisms.

Forcing caladiums as potted plants

Growing media

Adequate moisture retention is the most critical concern with the growing medium. Caladiums, if allowed to wilt, may not only lose leaves but also go dormant. Once dormant, caladiums require additional time to produce a marketable plant since they do not re-sprout quickly. Soil mixes should contain a significant proportion of peat or other water-holding components to produce a soil with high water retention and have sand or perlite added for drainage (55-65 percent capillary pore space and 4-5 percent noncapillary pore space).

Planting depth

Roots emerge around each sprout on the tuber. Since sprouts are only on the top or side of tubers, roots form primarily on the top and sides of the tuber. Tubers should be planted upright with 1 to 1 1/2 inches of soil over the top of the tuber to ensure emerging roots are not exposed.

Prefinished plants

Prefinished plants may be purchased in 4- or 6-inch pots and are available from approximately March through May. Prefinished pots usually have 2 - 4 tubers per 4-inch pot and 3 - 5 tubers in a 6-inch pot. Prefinished pots are usually shipped after the leaf sheathes have emerged. Many pot growers find that purchasing prefinished pots is more economical than forcing tubers for holidays after Valentine's Day. Since the prefinished plants are not received until March or later, the caladium crop does not utilize space needed for Christmas or Valentine's Day crops.

Fertilization

A maintenance fertilizer program of 5 to 8 pounds of a slow-release fertilizer such as Osmocote 14-14-14 or Nutricote 13-13-13 per cubic yard of soil at planting is satisfactory. A liquid fertilization program, beginning when the plants sprout, using 20-20-20 or 20-10-20 and supplying 400-500 ppm nitrogen once a week is also satisfactory. If tubers are to be forced with average temperatures above 70-75°F (such as in heat tents), then the slow-release fertilizer should be top-dressed at sprouting (1 to 1 1/3 teaspoons per 6-inch pot) rather than incorporated in the soil before planting. If the fertilizer is incorporated prior to planting, the high temperature can cause a rapid release of the fertilizer salts and result in soluble salt damage to the plant.