HortScience 45(8):1281–1282. 2010.

‘Scenic Bay’ *Aglaonema*

Richard J. Henny[1,3] and Jianjun Chen[2]
University of Florida, Institute of Food and Agricultural Science, Mid-Florida Research and Education Center, 2725 Binion Road, Apopka, FL 32703

Additional index words. Aglaonema nitidum, *Aglaonema commutatum*, Chinese evergreen, foliage plant, foliage plant production, plant breeding

Aglaonema, in the plant family Araceae, are a reliable crop for commercial growers and are favored by consumers for their adaptability to low light and low relative humidity levels encountered in interiorscape conditions. The genus *Aglaonema*, commonly known as Chinese evergreens, has been a commercially important source of tropical foliage plants since the 1930s (Smith and Scarborough, 1981). The first commercial *Aglaonema* cultivars were specimens collected from their native tropical habitats propagated and sold as ornamentals. Protocols to control *Aglaonema* flowering (Henny, 1983) and new pollination techniques (Henny, 1985) made hybridization and seed production reliable. These breeding innovations have generated many new hybrid *Aglaonema* cultivars over the past 20 years by both public and private breeders worldwide. Six such *Aglaonema* cultivars have been released previously (Henny and Chen, 2001, 2008; Henny et al., 1992, 2003, 2008) by the Foliage Plant Breeding Program at the Mid-Florida Research and Education Center (MREC) in Apopka, FL. These cultivars are very successful commercially and have become known as the “Bay” series. ‘Scenic Bay’ is the seventh *Aglaonema* hybrid developed tested and selected as a part of this series as shown in Figure 1.

Origin

Aglaonema ‘Scenic Bay’ is a selection from an interspecific cross of *A. commutatum* Treubii with *A. nitidum* Curtissii. The resulting seedling ‘Scenic Bay’ was selected from a hybrid population because of its highly variegated leaves, white and yellow–green mottled petioles, vigorous growth, and strongly triangular form and habit.

Description

The color descriptions that follow are based on The Royal Horticultural Society’s color chart [Royal Horticultural Society (RHS), 1995]. *Aglaonema* ‘Scenic Bay’ upper leaf surfaces display a dark green edge and background (RHS 137A) that are highlighted by irregular variegated areas associated with the lateral veins as shown in Figure 1. These irregular areas, consisting of two distinct colors, originate from the midrib angling toward the leaf tip to form an irregular V pattern and cover approximately two-thirds of the upper leaf surface. Darker, grayed–green (RHS 191A) areas of variegation are centered over the lateral veins and vary from 0.5 to 1.5 cm in width. They are contrasted by a lighter grayed–green-colored variegation (RHS 191B) that is visible within the darker sections and are also centered directly over the vein. These lighter areas measure 3 to 4 mm wide and have irregular edges. There are three to four variegated bands in each leaf separated by the darker green background strips. The leaf underside is a lighter green field (RHS 137C) with the midrib and lateral veins a lighter yellow green (RHS 148C/D). The petioles are mottled with a mix of darker green (RHS 137A) and yellow green (RHS 148D) flecks. Petiole wings are yellow green RHS 148D and contain darker spots of green (RHS 137C). The stem, although hidden from view as a result of the clasping nature of the petioles, exhibits a combination of dark green (RHS 137C) and lighter yellow green (RHS 148D) areas that blend together.

Performance

Growth tests for *Aglaonema* ‘Scenic Bay’ were initiated using 10- to 12-cm long tip cuttings composed of three to four leaves each. Cuttings were harvested from stock plants grown in a shaded greenhouse in Apopka, FL, and stuck in 50-celled trays containing Vergro Container Mix A (Verlite Co., Tampa, FL) on 14 Nov. 2006. The cuttings were placed inside a propagation tent at a maximum irradiance of 80 $\mu mol \cdot m^{-2} \cdot s^{-1}$ for 8 weeks. On removal from the propagation tent, rooted cuttings were allowed to acclimatize for 2 weeks in the greenhouse. At this time, half of the liners were potted one plant per 1.6-L pot using with Vergro Container Mix A and half were potted one plant per 1.6-L pot using Fafard 2 Mix (Conrad Fafard, Inc., Agawam, MA) substrate. Plants were grown in a shaded greenhouse with maximum irradiance of 250 $\mu mol \cdot m^{-2} \cdot s^{-1}$ under a natural photoperiod and a temperature range of 15 to 34 °C. Plants were grown using three different fertilizer treatments: 1) Osmocote Plus 15N–4P–10K (Scotts-Sierra Horticultural Products Company, Marysville, OH); 2) Nutricote Plus 18N–2.6P–6.6K (Chisso-Asahi Fertilizer Co., Ltd., Tokyo, Japan); and 3) Peter’s liquid 20N–8.8P–16.6K (Scotts-Sierra Horticultural Products Company). Plants fertilized with Osmocote and Nutricote were retreated every 3 months. The liquid fertilizer treatment was applied as a 200 mL liquid drench per pot once weekly throughout the duration of the experiment. Seven plants per each fertilizer treatment in each of two soil types (42 plants total) were grown in a completely randomized design for 9 months. Data recorded at termination of the study included plant height with leaves pulled up, canopy height, canopy width, length and width of the largest leaf, number of basal shoots, and a visual quality rating in which 1 = poor, 2 = fair, 3 = saleable, 4 = good, and 5 = excellent quality.

