Some Recent Vireya Species Introduced into Cultivation.

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Rhododendron buxifolium on Mt. Kinabalu, Sabah

There have been several historical reviews of the introduction of Vireya species into cultivation (Craven 1973, Withers 1991, Argent 2006). The oldest classical living introductions by Veitch's nurseries have certainly disappeared although a handful of the Victorian hybrid cultivars derived from them are still grown and perform well. The next great wave of introductions was in the 1960's and 70's when Professor Sleumer was very active in describing vireyas, and the herbarium in Lae under John Womersley was supporting field work in what is now Papua New Guinea, often sending seed and cutting material of the many species in that country. Norman Cruttwell working as an Anglican missionary also in Papua New Guinea was in an ideal position to do extensive fieldwork and found and introduced many new species. Paul Kores was funded by the Stanley Smith Foundation to travel widely in the eastern half of New Guinea to collect vireyas for

cultivation and additionally made significant observations on the living populations. Subsequent to this there were many collectors who actively sought vireyas, or more passively collected them alongside many other plants.

Introductions of vireyas from seed often take 5 or 6 vears first to flowering. They may well take 10 years to demonstrate really how they are going to perform in cultivation and even longer to get distributed widely, to show how they will perform in a range of situations. Rhododendron gardenia Schltr. took



Rhododendron maxwellii

nearly 30 years to flower for the first time at the Royal Botanic Garden Edinburgh (RBGE). For the context of this article I have included mostly those vireyas introduced in the last 30 years, during which there has been remarkable activity, and



Rhododendron yongii

almost 100 new species have been introduced to cultivation in this period. In addition new forms of species already in cultivation have been collected and some reintroductions of species which had previously failed to establish. All the wild species known to Veitch's nurseries in the Victorian era, for instance, have been reintroduced, although the red form of R. multicolor Miq. grown then, does not appear to have been recollected recently; just a rather insipid pale yellow form, which has been introduced more than once. In all, about 180 of the 315 Vireya species have been introduced to cultivation at one time or another, some do not persist very long, the high altitude species usually being the most difficult. The less attractive species, with small flowers also tend to get neglected. They are less often collected and more likely to be ignored in collections. Nevertheless some really spectacular species recently appeared in collections and further

introductions continue and the potential for hybridising from this gene pool has never been greater.

In 1977/78 the Royal Geographical Society organised a major expedition to what is now the Mulu **National** Park in northern Sarawak, iointly with the Sarawak Forestry Department. This proved to be amazingly rich area with its varied geology and topography and very Rhododendron nieuwenhuisii



high rainfall. Rhododendron yongii Argent, was identified correctly for the first time from this expedition although it had been previously collected on the nearby mountain (Mt. Murud) and grown for nearly 10 years as a form of R. rugosum Low ex Hook. f. The very dark wine red, hairy flowers of this species can give very attractive displays although the best forms were collected subsequently from the Crocker Range in Sabah. Also new to cultivation from this expedition was R. nieuwenhuisii J.J.Sm. This



Rhododendron himantodes

species is very attractive with good, distinctively rugose foliage and large mostly solitary yellow flowers which be produced can almost continuously. The species is heat tolerant coming from low altitude and requires very high humidity but deserves to be more grown widely in places where the

more cold requiring species do not thrive. The other notable introduction from the Mulu expedition was *R. himantodes* Sleumer. This had previously been introduced to cultivation but had failed to establish. It is not the easiest of species to grow and in the early years the flower buds often aborted as they tended to form in November in Scotland as light levels were failing. Artificial light certainly helps to ensure a good display of flowers, but once the plants are growing vigorously the problem of aborted flower buds diminishes considerably. This is always one of the great stars of any *Vireya* collection. The silvery strap-shaped leaves are both bizarre and attractive, and the flowers have a dainty charm which never fails to captivate people. Subsequent collections of this species have been made from Batu Lawi (Sarawak) and the Crocker Range (Sabah), so there is some genetic diversity in cultivated material although little apparent variation.

In the early 1980's there was an influx of living species from Sabah (formerly British North Borneo).

Rhododendron lowii Hook. f. with its enormous ball of yellow or pale orange inflorescence was flowered for the first time at Glendoick in 1989. The Kinabalu endemics R.



Rhododendron lowii

abietifolium Sleumer and R. buxifolium Low ex Hook. f. were both collected in 1980 together with the wild hybrid between them R. x sheilae Sleumer. R. abietifolium has an attractive bonsai-like form and grows very slowly. R. buxifolium also is very slow and not nearly so attractive as it can be in the wild, when it can form banks of bright red honey scented flowers. The hybrid R. x sheilae is more vigorous and produces the most wonderful luminous pink flowers in great abundance. R. maxwellii Gibbs with



