



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

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Nature of the Work: We continue to evaluate interspecific hybrids of *Abelia* for potential as new cultivars. Seedlings are being grown in field plots in Griffin and Blairsville, and are being assessed 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 summers of 2003, 2004, and 2005, selections were evaluated in containers at the CANR and in Griffin. Three cultivars have been released from these studies: 'Raspberry Profusion', 'Lavender Mist' and 'Plum Surprise', and are currently under license to Ball Ornamentals. In the summer of 2006, additional selections were evaluated for container performance in full sun on gravel at the CANR and in Griffin.

This year, eleven selections and one cultivar were evaluated. Selections evaluated at the CANR for the first time are as follows: Plants 01-bc-19-4, 00-bc-20-5R, 00-bc-47-27R, 01-bc-19-25R, and 01-bc-19-28R, seedlings with 'Francis Mason' and *A. chinensis* in their parentage. Other selections evaluated were 99-2-7, 99-11-5, 00-bc-11-3, and 00-bc-46-4. These plants were also derived from crosses/backcrosses involving 'Francis Mason' and *A. chinensis*. In addition, selection 01-13 -2, derived from 'Francis Mason' × an unknown *A. × grandiflora* plant, and EG-14, a seedling from open-pollination of 'Edward Goucher', were evaluated. The cultivar used as a control was 'Francis Mason'.

Three plants per selection or cultivar were repotted from 1-gallon containers into 3-gallon containers on June 15 using McCorkle's growing medium consisting of 6:1 bark:sand, 6.25 lb lime/yd³, 2 lb micromax/yd³, 2 lb gypsum/yd³, 2lb Talstar/yd³ and Harrells 18-6-12 NPK at 12.5 lb/yd³. The plants were placed on gravel and were irrigated with overhead water. On September 6, the height and width of each plant at the CANR was measured. Foliage color and plant form were noted, and degree of flowering and overall quality were rated on a scale of 1 to 10, with 1 indicating no flowering or poor quality, and 10 indicating many flowers or high quality. Plants in Griffin were also measured and evaluated.

Results and Discussion: All of the *Abelia* selections and 'Francis Mason' grew and performed well in containers at the CANR and Griffin (Table 1). Leaf drop was minimal or non-existent on all the plants. Floriferousness was very high on 00-bc-11-3, 00-bc 46-4, 01-bc-25R, 01-bc-19-28R and 99-11-5. Selection 00-bc-11-3 has attractive chartreuse foliage and large panicles that bloom in late summer. Plant 00-bc-46-4 has emerald green foliage. It blooms in July and August with huge panicles of white flowers. Flowering is heavy even on young cuttings in containers. The two smallest plants in this group are 00-bc-47-27R and 01-bc-19-4. Foliage is bright green or dark green, respectively, and both have white flowers. In the field, they are low growing, spreading plants. One of the best plants in this group is 01-bc-19-28R. It has a bright yellow-green foliage through mid-summer, then the foliage turns to an emerald green. The overall plant form is rounded, with many flowers throughout the summer. Plant 99-2-7 has a weeping form, dark green foliage with burgundy margins, and blooms heavily in August and

September. Sepals are a very pretty dark pink. Selection 99-11-5 changes color with the seasons. In the spring, foliage is yellow-green throughout the plant and orange at the shoot tips. Blooming begins in June, with dark pink sepals and bright green foliage. Sepals remain dark pink all summer. In late summer, new growth is again orange. An especially stunning selection when in full bloom is EG-14, which has dark green foliage, red stems, purple flowers and red sepals.

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 unusual and attractive flower and foliage colors, flower cluster size and form, sepal color and novel plant habit.

Table 1. Average height, width, degree of flowering and overall quality of *Abelia* selections grown in containers at the CANR in summer, 2006. Data was collected on September 6. Color of foliage, flowers and sepals, as well as bloom time, is also listed.

Plant ID	Height (cm)	Width (cm)	Foliage Color	Flower Color	Sepal Color	Bloom Time ¹	Flowering Rating ²	Quality Rating ³
00-bc-11-3	28	54	Yellow-Green	White	Pink	August-Sept	9	8
00-bc-20-5R	38	69	Green	White	Dark Pink	June-Sept	7	8
00-bc-46-4	35	55	Green	White	Pale Pink	July-August	10	8
00-bc-47-27R	32	52	Green	White	Pale Pink	June-Sept	6	8
01-13-2	42	88	Dark Green	White	Pink	July-Sept	7	6
01-bc-19-4	30	54	Dark Green	White	Pale Pink	June-Sept	7	7
01-bc-19-25R	51	61	Mixed	White	Dark Pink	June-Sept	8	7
01-bc-19-28R	41	58	Mixed	White	Pale Pink	June-Sept	9	9
99-2-7	46	101	Dark Green	White	Dark Pink	July-Sept	6	8
99-11-5	38	56	Multi-colored	White	Dark Pink	June-Sept	8	9
EG-14	44	88	Dark Green	Purple	Red	June-August	7	8
Francis Mason	34	56	Yellow-Green	White	Pink	June-Sept	6	6

¹Bloom time refers to bloom date in the field at Griffin.

²Flowering rating: 1 = no flowers; 10 = very many flowers.

³Quality rating: 1 = poor quality; 10 = high quality.