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# Brazilian Snapdragon (*Otacanthus azureus*) for the Cut Flower Market

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Brazilian snapdragon, *Otacanthus azureus* (Scrophulariaceae), is an uncommon tropical plant that has been sold as a novelty flowering pot plant in the U.S. for a few years. Bright green, somewhat sticky, opposite leaves and terminal spikes of bright blue flowers characterize this small shrub. The flowers, 1<sup>1</sup>/<sub>2</sub> inch long and 1 inch wide, are dominated by a large flat lower lip. The blue color is just great; there are too few blue colors available in flowers. This plant is typically added to large mixed patio containers for spring sales in garden centers. However, the stems are relatively long. It seemed logical to evaluate this plant for summer cut flower production in the greenhouse.

This plant has been called *Otacanthus coeruleus* for a number of years, but Ronse (2001) has determined that the correct name is *Otacanthus azureus*.

## Propagation

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Brazilian snapdragon is easy to propagate from cuttings. For these trials, cuttings were taken April 20, 1998 and placed in 72 count plug trays. They were placed under intermittent mist and bottom heat in a greenhouse with a heat set-point of  $68^{\circ}$  F and ventilation set-point of  $78^{\circ}$  F. Cuttings were well rooted in 3 weeks; and individual plants were transplanted into  $4\frac{1}{2}$  " square pots that were placed into  $13\frac{1}{2}$  " x 22  $\frac{1}{2}$  " trays.

## **Environmental Factors**

Brazilian snapdragon seems to be a day neutral



plant. It flowers throughout the winter in the greenhouse; however, no specific evaluations of flowering response have been completed. Ronse (2001) reported that this plant seems to flower year around in its native range in Brazil. This plant seems to tolerate cooler winter greenhouse temperatures much better than angelonia. Our work with angelonia, another Brazilian native, has shown these plants need 65° F night temperatures for normal growth as a stock plant in winter, but Brazilian snapdragon can tolerate temperatures 5-10° F cooler.

## **Field Production**

We have not grown Brazilian snapdragon outdoors in cut flower trials. The plant does perform well under garden conditions in Kentucky as long as it receives plenty of water and regular fertilization.

## **Greenhouse Performance**

Brazilian snapdragon is a productive plant for cut flowers. These trials used 132 plants in  $4\frac{1}{2}$ " pots, spaced pot-to-pot in trays for a plant density of 7.1 plants ft<sup>-2</sup>, Geertsen (1990) used a lower density of approximately 6.5 plants ft<sup>-2</sup>. For these trials, plants were grown in a 30' x 60' polyethylene covered greenhouse with sidewall natural ventilation at the Horticulture Research Farm in Lexington KY. The greenhouse had a heat set point of 65° F and ventilation set point of 76° F; however, the greenhouse day

temperature was often above 95° F during the experiment.

The first harvest occurred from July 10 to 20 when 247 stems were harvested with an average length of 24.1 inches. The second harvest occurred about 8 weeks later (Sept 10-30) and 786 stems were harvested with an average length of 25.3 inches. A total of 1033 cut stems were harvested in the summer of 1998 from 30 ft<sup>-2</sup> of bench space for an average production of 34.4 stems ft<sup>-2</sup>.

Cut stem lengths varied from 14 to 35 inches when harvested. Stem lengths of 20 to 24 inches were most common, but longer stems were harvested as well (Table 1).

### **Post-harvest**

Cut stems lasted 6-9 days in vases in preliminary observations and the youngest flowers were smaller and faded after opening. Geerstsen demonstrated that floral preservatives were quite successful for enhancing the post harvest life of Otacanthus cut stems in his report published in 1990. Post harvest vase-life could be longer than 4 weeks.

#### Cultivars

Obtain cuttings of *Otacanthus* from companies that sell liners of tropical plants. Bodger Botanicals has introduced 'Caribbean Blue' that is more dwarf than the species.

#### Marketing

Brazilian snapdragon is a unique item for cut flower bouquets and arrangements. Florists and consumers will like the striking form and color.

**Table 1**. The percentage of harvested cut stems of Brazilian snapdragon in standard stem length grades in 1998.

	Percentage in stem length grades (inches)					
	12-16	16-20	20-24	24-28	28-32	32-36
First harvest July 10-20	14.9	19.4	36.8	20.6	6.9	1.2
Second harvest Sept 10-30	10.6	16.2	37.1	25.8	8.0	2.3

#### Literature Cited

Geertsen, V. 1990. The keeping quality of *Otacanthus coeruleus* - a potential new cut flower. Scientia Hort. 43:145-153.

Ronse, A. 2001. A revision of Otacanthus Lindl. (Scrophulariaceae). Brittonia 53(1):137-153.

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