

A Northeast Home Horticulture Fact Sheet

# DIEFFENBACHIA



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Dieffenbachias are broad-leaved foliage plants with rather thick stems. They are similar in overall form, habit of growth, and leaf shape. They are popular house plants because of their durability and ease of culture. Dieffenbachia species are native of Central and South America.

Common names are Tuffroot and Dumbcane. All plant parts contain a juice that has an irritant or toxic properties. A person who chews, bites, or tastes the plant will be speechless for a period of time due to irritation and swelling of the lips, mouth, and tongue. If the juice comes in contact with the eyes, it will cause a burning sensation.

Small children should be taught to stay away from dieffenbachia plants. Handle the plant with care when making cuttings for propagation purposes.

### **Soil**

Use a loose, fertile, high organic medium. Many different mixes can be used. Plants can be grown in pure peat; peat and perlite (1:1); soil and peat (1:1); or soil, peat and perlite or vermiculite (1:1:1). The growing medium should have good water holding capacity and be well drained.

### **Fertilizer**

It is difficult to give specific fertilizer recommendations for foliage plants. Plants given a minimal amount of nutrients will grow slowly and retain a desired shape. If the plants are growing in a dark area, they require less frequent fertilization. Dieffenbachias are considered heavy feeders. Use a complete fertilizer such as a 20-20-20 and feed every 4-6 weeks only in the active growing season.

### **Water**

Maintain moderately moist soil. Watering is an important part of growing dieffenbachia. Water thoroughly and then not again until the surface of the potting medium is dry to the touch. Plants can be rooted and grown in water. Plants grown in soil should not be water-logged.

### **Temperature**

Best growth occurs between 65 and 75 degrees F. The temperature should not drop below 50 degrees F.

### **Humidity**

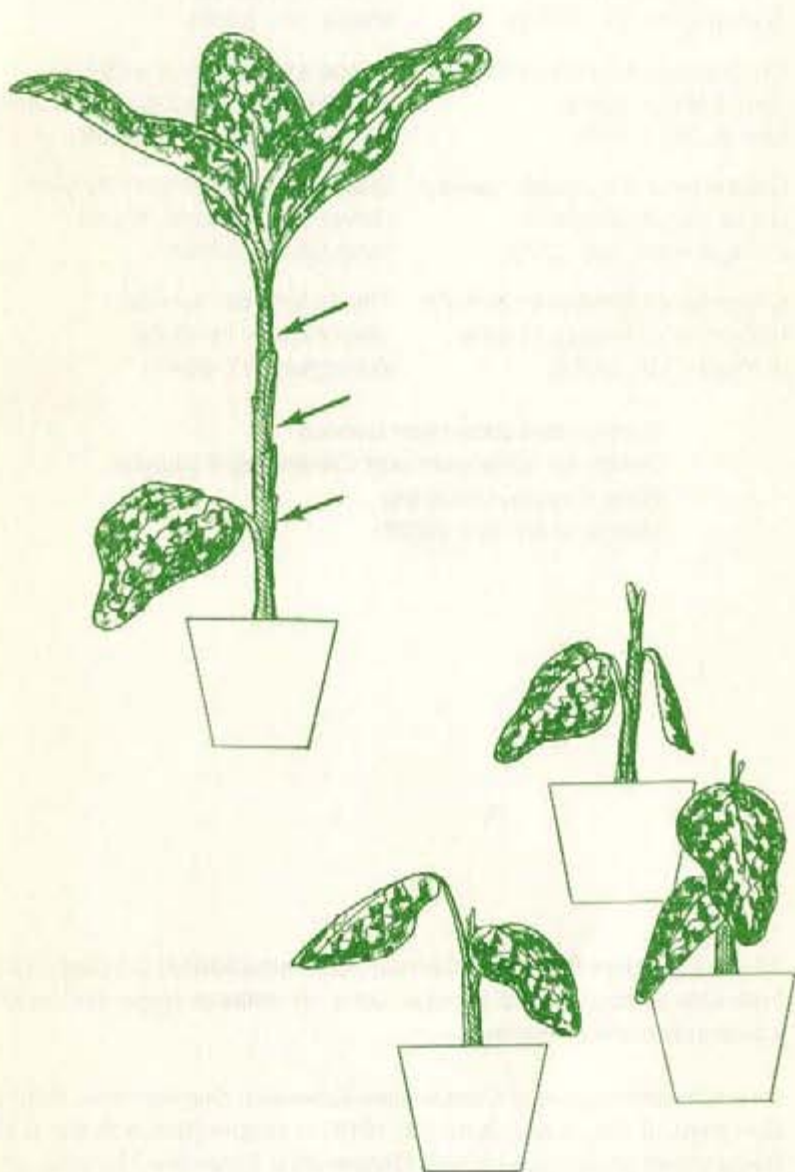
A relatively moist atmosphere results in vigorous growth. The large leaves may dry up in a hot room. Spraying the leaves is important all year.

