



Evaluation of *Abelia* Selections to Withstand Cultural Conditions in Containers

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Nature of Work: We have been developing new cultivars of *Abelia* through interspecific hybridization. Seedlings are being evaluated in field plots in Griffin and Blairsville for cold hardiness, flower and sepal color, compact plant form, attractive foliage and heavy blooming. Selections that have outstanding characteristics in the field need to be further evaluated in containers, to ensure that any cultivar releases are easy to propagate and grow well under nursery conditions. In addition, *Abelia* cultivars often fail to thrive in container nurseries during the hot summer months. In the summer of 2003, eleven selections were evaluated in containers at the CANR and in Griffin, and plans are being made to release some of these selections. In the summer of 2004, additional selections were evaluated for container performance in full sun on gravel at the CANR and in Griffin.

This year, eight selections and two cultivars were evaluated. Parents of the selections are as follows: *A. chinensis* × 'Francis Mason' (99-2-7); 'Francis Mason' × '*A. parvifolia* (syn. *A. schumanii*) (00-53-17, 00-53-51, 00-53-71); 'Francis Mason' × *A. chinensis* backcrossed to either 'Francis Mason' or *A. chinensis* (00-bc-35-3, 00-bc-46-4, and 01-bc-60-4); and a selection from open-pollination of 'Edward Goucher' (EG-14). Two cultivars, 'Edward Goucher' and 'Rose Creek' were grown to provide a comparison to commercially available cultivars.

Three plants per selection or cultivar were repotted from one-gallon containers into three-gallon containers on June 16 using McCorkle's growing medium consisting of 6:1 bark:sand, 4 lb lime/yd³, 1.5 lb micromax/yd³, 1.5 lb gypsum/yd³, 2lb Talstar/yd³ and Osmocote pro 22-4-6 at 4 lb/yd³. The plants were placed on gravel and were irrigated with overhead water. On August 19, the height and width of each plant at the CANR was measured. Sun scald, leaf drop, floriferousness and overall quality were rated on a scale of 1 to 10, with one indicating no sun scald, leaf drop, flowering, or very low quality, and 10 being high sun scald, severe leaf drop, a high rate of flowering or high quality. Plants in Griffin were also measured and evaluated.

Results and Discussion: All of the *Abelia* selections and the two cultivars evaluated grew and performed well in containers at the CANR (Table 1) and in Griffin. Foliar chlorosis was not observed, and most plants retained all of their leaves. As in 1993, the decline often observed among *Abelia* plants in container nurseries in the summer months was not observed. Further investigation into the cause of this decline is needed, in order to develop a selection protocol to screen potential new cultivars for adaptability to container growth.

Selections were evaluated for several traits, as shown in Table 1. Sun scald was quite high on 00-53-17, and to a lesser degree on 00-bc-35-3 and 01-bc-60-4. All of the selections with sun scald have yellow-green and sometimes multi-colored foliage. These selections are particularly

colorful in the fall and winter months, in both the landscape and containers. Floriferousness was very high on 00-bc-46-4, and high on 00-53-17 and 00-53-71. Selection 00-bc-46-4 has drawn enthusiastic response from many who have seen it. This plant has huge panicles of white flowers and pale pink sepals. The overall appearance is unique and stunning in July and August. The plant develops large flower clusters as a young cutting, making an attractive pot plant. Three of the selections, 00-53-17, 00-53-71, and EG-14, have purple flowers. Two of these are especially promising. Selection 00-53-71 has purple flowers and dark green leaves, while EG-14 has red stems and sepals, and is very pretty in a pot. Quality in August was rated highest on 99-2-7, 00-53-71, and 'Edward Goucher'. Selection 99-2-7 is attractive throughout the summer and fall, and outstanding from July to September. This plant has dark green foliage with burgundy edging on the leaves, and a graceful, weeping habit.

Table 1. Average height, width, leaf drop, sun scald and floriferousness of *Abelia* selections and cultivars at the CANR in Dearing, GA. Data collected on Aug. 19, 2004.

Plant ID	Height (cm)	Width (cm)	Leaf Drop Rating ¹	Sun Scald Rating ²	Floriferousness Rating ³	Quality Rating ⁴
99-2-7	58	96	1	1	4.7	8.2
00-53-17	52	84	1	7	6.5	5.5
00-53-51	56	80	1.3	1	3.7	5.8
00-53-71	33	57	1	1	6.3	7.8
00-bc-35-3	35	48	1	3	4.3	5.3
00-bc-46-4	32	48	1	1	9	7.0
01-bc-60-4	41	62	1	3	2.7	7.0
EG-14	40	68	1.3	1	3.0	5.7
'Edward Goucher'	38	77	1	1	4.5	7.8
'Rose Creek'	58	55	1	1	2.5	6.0

¹Leaf drop rating: 1 = no leaf drop; 10 = 100% leaf drop.

²Sun scald rating: 1 = no sun scald; 10 = 100% photobleached foliage.

³Floriferousness rating: 1 = no flowers; 10 = very many flowers.

⁴Quality rating: 1 = poor quality; 10 = high quality.

Significance to Industry

New cultivars are in demand by the nursery and landscape industries. *Abelia* is a drought tolerant, pest resistant shrub that is widely grown, but novel flower and foliage characteristics and improvements in growth habit, container performance and other traits are needed. Selections evaluated in this study performed well in containers, as well as in previous landscape studies. Some of these selections show promise as new cultivars, with outstanding floriferousness, unusual and attractive flower and foliage colors, flower cluster size and form, sepal color and novel plant form.