



The *Abelia* Saga
The Evaluation Process for Plant
Introductions:
Is *slow* slow enough . . . ?

Michael A. Dirr, Carol Robacker and Sloane Scheiber
Department of Horticulture - Athens & Griffin
The University of Georgia

Mark Griffith and I traveled to McCorkle Nurseries, Inc. and the Center for Applied Nursery Research on a warmish 1 June day. Mark had crapemyrtle liners to deliver and I asked Mark if he would evaluate some of the new seedling material, particularly the *Abelia chinensis* selections that are now in their third growing season. Initially 13 were selected, then to 19, 23, and finally 32. This last fall, Kay Bowman, Jim Midcap, Jeff Adkins and myself evaluated the seedling population one more time and selected another 37 before agreeing to eliminate the rest of the more than 200 open-pollinated *A. chinensis* seedlings.

Our initial impulses were pretty much on target with the first 32 worthy of continued assessment. The last 37 were easy to peruse the June 1 day and we eliminated all but #5, 41, 45, 55, and 56; those given less than enthusiastic *maybes* and saved from the mulch pile.

We will discuss several of the first 32 in depth but a little history is in order to properly set the table. This project was initiated in 1997 when I accessioned species and cultivars of *Abelia*, particularly *A. × grandiflora*, that were commercially available. Twelve types including *A. chinensis*, *A. 'Dwarf Purple'* (same as 'Edward Goucher'), *A. 'Edward Goucher'*, *A. × grandiflora* (UGA), *A. × grandiflora 'Compacta'* (Hines), *A. × grandiflora 'Compacta'* (UGA), *A. × grandiflora 'Francis Mason'*, *A. × grandiflora 'Golden Glow'*, *A. × grandiflora 'John Creech'*, *A. × grandiflora 'Little Richard'*, *A. × grandiflora 'Prostrata'*, and *A. × grandiflora 'Sherwoodii'* were grown at the Center during the summer of 1997. Seeds were harvested from *Abelia chinensis* in December, 1997, sown, and germinated by February, 1998. Immediately evident was variation, with 8 seedlings out of over 200 with yellow leaves. These were tagged and given our standard codes, *Abelia-1-98*, *Abelia-2-98*, etc., with characteristics logged for each plant. Phenomally, not a single seedling resembled *Abelia chinensis*; the bees and butterflies effected cross-pollination with the resultant progeny reflecting the different growth habits and foliage of the pollen donors. The reason *A. chinensis* was selected as the maternal parent was cold hardiness and repeat flowering. The Morton Arboretum, Lisle, IL reported that although *A. chinensis* is injured by cold (zone 5), shoots may grow 5 feet in a season and produce copious flowers. *Abelia chinensis* has long been a staple of the J. C. Raulston Arboretum and Bonnie and I grow it in our garden, zone 7b, where it flowers and fruits with abandon.

Abelia × grandiflora originated in Italy, possibly before 1866 with the plant not introduced into cultivation until 1886. The parents of *A. × grandiflora* include *A.*

chinensis and *A. uniflora*. With 30 or so species in the genus, ranging from the zone 10/11 evergreen Mexican species, *A. floribunda*, with large red flowers to the Korean *A. mosaenensis* with rose-red buds opening pink-white and zone 4 cold hardiness, the potential for producing superior hybrids is boundless.

Our initial open-pollinated seedling success and broadening knowledge of the various *Abelia* species and cultivars prompted Michele Scheiber's PhD program in *Abelia* improvement. She has made over 7000 controlled crosses and is assessing pollen viability, compatibility and inheritance of characteristics. She has out-planted over 500 seedlings at the Griffin Station. In the first year, plants about fist-size (with flowers) to three-feet high were evident. Her work will move *Abelia* breeding to the 21st century after a hundred plus years of void.

Mark's mission as I reminded him was to decide the commercial realism of the 32 selections. Mark put the name 'Rose Creek' on *Abelia*-12-98, a compact (3') form with lustrous dark green, broad-ovate leaves and abundant white flowers. It is moving fast into commerce and, in my opinion, will dominate 'Sherwoodii', 'Compacta' and 'Prostrata' as well as 'Little Richard' and 'John Creech'.

