

# Ornamental Research News

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## EXTENSION CORNER

### Florida's Foliage Plant Sales Have Improved

Dr. Richard W. Henley, Extension Foliage Specialist

After seven years of continually declining sales, the market for Florida-grown foliage plants rebounded dramatically, according to USDA statistics. Floricultural Crops - 1994 Summary reported that wholesale foliage plant sales in Florida increased 34 percent, from \$224.8 million in 1993 to \$301.9 million in 1994. According to Florida Agriculture - Foliage, Floriculture and Cut Greens, prepared by the Florida Agricultural Statistics Service, \$25.5 million of the 1994 increase was from the Apopka area (Lake, Orange and Seminole counties), \$48.3 million was from Southeastern Florida (Broward, Dade, and Palm Beach counties), and the remaining \$3.3 million was from other areas of Florida. Potted foliage plants accounted for 74 percent of the 1994 increase, while hanging baskets made up the balance. Foliage plant hanging basket sales for 1994 were 2.1 times greater than that of 1993.

The top five foliage plant producing states, ranked in order of their 1994 sales in \$million are Florida - 301.9, California - 77.6, Texas - 23.7, Hawaii - 12.1, Ohio - 9.7, and all others - 73.5. Since there is limited detailed information on foliage plant sales and the factors which influence them are not monitored, one can only offer educated estimates about what which influences sales.

Producers were generally pleased that the product price structure was slightly better during 1994 than in several of the preceding years. The Floricultural Crops - 1994 Summary indicated that average wholesale price of hanging baskets increased from \$3.20 in 1993 to \$3.45 in 1994. No average price of potted plants was mentioned in the summary because of growth rate differences among plant varieties and the broad range of container sizes used by nurseries. Several nurseries had new, more desirable foliage plants and low light flowering plants during 1994 which increased consumer demand for their

products. It is evident from the USDA statistics that foliage plants actually displaced some flowering potted plants at the national level. The sale of flowering potted plants dropped from \$686 million in 1993 to \$654 million during 1994.

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## **PLANT BREEDING**

### **Considering a Plant Patent?**

Dr. Richard J. Henny, Genetisist

If you find a new plant (either a sport or a hybrid) that you feel has potential to be a commercial cultivar, applying for a plant patent may be in order. This article will present some factors to consider regarding plant patents.

The plant patent system was initiated to stimulate creation of new and better plants by rewarding those who work in plant development. The holder of a patent has the exclusive right to propagate that plant for seventeen years. No one else can legally propagate it unless licensed by the developer this usually involves payment of royalties by the licensed propagator to the patent holder. It gives a competitive advantage to creators of new plants that, in turn, helps pay development costs.

Plant patents are allowed only for plants that are asexually propagated. This means that the only acceptable method of multiplying patented plants is by division, cuttings or tissue culture. Plants that must be propagated by seeds or spores cannot be patented.

A plant can be patented if it has a trait that distinguishes it from other cultivars. Such traits may include variegated rather than green foliage, dwarf versus tall growth habit, a new flower color, or fragrant flowers instead of scentless. These traits need to be documented. For example, if plant size is notable, include measurements of leaf size and plant height, and relate these to plant age. These measurements should be compared to comparable commercial cultivars grown under similar condition to make a valid distinction. If color is involved, it is important to define the color using standardized color charts (i.e., The Royal Horticultural Society Color Chart). Good color photographs are vital.

Keep written records regarding the history of the new plant. You need to know where, when and by whom the new plant was found (address, date and discoverer). If the plant originated from seed, the parents must be listed or if it was a sport, the parent plant must be stated.

Finally, a plant patent attorney should be contacted to help with patent application. The attorney can prepare the patent in a form that is acceptable with the examiners in the patent office and can help deal with questions regarding the patent application. Contact other plant patent holders for advice regarding attorney selection. The cost of a plant patent may range from \$1500 to \$2500 depending on complexity and may take one-to-two years to complete the process. However, don't be afraid to consider seeking a

plant patent if you have a special plant it may be worth it.

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## **PLANT PATHOLOGY**

### **Good Spatial Relationships Give Better Disease Control**

Dr. J.O. Strandberg, Plant Pathologist

Spatial relationships are very important in the production of landscape ornamental plants, particularly in relation to diseases. The spatial relationship of diseased plants to healthy ones greatly affects the probability of movement of pathogens within and between groupings, and even between individual containers. Of course, different pathogens have different methods and capabilities for dispersal. In general, a soil-inhabiting pathogen can be spread by any process that moves infested soil; whereas most leaf spot and foliar pathogens can be spread by rain, irrigation water, wind, or insects. However, even soil-borne pathogens or diseased leaves can be transported by flowing water or flooding.

Although disease organisms may differ in their capabilities and methods of spread and dispersal, the rules of probability apply to all. Although some propagules can be spread over significant distances, by far the greater proportion of propagules are dispersed over very small distances usually to adjacent parts of the same or neighboring plants. Thus, spacing between plants greatly affects how quickly disease spreads and how severely plants are damaged. Typical nursery production conditions, which tend to maximize use of growing areas, provide an ideal situation for the spread of almost all plant disease-producing organisms.

Spacing also affects the microclimate within the plant canopy. Not only will temperature variations occur, but foliage will remain wet longer following dew, rain or irrigation. It is also harder to attain good coverage with fungicides when plants are densely packed together.

Additionally, spatial arrangement is an important consideration in disease spread as it relates to host susceptibility. Although many diseases have quite specific hosts, many of the more troublesome ones can attack several host species. Moreover, some cultivars of a particular species are much more susceptible than others. Segregating susceptible cultivars or other disease-prone plants from groupings of related plants, which may also be hosts, is a good practice to employ. It is clearly helpful to avoid such hazardous situations as, for example, placing Photinia plants next to Rapheolepis, since both are quite susceptible to Photinia leaf spot disease. These approaches cost little and can often prevent unnecessary losses.

It is beneficial to use the greatest possible spacing between plant consistent with your production system. Obviously, a balance must be achieved between the economics producing the greatest number of plants per unit area and the increased risk of disease. Producing fewer plants at lower cost for disease control may be more profitable in the long run than maximizing numbers of plants and ignoring disease

prevention or control costs.

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