

# Hybridizing Evergreen Azaleas— My First Attempts

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For many plant lovers, hybridizing is the best thing to do. At least it has been for me—for the past 20 years with rhododendrons, and the last 6 years with evergreen azaleas as well.

I think that only hybridizers know and understand the tension in all the aspects of hybridizing. This “tension” can develop into a real obsession after the first results, even if some of them are a disappointment. It depends on what you expected. Certainly after some fine results, you want more and better results. It starts by you thinking and reflecting what your next crosses will be. Walking through your fields and garden with named cultivars, you feel the tension of what to cross next. What could or would be a fine combination? Thinking about what you really want to get as a result. Better flowers? But what is better? Bigger? Or do you want flowers more or less like the Satsuki? Or, do you want plants with mahogany-red leaves in winter and early spring? Dark glowing leaves? A

combination of all these qualities? Sure, and with bicolor flowers, .....and double, or even triple, blooms!

So it is a tense moment when the plants start to flower. Bringing some fine hybrids or good results of your own hybridization into the greenhouse. Taking small scissors to cut off the filaments of the flowers. Or taking a pair of tweezers and pulling off some anthers with pollen and going to the flowers to cross with and putting the pollen onto the stigma of the other flower(s). Or taking pollen from azaleas in the garden as soon as the flowers open, while the bees are competing with you.

It is the start of creating something new!! From this moment on, you can watch how the ovary is growing, bearing the children of a new generation of azaleas. For me it is working as a human architect with the great creations of God, the Great Architect! We can only discover what He has planned and created.



“Trippie”, an open-pollinated cross of ‘Labe’.



A salmon-orange bloom resulting from ‘Fascination’ x ‘Gunki’.



‘Lyric’ x ‘Robin Hill Congo’.



‘Lyric’ x ‘Surprise’. (All photos by Tijs Huisman)

We have to wait one growing season to see the plant itself. And then to wait another season to see the first flowers. It does not have to take more years if you plan things right.

Then, continuing our “crossing-story,” in September, when the seed capsules turn brown, it is collecting time. Collect the seeds from the capsules and name them correctly, with the mother plant’s name first. If you are lucky enough to have a greenhouse with bottom heating and daylight tubes, the seeds can grow out to small seedlings at the end of February. Then plant out the seedlings in small pots, just the best of some (ten) thousands of azalea babies. Even at this early stage you can see if the flowers will be light-colored/white, or dark/red or purple. Just look at the small stems of these baby plants: if they are light green, the flowers will be light flowers; dark green to red stems mean dark flowers.

And in every part of this hybridizing story you have these tense feelings—what will the plant be in two years? Will your expectations come true? Or maybe, and I always hope for it, will it be something really new? Perhaps a plant with variegated leaves? Sadly, this trait mostly disappears after the second pair of leaves. What will happen when I cross a hose-in-hose flower with a double flower? Like ‘Ho-Oden’ with ‘Elsie Lee’?

Some hybridizers are like chess players, studying many chess books about how to start your first moves, etc. I am not such a “chess playing” plant-crossing player. I like spontaneity, surprises and no calculation. If you get only what you expect, where is the tension? Anyway, in hybridizing you will always have surprises, if you want them or not.

### Open-pollinated Azalea Crosses

Another question is whether we do better than the bees or other pollen-spreading insects. Some of “my” best new hybrids are created by insects, so maybe the bees should be honored more for their contribution.

About six or seven years ago, just as I began with hybridizing rhododendrons, I started by collecting seeds of open-pollinated flowers, just to see how evergreen azalea hybridizing works. Some varieties make seeds very sparingly, especially hose-in-hose types like ‘Ho-Oden’ or ‘Peggy Ann’. Other varieties like ‘Knorr’s Lilac’, ‘Labe’, and ‘Canzonetta’ were more fruitful, so I picked out seeds from those plants, and did not have bad results, actually. All these parent-plants are very cold hardy and tough.

