'Star Bright' *Dieffenbachia*

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Introduction

Dieffenbachia are important ornamental tropical foliage plants because of their attractive foliar variegation, ease of production, and adaptability to interior environments. Twenty-two cultivars were listed in the 1991–92 Florida Foliage Locator (Reisch, 1991). Historically, new cultivars have originated from private collectors, mutations of established cultivars, or, more recently, from small private breeding programs. The diversity of growth habits, plant size, and foliar variegation patterns led us to include *Dieffenbachia* in the breeding program at the Central Florida Research and Education Center, Apopka. The hybrid *Dieffenbachia* x 'Star Bright' is the sixth hybrid to be released from that program (Henny, 1993; Henny et al., 1987a, 1987b, 1988, 1989).

Origin and description

'Star Bright' *Dieffenbachia* is the result of several generations involving many parents, beginning with crosses made in 1976. All parent plants were numbered accessions maintained by R.J.H. The accession numbers, used only in this breeding program, are of little meaning to others; thus, the extensive pedigree of 'Star Bright' is not reproduced, but is available on request from R.J.H. The dominant feature of 'Star Bright' is its bright foliar variegation pattern that is highlighted by whitish petioles (Fig. 1). Two other distinctive features of 'Star Bright' are its narrow leaves, which are half the width of most *Dieffenbachia* leaves, and the arching manner in which the leaves are held on the plant.

Performance

Growth characteristics of 'Star Bright' were determined during a 1993 greenhouse trial. This test used uniform liners obtained from a commercial tissue-culture laboratory. Thirty 10-week-old liners were potted into 1.6-liter (15-cm) pots filled with Vergro Container

Mix A [a mixture of 2 Canadian peatmoss : 1 vermiculite : 1 perlite (by volume)]. Plants were fertilized with Osmocote (19N–6P–12K) at rates of 2.5, 4.2, or 5.9 g/pot per 3 months. There were 20 replications per fertilizer level.

The plants were grown for 24 weeks, at which time their growth and quality were measured. Data included plant height (with leaves held upward), length and width of the largest leaf, number of basal shoots, and a visual rating of plant quality. At this time, plants were removed from the greenhouse and placed in an interior room where they received 17 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ light from fluorescent bulbs 12 h daily. After 3 months, the plants were evaluated for holding quality.

All plants in this growth test performed well and received an appearance rating that averaged between "good" and "excellent." The lack of significant statistical differences in growth (plant height, ≈ 50 cm; leaf length, ≈ 36 cm; leaf width, ≈ 8 cm) between fertilizer levels indicates that 'Star Bright' tolerates a range of fertilization. 'Star Bright' is a moderate producer of basal shoots, averaging between 3.5 and 4.0 basal shoots per plant. All foliage was healthy in appearance, with no signs of tip burn or any other abnormalities in

any treatment. After 3 months in an interior room, plants maintained their distinctive foliar variegation, did not stretch, and graded out as good quality.

'Star Bright' *Dieffenbachia* is intended for commercial foliage producers growing finished *Dieffenbachia* in 1.6- to 8.0-liter (15- to 25-cm) pots. Its long, narrow, arching leaves may make it more suitable for the larger pot sizes. Tests also indicated that this plant performs well in interior environments.

Availability

'Star Bright' *Dieffenbachia* is being propagated by Florida tissue-culture laboratories that assisted in its selection, initial increase, and several grower evaluations. These laboratories also provided plant material for the experiment presented in this report. Names of cooperating laboratories may be obtained from the Florida Foundation Seed Producers, P.O. Box 309, Greenwood, FL 32443.

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Fig. 1. *Dieffenbachia* x 'Star Bright' after 24 weeks of growth in a 1.6-liter (15-cm) pot.

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