Introducing and Popularizing New Species in Commercial Horticulture[©]

Andrea Durrheim

New Plant Nursery, PO Box 4183, George East, RSA 6539

Email: andrea@newplant.co.za

In South Africa, with our unique diversity of plant species, there are thousands of plants that have never been commercially exploited. Various human interventions place many of these under threat, and they may be lost forever.

Legislation regarding rehabilitation after development is now stricter than ever, and there is an increasing demand for horticultural skills in order to carry out plant rescue and propagation. The ability to propagate species that have never been cultivated before, and on which little or no information is available is increasingly important. In the process, indigenous species of ornamental value may be discovered and introduced to the market.

CONSERVATION AND COMMERCIALIZATION

Delosperma virens, a low-growing, almost constantly flowering, mound-forming succulent is an example. It was propagated for coastal development and proved so successful in nursery trials and on the site that it was introduced to the market where it is rapidly becoming popular in both the landscaping and retail markets.

Gnidia pinifolia, an attractive, free-flowering shrub with a "fynbos look," was found on a building site by an alert Paul Fick. Thanks to its drought tolerance and ornamental potential, it has become quite well-known and sought after over the years.

In some cases, as with *Erica verticillata* which once grew in Kennnelworth, a collaborative effort can save a plant that is threatened, or has become extinct in the wild. In this case, Anthony Hitchcock of South African National Biodiversity Institute (SANBI) had to source material from Europe in order to return the species to our South African floral wealth. New Plant Nursery successfully propagated the *Erica*, and it has been successfully re-introduced into the wild as well as becoming a successful garden plant.

Some plants that are locally common are being forced out by urban sprawl. The public, so much better informed than in the past are in favor of planting locally indigenous plants. Much can be done to preserve and restore the natural environment in this way. In the George area, for instance, large areas packed with indigenous wealth are bulldozed to accommodate new suburbs. Plants such as *Watsonia laccata* can easily lose ground in this way. If, however, local gardeners and landscapers make use of the plants, they can thrive in the environment for which they were intended.

Other collaborative efforts with SANBI have promoted the propagation and sale in the ornamental plant trade of plants such as *Lobelia valida* and *Freylinia visseri*. Both of these are extremely rare in nature and have relatively exacting cultural requirements, but make excellent garden subjects.

BEAUTIFUL "COMMONERS"

There are also easy-to-grow and spectacular plants that are not commercialized until someone takes the correct steps to introduce them to the market. There are many questions that must be answered first.

Initially, the question of the best propagation method must be determined in trials. Often, vegetative material collected from private farms, developments, and building sites has grown under relatively stressed conditions and is not vigorous enough to root well. Seeds are frequently parasitized in their natural environment, or may require special treatment in order to germinate.

Once a few plants have been produced as nursery stock, trialling of the new plant can begin in earnest. How does it grow in nursery conditions? Can large volumes be produced? How will it perform in garden conditions? What are the cultural requirements with regard to water, light, temperatures, soils, and pest and disease control? Is it in any way invasive? Have the correct genus and species been identified? Determining the answers to these questions can take a number of years. Only then is the new product ready for release on the market.

Examples of commercially successful plants that entered the trade in this way include the delightful *Falkia repens* a flat-growing ground cover similar to wonder lawn, that has flowers the size of a 50c piece and is remarkably tough, or the cheerful *Linum africanum* with its sunshine-yellow flowers and fresh green foliage. An enchanting *Felica* new to trade and botanical fraternity alike and known as 'Puntjie Blue' now graces many landscaped developments and users are particularly pleased about the comparatively inconspicuous dead flower heads and the neat growth habit that requires little or no pruning — a huge improvement on *Felicia amelloides*.

IMPROVED SELECTIONS

Improved selections are incredibly hard work. They originate in two ways: from a breeding program or as the result of a genetic mutation known as a "sport" that influences all or part of a plant.

Breeding programs are particularly time consuming: it takes many years of controlled breeding and selection in order to arrive at a targeted characteristic. Having achieved a result, the plant has to be studied in order to identify and enumerate distinctive differences. Thereafter, the registration process is lengthy. Examples are the distinctive *Felicia* 'Out of the Blue' with its extremely dark blue flowers or the striking *Anisodontea* 'Elegant Lady' with its extra large, deep pink blooms.

Eye-catching improved ground covers include *Monopsis* 'Royal Flush'. Popular in North America as a pot plant thanks to its deep purple flowers and increasingly used as a landscaping plant either in hybrid or species form. The hybrids have the advantage of a more uniform growth habit.

These plants are protected by plant breeder's rights, and ensure that these selections, most of which sell in much larger quantities in Europe and North America, result in income for the breeder and the country of origin.

Other plants are trademarked and an example would be the striking *Gazania* 'Giant Red' with its extra, extra-large red flowers.

Propagating from sports is not much simpler. Having identified the sport, it has to be propagated and tested for stability and general vigor. Some sports are initially unstable, but can be established as a stable clone with repeated re-selection and propagation. Others prove unsuitable despite these efforts, and the attempt has to be abandoned.

Successful taxa that originated from sports include *Barleria* 'Tickled Pink' with its distinctive rose-pink flowers. An upcoming one that will take the market by storm and that has taken over 8 years to perfect and bulk up is the soon to be registered

Sideroxylon 'Milky Way' — a milkwood with very attractive variegation. Another exciting newcomer to look out for is the deep purple Selago 'Royal Purple'.

POPULARIZING NEW INDIGENOUS SPECIES AND HYBRIDS

Communication is the key word here. Having ascertained that the plant is useful in gardening and having determined its cultural requirements, the grower can be confident in the new market offering. End-users need to have an opportunity to see and try the new plant for themselves. Although landscapers love to use plant material creatively, and enjoy finding new species to add to their palette, they are understandably wary until they are able to see the results for themselves.

Sometimes, this can even mean giving the new plants away. Seeing is, after all, believing, and trial gardens can often be an excellent marketing tool for this reason. No prodigy is recognized as such until he/she has performed for his audience, and for fame to be achieved, the audience must be a wide one.

Exposure at trade shows and in the press, high quality point-of-sale material and continued commitment to plant quality are only the beginning of the process. It generally takes the market some time to become accustomed to a new species or selection and for its use to become widespread. For example, *Hermannia saccifera*, a tough and extremely attractive ground cover, is only now becoming widely used. A grower has to have a lot of faith in the plant that he offers to the market, and patience and persistence are required in the time during which end-users become acquainted with and confident in the use of these plants

CONCLUSION

The introduction of new indigenous species and improved selections assists our trade in its quest for international and local recognition, and makes new plant material available to creative landscapers and the retail trade. It aids in the conservation of species and enables landscapers and designers to add a unique and unusual twist to their designs.