As I said at the Chattanooga ASA Convention, here in Holland and Germany we need plants that are “winter-tough”! By looking at these results I can guess what azalea was the father (pollen parent). For example, seedling 99-1: mother ‘Labe’ (we always know the mother, right?) and father probably sport of ‘Easter Parade’, which stands

next to the ‘Labe’ plant. And what about the extremely cold hardy ‘Knorr’s Lilac’, with glowing rounded leaves and lilac flowers? It has seeds as hairy as on a dog; the results are not spectacular in flower color, but fine hardy plants. Also as mother, crossed with ‘Helen Curtis’, it can have good results, like seedling 99-14, with white, more or less hose-in-hose flowers, that are very cold hardy. And what makes it so nice is the fact that we have here a hardy kind of a Satsuki, flowering in mid-May, with now and then white flowers with pink stripes, or even pure pink/lilac flowers! Again using ‘Labe’, still open-pollinated, one result is a very hardy compact plant, with small leaves, and entirely covered with small salmon/pink flowers, that look triple!! Since the flowers are both hose-in-hose and double, they really look like they have three rows of petals: five petals from the sepals, five from the corolla, and five from the stamen. When I introduce it, I will name it ‘Trippie’ (Photo 1).

Oh, yes, bees and other insects are fine artists! I am still talking about open-pollinated flowers. ‘Canzonetta’ and ‘Brunella’ are just two of Mr. Hachmann’s beautiful introductions with mahogany/bronze leaves in winter and early spring. I like this quality, since it gives an additional pleasure in a dull time of the year. When there is some snow, and it melts, you can see these leaves peeping out of the snow as “treasures in white.” One of the results of such plants is my seedling 99-28<sup>2</sup>. It is like ‘Maruschka’, with glowing bronze leaves, but it grows much faster and has double dark rosy/red flowers. This is also a good starting point for further hybridizing. In recent years I have continued to take open-pollinated seeds from ‘Maruschka’, which is Hachmann’s best mahogany/bronze-leaved introduction. Most of the offspring also have this fine color in winter. I have one with these glowing leaves and more or less double dark pink flowers with white anthers!

### Crossing for Specific Traits

Of course, playing the role of a “big bee,” I did quite a lot of hybridizing myself. But what parents should I use? I like orange very much, which is also a common color in deciduous azaleas. So, ‘Fascination’ would be a good parent, so would ‘Flame Dance’ and ‘Midnight Flare’, which is the darkest red azalea! So, why not cross with them, as in ‘Flame Dance’ x ‘Midnight Flare’.

For orange, I cross ‘Fascination’ x ‘Gunki’, though I don’t know anymore if it is the Kurume or the Satsuki form. The result is pure salmon/orange flowers, some with a white center or even a darker blotch (Photo 2).

Joe Klimavicz taught me that if you want a double flower, cross with ‘Elsie Lee’. So, I wondered if I could I get a double orange flower by crossing ‘Elsie Lee’ with ‘Fascination’? I’ll try. I am 55 now, so I hope to have time enough to see the children of this cross!

My experience with 'Elsie Lee' is that many of the seedlings are not double, and most are in the color range of pink/purple/lilac. Joe does not like orange, and that is my luck, because he will send me cuttings of plants with more or less orange flowers, which he would throw away. And for all of you: If you don't like orange, please think about me.

Now you know a bit about my hybridizing priorities—double, orange, clear colors—or even better—bi-colors, hose-in-hose flowers, mahogany leaves in winter.

I asked before what would happen if we cross a hose-in-hose with a double flower? Crossing with a hose-in-hose flower is a difficult thing anyway. In Galle's book on page 412 you can read about it in an informative article by Dr. ir. J. Heursel. If we cross a single-flower form as the mother with a hose-in-hose flower, then we can have again a hose-in-hose flower. As follows:

*female single flower x hose-in-hose male = half single  
and half hose-in-hose*

*female hose-in-hose x hose-in-hose male = sterile  
female hose-in-hose x single = sterile also.<sup>3</sup>*

Conclusion: If you want a hose-in-hose flower, cross a female single with a male hose-in-hose!!

This occurs with homozygotic flowers, that are "pure" and not from complicated crosses. Another complicating thing is, that this quality of hose-in-hose is connected with the Q gene in the production of quercetin. And they are located on the same chromosome.

Well, in spite of these difficult matters, I tried (of course) to see if this is true. I crossed my own hybrid seedling 99-1' (which is 'Labe' x probably sport of 'Easter Parade') having a single flower, x 'Peggy Ann', with a hose-in-hose flower, and guess what? I had about 20 seedlings of it, and they were all hose-in-hose. That's good luck for a hardworking hybridizer.

