



Cotoneaster Evaluations

John M. Ruter
Department of Horticulture - Tifton
The University of Georgia

Nature of Work: The nursery industry is being driven by the selection of new plant material. *Cotoneasters* have not been grown due to problems with insects and fireblight. Twelve different species were selected from more than 70 species and cultivars evaluated for several years in Tifton (USDA 8a) and Blairsville (USDA 6b). The purpose of this study was to evaluate 12 new selections under container production conditions at CANR for possible future release to the industry.

Plants in #1 containers were transplanted into #7 containers at CANR on 13, March, 2003. The substrate consisted of a 6:1 blend of pine bark and sand (v/v) amended with the following in lbs. per cubic yard: Scotts 22-4-6 (14), dolomitic limestone (4.0), Micromax (1.5), Gypsum (1.5) and Talstar (2.0). Plants were grown under standard cultural practices and received no supplemental treatments of fungicides or insecticides. Plant height and width were measured in mid-August, 2003. All plants were pruned on 25 August, 2003.

Results and Discussion: Results are presented in Table 1. The tallest plants (> or = 50") after five months of growth were *C. applanatus*, *C. dielsiana*, *C. marginatus*, and *C. pannosus*. Plants with widths >90" were *C. applanatus*, *C. franchetii*, and *C. pannosus*. The earliest flowering species in late March was *C. sherriffii*, followed by *C. marginatus* and *C. cochleatus*. All other species bloomed in May. *Cotoneaster marginatus* and *C. cochleatus* were the only two species to have ripe red fruit by mid-September, the fruit on all other species still being mostly yellow-green. All plants except *C. glaucophyllus* and *C. sherriffii* produced fruit, with *C. amoenus* and *C. boisanus* producing the most fruit (data not shown).

At the end of August, *C. boisanus* had lost half of its older foliage. Other species losing foliage by August were *C. dielsiana*, *C. franchetii*, and *C. splendens*. None of the species tested showed signs of fireblight in 2003.

Significance to Industry: The plants in this study performed well under field conditions in Blairsville, Tifton, or both locations. Results of this trial indicate that all the selections may be suitable for container production, though control of foliar diseases may be required on some species. The plants will be evaluated further and considered for release to the nursery industry.

Table 1. Growth measurements for 12 species of *Cotoneaster* after five months in #7 containers. Periods of peak flower production are shown.

<i>Cotoneaster</i>	Height (in)	Width Index ^z (in)	Dates of Peak Flowering (2003)
amoenus	38	63	5/13-6/3
applanatus	52	98	5/2-5/30
boisanus	47	86	5/12-5/30
cochleatus	34	74	4/18-5/5
dielsiana	50	82	5/12-6/13
franchetii	44	95	5/12-6/3
glaucophyllus	25	54	5/6-5/15
marginatus	58	72	4/4-5/5
pannosus	54	94	5/12-6/3
sherriffii	47	71	3/27-5/15
splendens	48	78	5/12-6/3
turbinatus	49	84	5/12-5/26

^z Width index (width N-S + width E-W/2)