We walked the 32 seedlings, once, twice, and more, then systematically 1 through 32. In tabular form, the results are presented. Only a few were in flower so, in another month, rankings could change. In essence, habit, foliage density and color, stem color, and the famous but undefined, "consumer appeal" in a container drove the evaluation process. To date, all 32 (#3 and 5 died) selections have been easy to root using 1000 to 3000 ppm K-IBA, 3 perlite:1 peat, and mist. Mark's top five choices were #12, 26, 7, 4, and 9.

Table 1. Evaluation of *Abelia chinensis* seedling selections at the Center for Applied Nursery Research, Dearing, Georgia. June 1, 2000.

Seedling number	Commercial acceptability			Notes
	No	Yes	Maybe	
1 (yellow/gold leaves)	D, G ¹			
2 (yellow/gold leaves)			D, G	
3 (dead)				
4 (yellow/gold leaves)	D, G			Brightest yellow, bleached out at Center. May be better in cooler climates.
5 (dead)				

6 (yellow/gold leaves)	G	D	
7 (yellow/gold leaves)		D, G	Rich copper-colored new growth. Antique bronze-orange fall winter color
8 (yellow/gold leaves)		D, G	
9 (all the rest either green or		D, G	Upright growing with bronze red tinged bronze and reddish purple) new growth. We thought this selection, based on foliage color and density, possessed consumer appeal.
10	D, G		
11		D, G	Compact, lighter leaf color than #12.
12		D, G	'Rose Creek' - The most compact form.
13		D, G	Compact, lighter leaf color than #12.
14	D, G		
15	D, G		
16		D, G	
17	D, G		
18	D, G		
19	D, G		
20	D, G		
21	D, G		
22	D, G		
23	D	G	Like <i>A. × grandiflora</i> with pink flowers,

			lustrous dark green foliage.
24	D	G	Like <i>A. × grandiflora</i> .
25	D, G		
26		D, G	Deep bronze-maroon leaves, striking foliage coloration.
27	D, G		
28	D, G		
29	D, G		
30	D, G		
31	D, G		
32	D, G		

¹D = Dirr, G = Griffith.

The above “data” provide reasonable assessments of aesthetic characteristics. Of the six golden yellow selections, numbers 4 and 7 were consistently the best at Athens. Number 4 is bleached out in Dearing and reminds of the color change in flowers of *Kerria japonica* in full sun. Number 8 was rich golden yellow in color with uniform growth habit. Our goal is to test the entire group at Bernheim Arboretum, Louisville, KY to assess coloration and cold tolerance. Louisville is the break-point between *Abelia* maintaining a woody framework and a die-back shrub.

Number 9 had never surfaced in earlier evaluations but had Mark and I buzzing about its bronze-red new shoots, smaller leaves and upright habit. If the flowers are average or above, this clone deserves a name. We suspect the plant will grow 3 to 5 feet high and remain densely branched and foliated.

Number 12 has been discussed and is already in the marketplace. The name ‘Rose Creek’ was supplied by Mark after the Oconee County stream. Numbers 11 and 13, although reasonably compact, do not have the exquisite lustrous dark green foliage of ‘Rose Creek’.

Number 16 is an *Abelia × grandiflora* look-alike with red tips to the new growth. This received maybe from Mark and myself.

Number 23 had small pink flowers and lustrous dark green foliage that caught Mark’s eye. The habit was ragged although foliage was lustrous dark green.

Number 24 is akin to *A. × grandiflora*, slightly more upright and vigorous with extremely lustrous dark green leaves.

We both agreed *in toto* that #26 was a keeper. Deep bronze-maroon leaves with mirror-like luster and reddish purple stems made the plant “jump out” from the rest. Assuming the flowers are white, this will be a powerful flowering shrub because of the contrasting foliage. Habit is upright-spreading and vigorous. No doubt, +5 feet is in the genes.

The plants are now in their third year, still growing in containers. Seemingly, the selections are easy to propagate and grow in containers. The evaluation process will continue, for a complete collection of the first 32 (-2) will be established at the Horticulture Farm. In-ground performance evaluations provide corroborating evidence that the plants are suited to the vagaries of the Georgia and southern climates.

David Creech, Director, Mast Arboretum, Stephen F. Austin University, Nacadoches, TX, received a collection of 13 Abelias. In zone 8, David reported #12 (‘Rose Creek’) was superior.

My hope is that 100-years from now, the selections will still be utilized in Georgia gardens and gardens worldwide. What a great testimonial to a plant introduction. Time will truly tell.

Published in *Georgia Green Industry Association Journal*, Volume 11(8): 26–29