

The Diverse Origin of New Plants for the Nursery Industry

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The last decade has shown that the introduction and marketing of new plants are vital for the successful economic growth of the nursery industry. A major feature of many nursery catalogues is promotional information on new plant introductions. This paper reflects upon the diversity of the origins of plants which are commercially grown.

The 19th and early 20th centuries were an important era for the discovery of new species. Reading about the travels of the early plant explorers such as David Douglas, George Forrest, and Ernest H. Wilson, one is able to appreciate the hazards and personal risks they took to collect seed and plants for European and American institutions. David Douglas was renowned for his discoveries in western North America. His collections included *Arbutus menziesii*, *Mahonia nervosa*, and *Ribes sanguineum*. George Forrest's collections in China, Burma, and Tibet included such excellent plants as *Pieris formosa* var. *forrestii*, *Magnolia campbellii* subsp. *mollicomata*, and *Rhododendron sinogrande*, while the extensive travels of Ernest H. Wilson in China gave gardening *Acer griseum*, *Clematis armandii*, and *Salix magnifica*.

As more international boundaries have opened up for plant collection, the last decade has seen considerable activity in both the discovery of new species and the re-collection of known species. Plantsmen such as Peter Cox, Christopher Brickell, Tony Schilling, and Roy Lancaster have generously distributed their seed to botanical gardens, arboreta, and horticultural societies. The University of British Columbia Botanical Garden has been particularly indebted to Roy Lancaster for wild-collected seed from China which has added to their collections in the David C. Lam Asian Garden. A new species of *Hypericum*, subsequently named *H. lancasteri*, was collected in 1980 by Roy Lancaster.

Rowland Jackman, Henry M. Eddie, and Ed Lohbrunner are just three of the well-respected "pioneer nurserymen" whose foresight and work have led to some excellent and reliable plants. The violet-purple, large-flowered *Clematis* hybrid, *C. ×jackmanii* (*C. lanuginosa* × *C. viticella*) was raised in the nursery of Jackman in Woking, England, in 1858. Today *C. ×jackmanii* is still one of the best selling cultivars in the marketplace. Originally from Scotland, Henry M. Eddie established nurseries in Vancouver and Chilliwack, British Columbia. He saw the commercial potential of breeding new plants, which led to his selections of roses, pears, and yews. However, it was his work in hybridising *Cornus nuttallii* with selections of *Cornus florida* for which he will be most remembered. Today *Cornus* 'Eddie's White Wonder' is one of the very best selections of dogwood grown. Born in Victoria, British Columbia, Ed Lohbrunner established an alpine plant garden on Vancouver Island. In a friend's garden, among some seedlings of *Genista pilosa*, he noticed a floriferous, intensely golden-yellow seedling. The fact that it also did not set seedpods after flowering made it a potentially good garden plant. He originally referred to this plant as 'Mayfair' because of the location in which it was found. It was subsequently

given to the University of British Columbia Botanical Garden, named *Genista pilosa* 'Vancouver Gold' and became the first plant to be released through the UBC Plant Introduction Scheme.

Today the contribution plant propagators and nursery growers have made to the development of new plants is not always appreciated. Peter Dummer, whose life's work was in the propagation department at Hillier Nurseries (Winchester) Ltd., has bred some excellent plants. Besides his personal interest, it was his in-depth knowledge and his ability to project the potential benefits of hybridising certain species or cultivars that lead to his selections. Among the plants his work has given us are *Cotinus* 'Grace' (*C. obovatus* × *C. coggygria* 'Velvet Cloak'), *Berberis* 'Goldilocks' (*B. darwinii* × *B. valdiviana*), and *Phygelius* × *rectus* 'Moonraker' (*P. ×rectus* 'Winchester Fanfare' × *P. aequalis* 'Yellow Trumpet'). Peter Dummer's infectious enthusiasm encouraged his colleagues at Hillier Nurseries to also develop new plants. Peter Moore hybridised *Choisya arizonica* with *C. ternata* resulting in *C.* 'Aztec Pearl', while Alan Postill selected a superior hardy form from seedlings out of *Daphne bholua* 'Gurkha' which he subsequently named *D. bholua* 'Jacqueline Postill'. Peter Catt, owner of Liss Forest Nursery Ltd., now has one of the most comprehensive listings of woody plants. He is another person who can perceive the benefits gained from hybridising specific plants. Among the excellent selections he has developed and introduced are the bright-yellow foliaged *Choisya ternata* 'Sundance', *Lavatera* 'Burgundy Wine', *L.* 'Candy Floss', and more recently *Ceratostigma willmottianum* 'Forest Blue' and *Lavatera* 'Lilac Lady'.