Rhododendron abietifolium

powerfully its scented flowers was introduced cultivation in 1980 but only flowered for first time in Edinburgh in 2007, although Richard Currie managed to flower this species in New Zealand in 2004 from a much later start. R. lamrialianum Argent & Barkman was introduced 1984 although

species was only described in 2000. It grows very slowly especially the compact type subspecies, but is universally admired when covered in its bicoloured red and yellow flowers speckled with its large brown scales. Keith Adams started his Borneo journeys in the 80's and notably introduced *R. edanoi* Merr. & Quisumb. ssp. *pneumonanthum* (Sleumer) Argent, *R. bagobonum* H.F.Copel. and *R. durionifolum* Becc. At this time *R. salicifolium* Becc. was rediscovered in the type locality on Mt. Mattan in 1982 and now grows in several collections as a dainty but rather unassuming plant. There is some possibility that this species was grown by the London nurseryman Veitch in 1897, but it seems more likely that the dried specimen in the Kew herbarium was collected, flowering in the wild, by one of his collectors, and that live plants did not survive the journey back as there is no other mention of

this as a living plant at this time. *R. lineare* Merr. and *R. verticillatum* Low *ex* Lindl. were also brought into cultivation in 1982. The first is potentially a striking horticultural plant with its bright yellow flowers covered in large dark brown scales, but it has proved a weak and sickly species in Edinburgh and this first introduction failed to establish although a later introduction still persists. *R. verticillatum* grows vigorously, flowers well with its bright red flowers but is like so many of the vireyas, a lanky often sprawling plant. A second subspecies of *R. verticillatum* has recently been discovered much further north, but this has yet to be described.

In 1987 a major expedition was organised to Mt. Binaia on the island of Seram in Indonesia. This resulted in the introduction of the endemic *Rhododendron ruttenii* J.J.Sm., a long-tubed, white flowered species similar to *R. jasminiflorum* Hook. Also introduced from this expedition was *R. meliphagidum* J.J.Sm.,



Rhododendron meliphagidum



Rhododendron meijeri

a yellow flowered form which was common in the montane forests. This species has proved to be easy to cultivate and is unusual with its long pale yellow hanging flowers. At this period Canon Cruttwell introduced R. baenitzianum Lauterb. from Papua New Guinea. This was a dramatic find in the garden at Wau, which had been abandoned by Paul Kores, so unfortunately we do not know the precise provenance of this fascinating and beautiful species, which produces enormous heads of large golden flowers. It does not grow well in temperate glasshouse cultivation, needing space and more heat than most other vireyas. It must have a very promising future in warmer climes such as Queensland where it can be grown outside. In 1988 Michael Cullinane took himself on a solo expedition to Papua New Guinea. He had been on organised collecting visits before but decided that he would like to try collecting on his own. This

visit resulted in the only known introduction of *R. truncicola* Sleumer, a species which is slow growing, has a compact habit and delightful pink flowers. In 1989 a Stirling/Sheffield University expedition to Sibuyan island in the Philippines resulted in the collection of a species, which was at first identified and distributed as *R. vidalii* Rolfe. This was later described as a new species in honour of Dr. John Rouse of Melbourne *R. rousei* Argent & Madulid. *R. rousei* has proved to be a wonderful horticultural plant. It has good branching habit, dark green glossy leaves and flowers at least twice a year with large pure white flowers. At least one of the major flowerings in Edinburgh is in the depths of winter when the flowers appear almost luminous on a dull day.

The early 1990's saw further introductions of endemics from Sabah: R. meijeri Argent, A. Lamb & Phillipps, R. baconii Argent, A. Lamb & **Phillipps** and R. tuhanensis Argent & Barkman. These slow growing species do not show great horticultural potential except that R. meijeri produces hybrids in the wild with R.



Rhododendron glabriflorum

Photograph: H. Brentel

baconii which have the most extraordinary bright mauve flowers and demonstrate that



Rhododendron apoanum

there is hybridising potential in all the wild species, however unpromising they appear to be. In 1993 an expedition to Mt. Apo, the highest mountain in the Philippines, made notable some introductions. R. apoanum Stein, has proved to be one of the best of the scaly malayovireyas cultivation. It grows

easily, has attractive bluish-green foliage and although the orange flowers are not large, they are produced in abundance several times a year. This expedition also introduced R. jasminiflorum ssp. copelandii (Merr.)Argent, notable for its powerfully scented flowers (the most highly scented of any of the forms of R. jasminiflorum), R. mindanaense Merr. and R. javanicum (Blume)Benn. ssp. schadenbergii (Warb.)Argent, a brilliant red flowered form of this species, which probably needs a tropical climate to reproduce the vivid colour that the flowers had in the wild. Further expeditions to the Philippines introduced R. taxifolium Merr. named from its 'Taxus' (yew) like leaves. This species is only known from Mt. Pulag on Luzon. Surrounding

mountains completely devoid of the montane forest which supports this species, SO it unlikely to be found anywhere else. With special permission this species was distributed world wide, to both conserve the species, and to remove the necessity for any further collection in this very restricted Rhododendron taxifolium habitat. It is both an



attractive species and very easy to grow, and is now certainly more common in cultivation than it is in the wild. An expedition to Mt. Mantalingajan in 1992 specifically to find R. acrophilum Merr. & Quisumb., not only found this species, although it was not quite what was expected (see Argent & Madulid 1995) but also found a new endemic R. madulidii Argent. Both these species have proved attractive in cultivation with R. acrophilum being one of the star performers. This species not only flowered in its first year of introduction, but has proved to be really easy to cultivate and is extremely floriferous, covering itself in the pretty usually bicoloured



