Taipei Azaleas: Selective Breeding Experiences
By Chen Nien-chou, Taipei, Taiwan

Note from editor: The author’s use of the term “species” refers to interspecific hybrids and informal groupings of hybrids based on parentage or the identity of the hybridizer.

I. Foreword

When I was young, my father and I learned the techniques of planting flowers under the instruction of Mr. Huang Yue-yuen (黃岳淵), the author of The Book of Flowers (花經). Of all the stories Huang told about his private Garden of Huang in Shanghai, I especially enjoyed his azalea-breeding stories. It was around the end of the Chinese Civil War when Huang Yue-yuen came to Taiwan. His son, Huang De-lin (黃德麟), also a horticulture expert, stayed in Shanghai to look after the house and the garden. It took effort to contact Huang De-lin, for direct mail between Taiwan and China was forbidden at that time. But through the mail sent across the strait, Mr. Huang De-lin also taught me much about azalea breeding. Hence I became determined on this career.

As a landscape designer, I find the most popular flowering landscape shrub in Japan and western countries is the azalea. It is also the most popular flowering bush in many districts in China, including eastern, southern, southwestern, and mid-China. The azalea breeding histories in Japan and western countries are longer; however, there have been few new species lately. Perhaps it’s because the existing species have filled the needs in habits or flower types. In Taipei, where I have lived for years, gardening has disappeared from everyday life; housing conditions in the crowded metropolis don’t allow it. Horticulture has been commercialized, ornamental plants from around the world are available, and therefore selective breeding for its own sake has been neglected.

I have been dedicated to azalea breeding for decades and have achieved some results quite different from known ones. The brand-new hybrid species I have bred are many, with a variety of flower types, colors and habits, and are generally named as Taipei Azaleas in this article.

II. The working schedule and goals of Taipei Azaleas

Azalea breeding is an uneasy task for it requires time and the processes are complicated. My working schedule goes as following (e.g. in spring 2012):

1. Pollination  March, 2012
2. Capsule production  March – November 2012
3. Seed collecting  November 2012
5. First blossoming  March 2016
6. Second blossoming  March 2017
7. Physiological character observation under intensive farming  April 2017 - March 2018
8. Hereditary character observation under cutting propagation  May 2018 - March 2019
10. Final selections  March 2020

Since a selective breeding generation takes nine years to develop, a competitive species is very precious. The competitiveness derives from both unique aesthetics and sensitivity to the market. The breeding goals for Taipei Azaleas mainly include:

1. to surpass the appearance of existing species (targeting western azaleas),
2. to surpass the developmental features of existing species (targeting Hirado azalea),
3. to surpass weather adaptation ability of existing species (sun tolerance, heat resistance, hardiness, etc.),
4. to surpass the cutting propagative/ survival rate of existing species,
5. to bloom more uniformly without a special effort to break the dormancy than existing species,
6. longer bloom time,
7. blight resistance,
8. distinct blooms, and
9. blooms targeted to the Chinese New Year market (e.g. Chinese red).

The advantages mentioned above will lead to full blossoming even in intensive farming, reducing production costs.

III. Achievements of Taipei Azaleas

1. Cluster habit
   Many flowers in one bud is a new characteristic for evergreen azaleas, rivaling rhododendrons.
2. Multi petals

The multi-petal gene varies the shape of the flower. I look forward to new species created by single multi-petal parental generations.

3. Enlarging flower diameter of Kurume Azalea

Kurume Azalea is the endemic species in Kyushu, Japan, with colorful, small flowers. It takes two breeding generations to enlarge its flower diameter.
4. Distinctive flower shapes
Taipei Azaleas reach an unprecedented success in creating the special flower shapes that every breeder loves.

5. Offspring of native azaleas in Taiwan
*Rhododendron oldhamii* is a native azalea in Taiwan. Its ability to adapt to weather change, to resist blight disease, and its advantages in growing and anti-aging ability are favorable in breeding despite its plain appearance. Filial generations inherit its strong genes, plus beauty from other parents.

6. Chinese Red
There is no Chinese Red flower that blooms around Chinese New Year – a definite need in the current market.

7. Special Color: Breeding unprecedented, very special colors has always been our goal.
IV. Future

It takes 20 years for Taipei Azaleas to have some achievements in the selective breeding. Using native parental azaleas of Taiwan, I have bred new species with Taiwanese DNA that contribute traits suitable for strong growth, intensive farming, and a shorter production period. Taipei Azaleas are well suited for landscapes and container gardening. I remember my teacher Huang Yue-yuen once said, “It's sad that there are the most initial species of evergreen azaleas in China and Taiwan, but the breeding results are ordinary.” After many years, I am glad to say that Taipei Azaleas have already made much progress.

How Many Azalea Cultivars Have Been Named?

Dr A.C. Leslie, International Rhododendron and Dianthus Registrar
Cambridge, United Kingdom

As with all figures the test is to know what they mean. There are 15,013 entries on the Register and Checklist database for azalea names. When you strip out the entries that are cross references (synonyms, trade designations, etc.) the number comes down to 13,296. The number of these that represent evergreen azaleas is 10,027 and there are 3,379 deciduous entries. Only a relatively small number of the overall set of azalea names has been formally registered (2,268) but more have been regarded as incorporated at the time of the first Register (6,634). The balances are those added to the Checklist since, but not formally registered. So there you have it. You can chose what figure you like! I would say the best figure in terms of getting somewhere near the total number of azalea cultivars is 13,296.