And what about blotches? I like blotches so much. I have some results from the cross 'Lyric' x 'Robin Hill Congo' with some nice children (Photo 3), and with 'Lyric' x 'Surprise', resulting in white flowers and a prominent yellow blotch (Photo 4), but actually not prominent enough. How nice would it be to have, let's say, a double orange flower, or hose-in-hose, crossed with some flower with a dark blotch? But, does anyone, hybridizer or not, know a named azalea with a good dark blotch? Just tell me. Give me a golden tip. 'Ho-Oden' could be such a partner. But then it would be used as the father, so it must have good pollen. See the schedule above. Well, maybe I am doing a bit of studying to be a good chess player. At least you must know some principles.

Sometimes it looks like you have a fine new hybrid. For instance I crossed my hybrid ('Flame Dance' x 'Midnight Flare') x 'Johanna' to get dark flowers with bronze leaves. Well, some plants have leaves that turn bronze, okay, and

flowers are indeed very dark, some even double, but in bright sunlight they fade very much. Another plant to cross with would be 'Galathea'; at least the offspring would have bronze leaves.

In the last few years I have become a bit of a follower of Joe Klimavicz, who hybridizes with some indoor azaleas that are not so hardy, but that are magnificent plants, like 'Satellite' with a combination of pink and white double flowers. So he crosses it with 'Elsie Lee' for hardiness. He has several very fine varieties like the recently registered 'Caitlin Marie' with very double flowers. But do I want to copy someone else? I should not invent the same wheel as others. So I also used 'Satellite', but crossed it with quite different varieties and my own hybrids. Some seedling plants are doing very well, with dark pink/red and double flowers. But in this color range there are already so many cultivars.

What about flower forms? Do you know 'Nannie Angell', 'Purple Pinwheel', or the creamy flowering 'Melba'? All have more or less split corollas. So, last year I crossed 'Melba' with red varieties and hybrids of my own, such as seedling 99-28<sup>2</sup>, and later I should cross again, F-2, to get separated petals in red, or purple, pink, and maybe salmon/orange. And, of course, I hybridized between these last three "pinwheel-formed" flowers. Now I have small seedlings, and I will take care of them like a hen cares for her chickens! I also have an open-pollinated seedling from 'Maruschka', with dark purple and split flowers. I could use this one, too. Oh, dear readers, in writing this article I have gotten the brightest ideas!

So, I have to think about plans for the future and to be practical. Should I do what other hybridizers don't? Some years ago I talked with Mr. Dick van Gelderen of Esveld Nurseries in Boskoop, and he thought that all this hybridizing would not lead to anything useful or better. If this is so, would or should we as hybridizers stop with this obsession?

Now it is time to end this hybridizing story with some words of the man who hybridized so much and whom we will always miss, "Mr. Hybridizer," Dr. August Kehr:

*"A beginner should heed a word of warning before he embarks on a plant breeding adventure. The progression from rank beginner to full-fledged hybridizer usually runs as follows:*

*Makes A Few Crosses  
Increasing Interest  
Permanent Addiction*

*This progression, once started, is non-reversible, and the ultimate 'disease' is incurable. ...A breeder spends years in anticipation and the rest of his life in satisfaction".<sup>4</sup>*

All that I can say now is: "You were and are right, Augie."

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ting up the basic organization and the by-laws, as did Bill. Bill assumed more and more responsibility and was national treasurer for a number of years. Nate was our first editor of *The Azalean*. That position was then assumed in 1979 by Jack Schaffer, a landscape designer with degrees from Harvard and Oxford universities.

Right from the beginning we decided to have a board of governors (BOG). [Now known as the board of directors, Ed.] Our first five were Emile Deckert—acting president, Frank White—acting vice-president, Thais Spencer (a retired lawyer and wonderful lady from Fulton, Maryland), Bob Mallet and Bill Parsons. We mostly met in the library at Brookside Gardens and sometimes at homes of members.

Our first public meeting was October 29, 1978 at Springbrook High School in Silver Spring, Maryland. There were 43 of our over 100 members present. Ryon Page was introduced as our plant-sale chairman, Rusty LaGuardia as our hospitality chairman, and George Harding to keep the slide library.

