

## COMMONLY AVAILABLE FOLIAGE PLANTS BEST ADAPTED TO INTERIOR ENVIRONMENTS

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**Abstract.** Over 300 cultivars of foliage plants are grown commercially in Florida to be used for interior decorative purposes. Because of differences in cultural requirements and responses to environmental conditions, some plants grow better for the average home owner. Successful adaption to home environments depends on the ability of a plant to maintain its aesthetic appeal under low light intensity. Research and general evaluations of foliage plant utilization in low light areas indicate that plants belonging to the genera *Aglaonema*, *Aspidistra*, *Chamaedorea*, *Dracaena*, *Ficus*, *Maranta*, *Peperomia*, *Philodendron*, *Sansevieria* and *Spathiphyllum* will remain attractive for long periods in most interior environments.

Utilization of foliage plants for interior decorative purposes has increased rapidly in the past five years. Commercial foliage plant production has become an important Florida agricultural industry with annual sales exceeding 25 million dollars (2). The increasing demand for foliage plants is best explained by examining our everyday surroundings. Many beautiful naturalistic setting which were once commonplace in the American environment have been forever replaced with densely populated areas which sprawl for miles from our urban centers. Foliage plants are the ideal way to counteract this harshness of concrete and steel and create attractive, restful indoor settings where we spend so much of our time.

Foliage plants have evolved under reduced light levels existing in the jungle understory, and are better adapted than other plants for decorative use in homes, apartments, hotels, business offices, airports and other building interiors where light

levels are less than 500 foot-candles. However, within the over 300 varieties of foliage plants available there are vast differences in cultural requirements and responses to environmental conditions found in most interior locations. Consequently, some foliage plants are better choices than others for the average home owner.

Although watering, humidity, nutrition and pest control are important when growing foliage plants indoors (1,3) adequate light is the most important factor in plant selection. All green plants require light energy to manufacture food through photosynthesis. Without adequate light, photosynthesis is inadequate to produce sufficient food for plant growth. Research has shown that each plant has a photosynthetic compensation point correlated to light intensity, duration and quality. Below this compensation point the plant will utilize stored food reserves in the stem and roots. Above the compensation point the plant will maintain its aesthetic appeal and continue to grow. Plants discussed in this article generally have compensation points between 50 and 75 foot-candles of light when they receive this amount for 10 to 12 hours a day, 7 days a week. Therefore, in areas where plants receive less than necessary light levels, their longevity will depend on level of stored reserves and the difference between light received and the compensation point. If natural light seems inadequate, place the plant near a lamp where it will receive artificial light for part of the day. A diverse selection of foliage plants have the ability to maintain their aesthetic appeal under light levels of 50-100 foot candles for periods of six months or more. Areas in Florida homes which correspond to these light levels are locations more than 6 feet from large windows and receiving no direct light.

Some of the best and most attractive plants for low light areas are in the genus *Aglaonema*. The smallest *Aglaonema* is *Aglaonema costatum* which makes an excellent table plant, while other species such as *Aglaonema commutatum*, *Aglaonema crispum*, *Aglaonema pseudobracteatum* and *A. modestum* are excellent as tub or floor plants. Of the many new hybrid *Aglaonemas* available, both *Aglaonema* sp. 'Fransher' and *Aglaonema* sp. 'Silver King' maintain their attractive coloration in low light areas.

A wise choice for very low light areas of 15-30 foot candles is *Aspidistra elatior*, an extremely

<sup>1</sup>Florida Agricultural Experiment Stations Journal Series No. 5168.

durable plant nicknamed 'Cast Iron Plant' which has enhanced American homes for over 100 years. Indoor palms have also been widely used for the same time period. A tropical effect can be achieved in areas of 50 to 75 foot candles by using either the 'Bamboo Palm' (*Chamaedorea elegans*) or the smaller 'Parlor Palm' (*Chamaedorea elegans*).

Many of the *Dracaenas* will remain very attractive in low light interiors. 'Janet Craig' with its dark green foliage and 'Warneckei', with its attractive white stripped leaves are two selections of *Dracaena deremensis* which can be used as attractive tub plants. The 'Corn Plant' or *Dracaena fragrans massangeana* is widely used because of its large yellow striped leaf and resemblance to a miniature tree. However, the yellow coloration gradually fades in low light areas, and this should be considered when placing it in the home. A wide variety of decorative styles are complemented by the red-edged, swordlike leaves of *Dracaena marginata* or 'Madagascar Dragon Tree'. *Dracaena sanderiana* is widely used in dish gardens, but also makes an attractive table plant when used in a multiple planting.

Within the wide selection of foliage plants, there are several that can be used as indoor trees. The fig family is well represented with the graceful weeping fig, *Ficus benjamina* and the Cuban laurel, *Ficus nitida* and the rubber plant, *Ficus elastica* 'Decora' with its dark green foliage.

The well known prayer plant, *Maranta leuconeura kerchoveana*, makes an interesting conversation plant because it folds its leaves every evening. For truly unusual leaf patterns the foliage of the red-veined nerve plant (*Maranta leuconeura erythroneura*) is difficult to surpass. Both *Marantas* will remain attractive longer if light intensities exceed 75 foot candles.

The most widely used foliage plants are found in the *Philodendron* genera. The name comes from the Greek words "Philo" meaning love and

"Dendron" meaning tree, and *Philodendrons* are usually found climbing trees in their native habitat. For this reason, many *Philodendrons* are grown on a slab of bark or tree fern and are called totems. The number one selling foliage plant in the United States for over 35 years is *Philodendron oxycardium* or *cordatum*. The dark heart-shaped leaves compliment many interior settings. Many other types of *Philodendrons* are available; *P. hastatum*, *Philodendron panduraeforme*, and *Philodendron sellowii*.

For small desk plants try *Peperomia obtusifolia* available in solid green or in an attractive variegated form. These decorative versatility makes them a favorite selection from the 500 *Peperomias* species found in the world.

Few plants are more versatile than *Sansevierias* which can be used in deep shade or full sun. Two upright forms are available, *Sansevieria trifasciata laurentii* and *Sansevieria trifasciata* which is sold as *S. zeylanica*. The diminutive "Birdnest" *Sansevieria* (*S. trifasciata* 'Hahnii') will do well in most locations and is a favorite desk plant.

If dark green foliage is desired in low light areas select a *Spathiphyllum*. If the plants receive enough light, attractive white flowers will compliment the foliage.

Remember, to keep foliage plants healthy and attractive provide as much light as possible but never full sunlight. Most foliage plants are native to tropical rain forests and will be injured when placed in full sun. Discussions on other important cultural care can be found in other references (1,3).

#### Literature Cited

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