Rhododendron mendumiae

flowers several times a year. The flowers are best removed as soon as they fade, as the withered corollas tend to rot terminal growth and can cause dieback. isolated An introduction of R. renschianum Sleumer by Ian Millar to the Dundee **Botanic** Garden went almost unnoticed until

further collection was made by David Mitchell from the island of Flores (Indonesia). This species has a neat growth habit and covers itself in the wonderful yellow and orange bell-shaped flowers. Another expedition in 1992 to the Lake Habbema area of

west New Guinea introduced a number of fine species. This was the first living introduction of R. curviflorum J.J.Sm. with its distinctive yellow hairy flowers. It is a lanky plant but grows and flowers very freely. It was also the first introduction of R. caespitosum Sleumer, the smallest Rhododendron in the world (Argent et al. 1999), known only from a small area of tree fern forests in the highlands. Unfortunately this introduction did not persist, although the species is still in cultivation thanks to subsequent collections by Hansjörg Brentel from the same area. R. flavoviride J.J.Sm. was introduced from very near Lake Habbema. Paul Smith climbed a 10m tree of this species to collect a few seeds from an old seed pod. These germinated, and now grow well, producing the strange pale green flowers mostly in the spring and fortunately on much smaller plants than the parent.



Rhododendron renschianum

The last five years of the last century saw new species introduced from a range of places. Expeditions to Sumatra introduced *R. adinophyllum* Merr. A curious species prone to dying back to the base, but with very attractive reddish-orange flowers and small, dark, glossy leaves. Also *R. jasminiflorum* ssp. *heusseri* (J.J.Sm.)Argent and some really good forms of *R. sumatranum* Merr.; a yellow flowered form of *R. rarilepidotum* J.J.Sm. and the curious *R. vinicolor* Sleumer with its narrow leaves and violet coloured flowers. An isolated foray to South Kalimantan managed to collect living material of *R. alborugosum* Argent & Dransf. This has proved to be a really



Rhododendron flavoviride

species. good It grows vigorously, has distinctive wrinkled leaves with wine-red petioles and veins. It produces pale pink or white, long-tubed scented flowers often more than once a year. An expedition to island of Palawan in the Philippines introduced mendumiae Argent,

relatively with its

large and powerfully scented white flowers. This has already been targeted as a plant for special attention in future breeding (Moyles 2007). At the turn of the century a major expedition from Kew working in the Mt. Jaya (Carstensz) area of Indonesian New Guinea introduced several new species to cultivation and at least one species new to science. R. milleri Argent has green flowers reminiscent of R. flavoviride but with different leaves and a totally different flower shape and disposition of the stamens. It remains to be seen how well this species performs in cultivation. R. glabriflorum J.J.Sm. was introduced also from Indonesian New Guinea in 2003. This magnificent species with its robust yellow flowers in a large head of often over 20 flowers must be potentially one of the best recent introductions, but the plants raised from seed are still a long way from flowering.

The pace of new introductions has not diminished in the last seven years with materials coming in from China, Vietnam, Sulawesi, Borneo and New Guinea, but many require more time to reach their potential. It is always difficult to pick out the best horticultural plants from these more recent introductions as different people have different preferences and different climates in which to grow them. Certainly some of the Philippine species rate very highly: R. acrophilum; R. apoanum and R. taxifolium are all splendid horticultural subjects. New Guinea will always produce lovely plants and R. glabriflorum is one of the most beautiful yellow flowered plants in the wild. It should be very good in cultivation also. The small compact and very floriferous R. trunicola is also a must for serious collectors of species. R. renschianum is one of the most attractive species in the RBGE and certainly deserves a wider audience. Borneo has



Rhododendron adinophyllum



Rhododendron gardenia

produced R. alborugosum and the compact but slow growing R. lamrialianum, which is always admired. Also from Borneo is the slow and difficult but overwhelmingly beautiful, himantodes with its silvery sword-shaped leaves and dainty scaly-speckled

flowers. Vietnam has

seen the introduction of *R. rushforthii* Argent & D.F. Chamb., with its most attractive bluish foliage, dainty yellow flowers. This species has the added attraction of being potentially hardy in Britain, at least in sheltered places. *Vireya* rhododendrons are an

amazingly diverse group that vary from tiny delicate alpine forms to those with large, gaudy flowers. Even those species which grow into trees in the wild, appear to flower as small plants and, although majority are not frost tolerant in temperate cultivation, diversity will appeal to the tastes of many different plant lovers. With the introduction



Rhododendron alborugosum

of more and more stringent regulations for both the export and import of wild plant materials it is important to conserve the species we now have. This should be done together with the provenance data, which is so important to maintain alongside the plants. This is not to replace efforts to conserve the species in the wild. True conservation is always of entire communities in complete habitats. Having wild species in cultivation however, allows some studies not possible in wild habitats, gives hybridisers immense potential in producing exciting new hybrids and allows many more people the opportunity to enjoy these varied plants than the few privileged to see them in their often remote mountain homes.

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Rhododendron lineare