BREEDING RHODODENDRONS FOR THE PACIFIC NORTHWEST AND COMPARABLE CLIMATES

JOHN G. LOFTHOUSE

6649 Osler Street Vancouver, B.C. Canada V6P 4C2

The breeding, development, and introduction of new plant cultivars can be compared to manufacturers introducing new products and models. To be competitive nurseries should feature these new introductions. Most customers like to try something different. The advertising and promotion of new cultivars increases nursery traffic, elevates profits, and indicates a progressive operation.

In my opinion, it is wrong to produce new cultivars for "new cultivars sake". I have been trying during the past few years to create rhododendrons with new "appearances"; flowers having longer corollas, flamboyant calyxes, also ruffles and frills. Some of these exciting new cultivars have recently been coming into bloom. The best will be selected and propagated for the retail trade. One might wonder about how to obtain them. Distribution by propagating nurseries, such as "Clays", "Briggs", and others, have made some of these cultivars available, world-wide. Others, and the newer introductions, can be obtained as scionwood for propagation. For a list of available cultivars and additional information, you can contact me at the above address.

As most of you may know new cultivars are created from controlled cross-pollination. Corolla and anthers are removed from the selected female flowers 5 to 7 days before the normal blooming time. (This reduces chances of self-pollination.) When the stigma becomes sticky, pollen from the selected male parent is applied. Up to here the procedure has been easy. The really hard part is the selection and development of suitable parents that have the genes to produce excellent offspring. What makes a rhododendron special? There are many cultivars available now, in beautiful colors, and clothed in attractive foliage. Also many sizes from short to tall. But many are not really special because they are so much alike.

- 1. 'L'Orchid' reminds one of cymbidium orchids. It is being crossed with cultivars having large calyxes to emphasize the orchid emulation.
- 2. 'Pink Petticoats' is my first rhododendron to bloom of any consequence, going back to 1964. Properly grown, it will bloom for sale in gallon containers. Its special value shows in its hybrids. They bloom early in life, have large flower trusses, and plenty of frills.
- 3. 'Pirouette' is a hybrid of 'Pink Petticoats' and a species rhododendron, R. yakusimanum. It has large "ball" trusses of many flowers on a compact plant with excellent foliage.
- 4. 'One Thousand Butterflies', a hybrid of 'Pink Petticoats', caused quite a stir when, during its first blooming in 1979, it was shown at an American Rhododendron Society convention in Vancouver, B.C. It has a full truss of 32 exotic

- flowers, each having a configuration of a butterfly in its center. It has good foliage and is an excellent plant for growing in containers.
- 5. 'Excalibur' has outstanding trusses. Deserving its mystical name, 'Excalibur' is in great demand. It is a cross between 'Lem's Cameo' and 'Pink Petticoats'.
- 6. 'Viennese Waltz' is also a cross between 'Lem's Cameo' and 'Pink Petticoats'. It is probably the most spectacular of the 'Pink Petticoats' crosses. It is reminiscent of the "ball gowns" of the Strauss period in 19th century Austria.
- 7. 'Yellow Petticoats' has ¼ of 'Pink Petticoats' in its ancestry. It blooms early in life, has big, many-flowered trusses of bright yellow.

This completes the hybrids of 'Pink Petticoats'. Of course, the other parents have influence, too. But 'Pink Petticoats' does seem to greatly influence the early blooming characteristics of the offspring, also the size of truss and number of flowers.

The above descriptions show how one dominant parent can influence the characteristics of the offspring. The next group show a collection of older and newer hybrids of considerable merit. They are shown in chronological order.

- 8. 'Sierra del Oro' is a hybrid of 'Crest' and R. lacteum. Ideal foliage and beautiful flowers makes this one of the finest yellows. Flowering, in early April, lasts up to six weeks.
- 9. 'Sierra Sunrise' is a natural triploid. Seen at its best, it has one of the world's largest flowers and trusses. I have measured trusses 14 in. high, and flowers 7 in. in diameter. It stays up well in wet weather. The name was suggested by a beautiful sunrise in Granada, Spain.
- 10. 'Sierra Beauty' is a sibling of 'Sierra Sunrise'. It displays a football-sized truss of slightly deeper color. Both are crosses of 'Mrs. Horace Fogg' and 'Point Defiance'.
- 11. 'Lemon Float'. A compact, floriferous, yellow hybrid, with deep green, beautiful foliage. Lemon-yellow flowers attract much attention.
- 12. 'Party Package' is frilled in bud and open flower, and is used to get frills and ruffles in other hybrids.
- 13. 'Supergold', a cross of 'Hotei' and 'Joanita' is, indeed, very yellow. It is set like a jewel on beautiful foliage.
- 14. 'Sunup-Sundown' is named for its morning and evening sky colors. To me, more important, is its large calyx, which is as large as the flower.
- 15. 'Sweet Sue' is one of my favorite rhododendrons. I liked it so much I gave it the name, as yet unregistered, of my daughter Sue, who always has a sweet and happy disposition. It is an apricot-colored cross of 'Hotei' and 'Lem's Cameo'.
- 16. 'Sierra Sunset' is a low growing, salmon rhododendron of great merit. The large calyx comes from 'Sunup-Sundown'. It blooms heavily in April, resembling an evergreen azalea.
- 17. 'Coral Skies' is one of the new "new", different rhododendrons. Low and compact in growth, the flowers are a light coral inside, and a deeper coral outside. On the back, radials of a deep coral-pink run to the edges of the flowers and the attractive calyx.
- 18. 'Butter Brickle' is named after that tasty ice cream dessert, the color it so closely resembles. It has attractive, bronze colored, new foliage. The plant is compact and has a nice "habit". Should be a good commercial cultivar. It has a nicely marked flower and large calyx.
- 19. 'Great Expectations' comes from a cross of 'Sunup-Sundown, and one of

Whitney hybrids. I like this for its own sake but, combined with 'Butter Brickle', it has given me some great hybrids that have just started to bloom in 1987 and 1988. Some would have bloomed earlier, but an early November, 1985, freeze wiped out a crop that was growing in containers.

My eventual goal is to produce unique rhododendrons shaped like lilies and daffodils, but will be beautiful as rhododendrons, and not for the plants they emulate.

BRUCE BRIGGS: John, I have noticed that plants, as Colorado blue spruce, that have a strong root system, will develop a straight leader system very fast. Have you noticed this in your work?

JOHN RUSSELL: One thing I did not mention about the plagiotropic plants is that they do tend to grow out of it. Definitely those that have a strong root system show little plagiotropism and will outgrow it quicker. When Douglas fir is left in containers they show plagiotropism, but when transplanted into the field they grow straight up.

VOICE: John, on your rhododendron selections, do you make any of your selections on ease of rooting, or is it all on other qualities?

JOHN LOFTHOUSE: We really cannot tell about ease of rooting until after they are actually blooming. Most root very easily.

VOICE: This is for John Russell. John, what do you base your selections upon?

JOHN RUSSELL: We are just now approaching our second generation selections with Douglas fir in British Columbia. We have five plant breeders here. We are trying to select for more dense wood as well as trying to keep our superior growth rate. Tree volume is one of our major growth criteria.