HYBRIDIZING AZALEAS

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Hybridizing azaleas is easy and interesting—including planning the crosses, sowing and growing seeds and selecting the best plants. Out of hundreds of crosses, and perhaps thousands of seedlings, I have selected five (5) for registration. They are:

'Lucent'	=	'Dream' x 'James Gable'
'Taenzer'	=	'Moonbeam' x 'Beacon'
'Ring #1'	=	Parentage unknown
'Orchido'	=	'Polar Seas' x 'Debonaire'
'Fairfax'	=	'Polar Seas' x 'Debonaire'

All of those selected for registration are very floriferous and "good doers." They are hardy to at least -5 degrees F. Selections were made after at least ten years of observation. Of the five, 'Fairfax' has the best winter foliage. Some of the crosses were made with the intent to obtain pastel-colored flowers. I find this goal somewhat elusive, although 'Taenzer', 'Orchido' and 'Fairfax' approach pastel effects.

There are several others still under observation, including some 'Elsie Lee' crosses and hybrids of *Rhododendron tschonoskii* x 'Sam'.

Since moving to Bent Mountain, I find that some varieties of evergreen azaleas do not bloom well every year. This may be partly due either to winter cold or to lack of sufficient heat to grow well here. Other varieties grow well even in the cooler summers, but lack sufficient flower-bud hardiness in some winters.

SPECIES EVERGREEN AZALEAS
Categories and Hardiness Zones

Kyushu	
kaempferi	5b-9a
kiusianum	7a-8b (some varieties are much hardier)
sataense	7a-9a (parent of kurumes?
komiyamae (= tosaense)	7a-9a
Ryukyu	
macrosepalum (= stenopetalum)	7a-8b
ripense	?
scabrum	8b-9b
Chinese	
simsii	8a-9b (parent of Belgian Indicas)
Indica	
indicum	7a-l0a (parent of So. Indians, with simsii and mucronatum hybrids)
eriocarpum (= tamurae)	7a-l0a
Taiwan	
nakaharae	6b-9a
oldhamii	8a-9a
rubropilosum	7b-8b
Korea	
yedoense var. *poukhanense*	6a-9a
Small Leaf	
serpyllifolium	6a-8d
tosaense	7a-8a
tschonoskii	5a-8a
microphyton	alpine-like *tschonoskii* but native to China
tsusiophyllum	6b-8a low-tubular flowers
yakuinsulare	similar to *simsii*
otakumi	improperly called "yakuinsulare" in the U.S.
Tashiroi	
tashiroi	a link between evergreen and deciduous azaleas?
Other	
Over 30 uncommon or uncultivated species. Not much is known about them.	

I am continuing to make a few evergreen azalea crosses using the hardier plants here, such as some Lanny Pride selections, Schroeders, and some species that have not been used much by others that offer promise for small size and adaptability to cool summers and cold winters. These are: *R. kiusianum*, *R. serpyllifolium* and *R. tschonoskii*. All three of these have small flowers, but can produce floriferous hybrids. By contrast, most of the current evergreen azalea hybrids available have been developed with *R. kaempferi*, *R. yedoense* var. *poukhanense*, *R. sataense*, *R. indicum*, and other species listed in the table on page 52.

If you have never hybridized azaleas, you will find Chapter 12 by August Kehr in Fred Galle's book *Azaleas* on hybridizing most interesting and helpful. There is a wealth of information on only ten pages in this chapter. In the same book, Appendix C, there is a brief article on the "Inheritance of Flower Color" by J. Heursel which includes information on the probable fertility of double and single flower parents. For example, he found that:

> Female hose-in-hose x male single flowers usually will not produce seed.

It is therefore necessary to use a single flowered azalea as the female parent crossed with male hose-in-hose in order to produce seed. Knowing this will save you a lot of time making crosses.

All hybridizers have their own goals for making crosses. Whatever your goals, you will learn interesting things about azaleas when you make the crosses and grow the seed to blooming size plants.

George Ring *has been a hybridizer of rhododendrons and azaleas for over 30 years. A Civil Engineer, he is retired from the US Department of Transportation and from the Research Board of the National Academy of Sciences. He is a Past President of the American Rhododendron Society.* ❑

SEARCHING FOR THE NATIVES

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This evening we shall travel with the Middle Atlantic Chapter ARS as we explore for native azaleas in the eastern United States. I hope to give you all a view of the species we have explored for and a taste of the trips we have taken up to this point in time.

The goals of our Native Azalea Study Program are to give us a better understanding of our azaleas and to produce a definitive slide program on all of the eastern native azaleas, which will be offered to other groups and organizations for their use. The program will be completed for the ARS Eastern Regional Fall Meeting at Williamsburg, Virginia in 1999.

By investigating the natives in their natural habitats we hope to understand where they grow, how they grow and especially their genetic diversity. This will be useful in helping us grow the natives in our gardens and perhaps give us information and plants to create better hybrids for our growing conditions.

Our trip this spring to investigate *Rhododendron canescens* and *R. austrinum* led us to southeast Mississippi, south Alabama, south Georgia and the panhandle of Florida in the last week of March. This year we were perhaps a week early because only about 25% to 33% of the plants we saw were in full bloom, and the rest were in opening bud to tight bud. This again impressed upon us our belief that by proper selection of different clones of a species, one can have a long period of bloom of many species.

Generally, we found *R. canescens* growing near water and sometimes at sites that must flood for short periods of the year. Flower color was mostly pale pink with a deeper pink tube but we did find some pure white clones. I was impressed by the large number of flowers in the truss of *R. canescens* and its tall graceful habit of growth, both characteristics which it seems to pass on to its hybrids, in my experience. The most unique *R. canescens* we saw in a cut-over woodland west of Tallahassee, Florida, was a plant with a white ball truss of fragrant flowers that at a distance resembled a viburnum.

R. austrinum seems to like more dry sites and can often be found on the bluff of some of the larger rivers, although at times we found *R. austrinum* and *R. canescens* growing and blooming side-by-side. The best blooming stand we saw was in Torreya State Park in Florida on a high bluff overlooking the Apalachicola River. Torreya State Park contains a very interesting selection of native flora and is well worth a visit. Again the genetic diversity of *R. austrinum* was very interesting in the yellow to gold flower color, with and without red to pink color on the flower tubes, and in the flower size and plant size. We agreed that the most interesting *R. austrinum* we saw was one that had us standing on our brakes when we saw it on the side of the road. From a distance it was a deep coral color and closer inspection showed it to be deep coral red in bud that opened and faded to an apricot shade with coral tubes, again found in northern Florida.

Our search for *R. periclymenoides* (Pinxter-bloom) has been in Virginia, West Virginia, and Maryland. It superficially resembles *R. canescens*, but prefers dryer woods, higher lands and generally has a more northern range. It seems to pass a greater range of flower shades, white to pink (pale and deep) to lavender pink, and sometimes (rarely) upon opening the flower has pale yellow blotch. It can be differentiated from *R. canescens* by the use of a hand lens