On January 3, 1979, a proposed slate for BOG for 1979 was mailed to the membership. Included were Emile Deckert, Frank White, Bill Parsons, Thais Spencer, Nate Fitts,

Judith Groomes, George Harding, Dr. Neil Campbell (a retired physician who claimed he caught “azaleaitis” from a patient, Albert Close, who was chief propagator at Glenn Dale), Alice Holland and Nancy Swell. Nancy has been active from the very beginning. She would drive from Richmond, Virginia, to Silver Spring, Maryland, just to attend board meetings. She put together the Richmond Chapter and was their first president. We were attempting to move along as fast as possible.

Our annual meeting was held at the US National Arboretum on March 25, 1979. Seventy-five members of our 140 were present. Ryon Page reported on the mart to be held in May. Nate Fitts announced that issue #2 of *The Azalean* would be out shortly. Buck Clagett was putting together a source list. The slate for BOG was accepted unanimously. When Nate’s resignation was put before the BOG, it was accepted with reluctance and Jack Schaffer was asked to take his place.

By the next year, 1980, we were able to confer charters on five chapters: Brookside Gardens, Richmond, Northern Virginia, Ben Morrison, and Robert D. Gartrell. The presidents of the chapters were automatically made members of the BOG.

In 1981 Bob Barry chaired the work for ASA to be represented at Flora Fest at the US Botanical Gardens as one of 29 plant societies. While he was working there, a big, lovely man walked through. He was in Washington, DC, with the dairyman’s association and was fascinated with the azalea display. His name was John Rochester. He and Bob talked, and the result was a new chapter in Louisiana and a friendship that lasted many years and beyond John’s death. John was the president of ASA in 1985.

I think that what pulls at my heart-strings the most is the memories of all the dear wonderful people. You know azalea people are very special. I felt that so many of the people that I worked with were my very dear friends: George Harding, Emile Deckert, Ryon Page, Bill and Thurza Parsons, Bob Barry, Nancy Swell, Jerry Goodman, Mal Clark, Gordon Severe, Roger Brown, Art Vance, Marge and Glenn Taylor, Rusty LaGuardia. It was a privilege for me to know Tony Dove, John Rochester, Frank White, Fred Galle, Don Hyatt, Charles Evans; and on and on and on. These eight years were a part of my life that I wouldn’t give up for anything. When people say, “Hey, who are you?” I say “I’m the lady that started the Azalea Society of America.”

*Azaleaphile – continued*

Carolina (2000). He owned and operated Savannah Spring Nursery, a wholesale plant nursery specializing in container-grown azaleas from 1973-1986. Along the way he found time to develop the multi-season-blooming Encore™ Azaleas now marketed through Flowerwood Nursery in Loxley, Alabama. In 2000, the Louisiana Nursery and Landscape Association recognized his significant contribution to the industry by awarding him a Professional Achievement Award, presented during the Gulf States Horticultural Expo in Mobile, Alabama. He is presently active in the development and testing of new azalea varieties through Transcend Nursery.

*Hybridizing Evergreen Azaleas—continued*

**Footnotes**

1. A photograph of seedling 99-1 was on the cover of *The Azalean*. 25(3): 49.
2. See *The Azalean*. 25(3): 61 for a photograph of seedling 99-28.
3. Galle, Fred. *Azaleas*. Revised and enlarged edition. Portland: Timber Press. p. 412; on p. 408 in the first edition.
4. Galle, op.cit., p. 341.

*Tijs Huisman, from The Netherlands, is a gardener of many years and is really crazy about plants. He started with a rhododendron garden 20 years ago and also hybridizes. He has been a member of the ASA since 1993 and is very active in growing azaleas. He has*

*a seven-acre garden with many of his own hybrids, and is testing hundreds more. In the spring of 2002, his first introduction of a new rhodo hybrid, ‘Helen Martin’, received a “Certification” at a rhododendron show in Germany, and he has many fine plants coming. Tijs has written articles for numerous publications: The Azalean, Journal-ARS, and publications of the German and Dutch Heather Society and a new Dutch magazine De Tuin Exclusive. He has also presented a number of programs in the US in the last 10 years. You can learn more about his horticultural experience by visiting his Web site <http://www.rhodoland.nl>. He is a professional teacher of German in high schools.*