A number of excellent variegated plants have been introduced from nurseries. Using perennials as examples, David Ward, propagator at the Beth Chatto's Gardens, Essex, England, saw in Beth Chatto's garden a coral-red variegated form of *Pulmonaria rubra*. Subsequently named *P. rubra* 'David Ward', this selection is considered the best of the various variegated forms. *Gaura lindeimeri* has been growing in popularity as a perennial for borders and at the same nursery a striking variegated form arose which was later named *G. lindeinfri* 'Corrie's Gold'. *Osteospermum* are now having a revival as tender summer-flowering perennials for borders and patios, which has stimulated some breeding programs. The best variegated selection was found a few years ago in Kenya by Christopher Fairweather, Hilltop Nursery, Hampshire, England. Named *O.* 'Silver Sparkler', it is now widely distributed.

John Massey and Philip Bault retain the National collection of *Lewisia* at Ashwood Nursery, Kingswinford, England. Their great enthusiasm for this genus has led them to study the different species in their native habitats in western North America. Some 17 years of hybridising the evergreen *Lewisia cotyledon* led to what is now sold as the "Ashwood Strain". It contains a galaxy of vibrant colors, making it an ideal plant for impulse buying at garden centers. Besides *Lewisia*, Ashwood Nursery is hybridising alpine show auriculas, hardy cyclamen, and hellebores.

Many excellent plants have been developed by home gardeners who have spent a lifetime cross pollinating specific genera. Roses, rhododendrons and clematis have particularly benefitted from the work of amateurs. Conrad Erlandson of Abbotsford, British Columbia, became very interested in hybridising *Clematis* after he retired from the printing industry. One of his best hybrids was the result of crossing *C.* 'Nelly Moser' with *C.* 'Ramona'. This superb free-flowering hybrid was later given to the UBC Botanical Garden, named *C.* 'Blue Ravine' and released through its Plant

Introduction Scheme. Though not part of a breeding program, one of the best recently introduced Euphorbias was found by Jill Paxton, Mere, England, in the Dordogne region of France. Named *Euphorbia dulcis* 'Chameleon', it has very attractive mahogany new growth that turns deep purple in summer, followed by various shades of autumn color.

Plant societies whose goals are to preserve cultivars thought lost to cultivation and to encourage the "re-introduction" of garden plants which should be more widely grown have also played an important role. A good example is the promotion given by Bridgemere Nurseries Ltd., Cheshire, England, at the 1992 National Garden Festival of Wales for *Dahlia* 'Bishop of Llandaff'. Its history, intense red flowers and deep purple foliage made this a sought-after plant. It is now widely available in Europe and is becoming known in North America. "Show auriculas" were especially popular in the 18th and 19th centuries and a number of different cultivars arose. Micropropagation, combined with effective promotion, has now made a number of these cultivars, such as *Primula auricula* 'Argus', available again. Their renewed popularity has also made it possible for some of the cultivars raised in the last 50 years by members of Primula societies to be commercially grown, for example, 'Rajah', 'Sheila', and 'Prague'.

Research and experimental stations, universities, botanical gardens, and arboreta have played a very important role in developing new plants. The Morden Research Station, Morden, Canada, is a classic example where the past breeding work of W.A. Cumming, W.G. Ronald, and H.H. Marshall resulted in new plants that would successfully adapt to the harsh climate of the Canadian prairie provinces. These plants, such as *Caragana arborescens* 'Walker' and *Fraxinus nigra* 'Fallgold', were subsequently grown in many other countries. It is unfortunate that current financial restraints have led to a radical reduction in funding for breeding ornamental plants.

Today the successful launch of a new plant entails considerable investment in both time and funding. The plant needs to be thoroughly evaluated to establish its potential markets, its best propagation and growing technique must be determined, and finally a "marketing package" must be formulated for promotion and sales. The last few years have shown how important it is to give the plant a cultivar name which is easily remembered by the consumer. As well, there are still ongoing problems with plant nomenclature, which are sometimes made more difficult by trademarking and patenting. However, in order to provide a fair economic return to the originator, it is essential that nurseries "play by the rules" with licensed and protected plants. There have been too many instances when this has not been the case. To ensure good new introductions there must be both an economic return and proper recognition of the originator.

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