At the finish of the growth cycle, all plants were moved into an interior growth room for 3 months’ evaluation of interior performance at a light level of 25 $\mu mol \cdot m^{-2} \cdot s^{-1}$ for 12 h daily at a constant 24 °C. Plants were handwatered as needed. After 3 months, the plants were again evaluated for visual quality using the same scale as previously described. Data were analyzed using analysis of variance procedures of the SAS program (SAS Institute Inc., Cary, NC).

Results

Aglaonema ‘Scenic Bay’ grown in 1.6-L pots reached marketable size in 9 months. There was no significant difference in growth between potting mixes so the data were combined for analysis. Again, there were no significant differences in plant height with leaves pulled up, canopy height, canopy width, leaf width, leaf length, or visual quality (Table 1). However, the number of basal shoots was significantly higher with the Peter’s fertilizer treatment (Table 1). Visual plant quality averaged between good and excellent at all nutritional treatments. After 3 months of evaluation under interior conditions, all plants had visual quality ratings of good to excellent (data not presented).

Availability

Aglaonema ‘Scenic Bay’ is intended for commercial foliage plant producers growing

Fig. 1. *Aglaonema* ‘Scenic Bay’ after 9 months growth from a single cutting in a 1.6-L container.

Received for publication 11 May 2010. Accepted for publication 10 June 2010.
[1]Professor.
[2]Associate Professor.
[3]To whom reprint requests should be addressed; e-mail hennyrjz@ufl.edu.

Table 1. Plant height with leaves pulled up, canopy height and width, length and width of largest leaf, number of basal shoots, and visual quality of *Aglaonema* 'Scenic Bay' after 9 months' growth in 1.6-L pots.

Fertilizer type[z]	Pulled-up ht (cm)	Canopy ht (cm)	Canopy width (cm)	Largest leaf length (cm)	Largest leaf width (cm)	No. basal shoots	Visual quality[y]
Osmocote	49.4 a[x]	29.7 a	46.8 a	27.4 a	5.5 a	2.71 a	4.14 a
Nutricote	50.0 a	28.4 a	50.3 a	25.4 a	5.8 a	3.14 a	4.28 a
Peters	50.3 a	30.0 a	54.3 a	27.4 a	5.7 a	4.00 b	4.86 a

[z]Osmocote Plus = 15N–4P–10K (5 g/pot/3 months); Nutricote = 18N–2.6P–6.6K (5 g/pot/3 months); 20-20-20 = Peters liquid 20N–8.8P–16.6K (applied 200 mL/pot/week at 200 mg/L nitrogen.
[y]Visual quality 1 = poor, 2 = fair, 3 = saleable, 4 = good, and 5 = excellent.
[x]Mean separation within columns by Duncan's multiple range test, $P < 5\%$.

finished plants in 1.6- or 3.9-L containers. A patent application has been submitted to the U.S. Patent and Trademark Office and plant patent rights assigned to the University of Florida, Board of Trustees. Stock plants will be released to licensed Florida growers for propagation and distribution. Inquiries regarding licensing may be sent to Florida Foundation Seed Producers, Inc., P.O. Box 110200, Gainesville, FL 32611. Plants for research purposes may be obtained directly from the author.

Literature Cited

Henny, R.J. 1983. Flowering of *Aglaonema commutatum* 'Treubii' following treatment with gibberellic acid. HortScience 18:374.

Henny, R.J. 1985. In vivo pollen germination of *Aglaonema* affected by relative humidity. HortScience 20:142–143.

Henny, R.J. and J. Chen. 2001. *Aglaonema* 'Golden Bay'. HortScience 36:1142–1143.

Henny, R.J. and J. Chen. 2008. 'Moonlight Bay' *Aglaonema*. HortScience 43:1598–1599.

Henny, R.J., J. Chen, T.A. Mellich, and M.S. Brennan. 2008. 'Mondo Bay' *Aglaonema*. HortScience 43:1900–1901.

Henny, R.J., J. Chen, and D.J. Norman. 2003. *Aglaonema* 'Diamond Bay' and 'Emerald Bay'. HortScience 38:1446–1447.

Henny, R.J., R.T. Poole, and C.A. Conover. 1992. 'Silver Bay' *Aglaonema*. HortScience 27: 1238.

Royal Horticultural Society. 1995. The Royal Horticultural Society's colour chart. 3rd Ed. Royal Hort. Soc., London, UK.

Smith, C.N. and E.F. Scarborough. 1981. Status and development of foliage plant industries, p. 1–39. In. J. Joiner (ed.). Foliage plant production. Prentice-Hall, Engelwood Cliffs, NJ.