## Light

Tolerate a wide range of light conditions. They will grow in heavy shade and can be used in dark areas in the home, but growth will be slowed. Dieffenbachia grows best in bright light (indirect sunlight).

## Propagation

Vegetative propagation is used — tip or stem cuttings. Use tip cuttings from the terminal portion of the plant or from small shoots that develop from lateral buds. Avoid contact of the plant juice with hands and forearms.



Stems that have become bare can be cut into 2" pieces (with at least one lateral bud). Dry the pieces then place in a rooting

medium, such as peat, sand, perlite, or vermiculite. Stem cuttings establish roots faster in sphagnum moss than in sand. Stem cuttings from near the top of the plant root faster than sections taken from the base of the stem.

Larger stems initiate roots faster than smaller stems, apparently because more stored food is in the bigger stems. Air layering can be used to advantage when the plant becomes top heavy or lanky with naked stems.

### **Flowering**

Dieffenbachia has a unique type of flower. A spathe and spadix make up the inflorescence (imperfect bloom). The spathe is green and often resembles an unfolding leaf. It remains on the plant for a long period of time. The spadix is erect, off-white in color, and is often hidden. The male flowers are near the tip of the spadix and the female flowers occur at the base. The flowers are insect pollinated. If fruit develops, it is berry-like in appearance. Dieffenbachia seldom flower in a home. It is not an attractive bloom.

### **Dieffenbachia Troubles**

Yellowing and dropping off of lower leaves — overwatering.

Plant rots off at the base rapidly — overwatering.

Leaves dry up — Low humidity in the room. Plants need periodic syringing.

Leaf color faded — plants need more light.

Lower leaves fall off and plant becomes leggy — too low light intensity.

Ants — Can cause considerable damage because they carry certain aphids. The aphids secrete a honeydew. The ants gather and feed on this honeydew. Fungi also may develop in this honeydew.

Tip burn — Droplets of water may develop during the early morning hours on the tip of leaves. This is called "guttation." If there are excessive fertilizer salts in the soil, these salts will be in solution in this water droplet. When the droplets evaporate, the salts remain on the tip of the leaf and cause tip burn.

Brown leaf edges and/or leaf tips — too much fertilizer ; too dry for short periods.

Lower leaf drop — Sudden changes in temperature, or plant is in a drafty location.

Leaf yellowing or discoloration — Caused by plant being in full sunlight.

## Species

*Dieffenbachia "Exotica" (Arvida)* — One of the showier dieffenbachias. Predominant leaf color is ivory, with many small green splashes. Leaf margins sometimes have a narrow green band.

*D. amoena* — One of the most commonly grown. Rapid grower. Leaves are often 18" long with small white spots. Well suited as a specimen plant. Frequently kept in a smaller pot in order to control the height. More tolerant to cool temperatures than other Dumbcane. A cultivar of this species is "Tropic Snow." Has smaller leaves and more variegation. Leaves are 12" long. Makes an excellent house plant.

*D. X bausei* — Has light almost yellow-green leaves. Leaves are flecked with yellow and white spots. Mature leaves 9-11" long and 3-5" wide.

*D. oerstedii "Variegata"* — Leaves 8-10" long and 3-4½" wide. Upper surface of leaf is dark green and the underside is light green. The mid-vein is white. This plant is best used in a combination planter. It is a fast grower with slender stems and has a tendency to get top heavy.

*D. maculata*. — This is the correct scientific name for *Dieffenbachia picta*, commonly sold as Spotted Dumbcane. This plant has ivory-white marbling and blotching on grass green leaves. Leaves are 10-14" long and 6-8" wide.

There are many cultivars of *D. maculata*. Most varieties differ mainly in leaf size and/or coloration. Some of these cultivars are: "Perfection" — leaves 8" long and 4" wide. Lower, smaller leaves are solid green and mature leaves are intensely variegated. The leaf margins remain green. This plant suckers freely and forms a multi-stem. It is a low-growing plant. It should be used as a specimen plant or in combination with a taller growing variety.

"Rudolph Roehrs" — one of the most important Dieffenbachias. Leaves are entirely yellow with ivory-white blotches. The mid-rib and leaf edges are dark green. Because of the large amount of white variegation, leaf burn can occur if the plant is exposed to high light intensity.

This plant has a tendency to revert back to the parent plant, *D. maculata*. Some plants may have ½ of the leaf showing characteristics of each plant. When this happens, the leaves may be buckled or look deformed. The *D. maculata* side of the leaf has more chlorophyll and is a more vigorous grower, when compared with the "Rudolph Roehr" side of the leaf.

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