Ribbier Constraint Restantion Society Inc.

Volume 61



The Rhododendron

Official Journal of the Australian Rhododendron Society

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Front Cover: R. 'Simon Begg'. See New Registrations, page 85.

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Aims

The Society's objective is to encourage interest in and disseminate information and knowledge about the genus *Rhododendron* and to provide a medium by which all persons interested in the genus may communicate and co-operate with others of similar interest.

Membership

Membership of the Society is open to all persons interested in the objectives of the Society upon payment of the annual membership subscription. For further information contact Branch Secretaries or the National Secretary.

Subscriptions

Annual subscriptions cover the period I July to 30 June, and vary up to AUD\$25 (single member) and AUD\$35 (member & partner) depending on the Branch selected. (Branches set their own level, out of which an amount is paid to the national Society). The annual journal *The Rhododendron* is included as a benefit of membership. Overseas members may nominate for affiliation with any of the Branches. The base annual subscription for membership of the Victorian

Branches. The base annual subscription for membership of the Victorian Branch is AUD\$35. This covers dispatch of *The Rhododendron* by airmail in the last quarter of the calendar year and other communications by email (if there is a preference for receipt of other communications in hard copy form, an additional subscription amount of AUD\$15 applies to cover airmail cost). The Victorian Branch accepts Visa or Mastercard payments. Overseas subscriptions to other Branches may vary from these rates and require to be paid by bank draft or cheque payable in Australian dollars. Contact the ARS National Secretary.

Contact details

Details of local Branches, along with Office Bearers of the Australian Rhododendron Society, are listed on page 92.

Editorial

ANDREW ROUSE

I thas been two years since our last journal, the 2021 issue a victim of Covid, or at least that is my excuse. To make up, this year we have a bumper issue, with articles and updates from Australia and overseas.

In my last editorial, I flagged that each of the ARS branches had voted for the de-registration of ARS Incorporated, and Graham Price, the ARS Inc. Secretary provides an update on the completion of this task. Whilst some members may regret that we no longer have a national body, I'm firmly of the view, as one of the state representatives on National Council, that the cumbersome and administratively burdensome structure of ARS Inc. was no longer required, and that the levy structure, where branches were contributing a portion of each member's funds to ARS Inc., was unwarranted and a source of frustration for the branches. ARS Inc. is being replaced with an MoU between the branches that will provide a structure for communication and coordination between the branches without the unwanted administrative burden.

Also, in the last editorial I flagged the upcoming ARS conference, which of course was a legitimate victim of Covid lockdowns and travel bans. I'm pleased to inform you that the conference has been rescheduled for 13–15 October 2023 and will be hosted by Emu Valley Rhododendron Gardens (EVRG). Please save the date in your diaries! Registration details will shortly be uploaded onto the ARS website and notification through the branches.

Each state group has provided an update, and it is lovely to hear from the Illawarra society after an extended absence from these pages. I know that the members of the Illawarra Rhododendron and Rainforest Gardens would be happy to welcome ARS members planning a trip to NSW south coast – see the back page for their contact details and those of all the groups.

We hear from Andrew Brooker and Graham Smith at Pukeiti Rhododendron Trust, New Zealand. Andrew provides an update on their ex-situ rhododendron conservation project, an initiative that, in my humble opinion, we should replicate in Australia in light of the growing number of rhododendrons that are threatened species along with the difficulty in sourcing from overseas those species lost to cultivation in Australia. Graham writes about Pukeiti's collection of *R. protistum*, one of the largest species in the genus, and one that I'm uncertain as to whether we grow in Australia?

We continue our theme of members and their gardens, and in this issue, Dale Schubert writes about his garden in the Gold Coast hinterland. Dale organised the society's trip to Borneo in 2018 and has plant hunted widely in SE Asia. Dale has a prodigious knowledge of tropical plants and it lovely to showcase his garden in this issue. Maurice Kupsch, Honorary Curator at EVRG, provides this year's species profile with an article on *R. kawakamii*, a dainty vireya from Taiwan. This is just one of many species held at EVRG's excellent species collection – an additional incentive to come along to this year's conference!

Steve Hootman, Executive Director and Curator at the Rhododendron Species Botanical Garden (RSBG) describes the last 40 years as the 'second golden age of plant exploration', and from a rhododendron perspective we owe much to his exploration and collecting during this time. Steve provides an inventory of the rhododendrons introduced into cultivation over this period, many of which have been established at the RSBG near Seattle, USA.

As I wrap up my hybridising days, I've taken the somewhat sobering decision to go back through my notes to tally up the number of crosses I've done and to provide a self-assessment of the number of quality hybrids that have come from this effort. Quality can be subjective, so I've provided criteria on what I deem to be desirable attributed in a plant. If nothing else it provides some insights into a hybridiser's strike rate ... and how I've amused myself on weekends.

My other contribution is an update on the living collection of R. virisoum and R. lochiae now established at Dandenong Ranges Botanic Gardens, the result of our five year partnership with the Australian Tropical Herbarium. We're now exploring how we can distribute plants to other botanic gardens to help safeguard them in cultivation.

As always, I'd welcome feedback on the articles in the journal and invite suggestions for future contributions, and better still a couple of unsolicited articles! The journal is for the benefit of our membership so as your Editor, I'm keen to ensure that we are providing the articles you want to read. \circledast

President's Report

JEFF JENKINSON

I thas taken a long time to wind up the Australian Rhododendron Society Inc. and the members are most appreciative of the amount of time that our Secretary, Graham Price, has devoted to the process of meeting the legal requirements involved. I am sure that a Memorandum of Understanding (MoU) will be sufficient between the former branches of the ARS.

I encourage everyone to support the journal, *The Rhododendron*, by contributing articles and sharing ideas-and subscribing. We all need to remind ourselves of the contributions made by Australians in the hybridisation of rhododendrons and actively encourage the sharing of Australian hybrids and knowledge between ourselves and others. Hybrids and species can so easily be lost forever if there is no ongoing propagation. We have two precious Australian endemic vireyas which are not well known by the plant buying public which we could promote by growing and supporting various botanical garden collections to display them. I urge rhododendron fanciers to consider attending a rhododendron conference interstate or overseas if they get an opportunity. We all seem to be nice people! I am hopeful that all branches will continue to attract persons with a passion for rhododendrons.



Emu Valley Rhododendron Garden: Cherry Blossoms by the Sea of Japan. see page 18.

Reports – Australian Rhododendron Groups

Emu Valley Rhododendron Garden

As I write this there is so much happening and there are so many questions that I think even the best Crystal Ball might have a meltdown. "Why" seems to be the word of the moment when people direct their views or suggestions about Emu Valley Garden:

Why are we not applying for more grants?

Why are some areas of the garden not being maintained?

Why are there not more weddings and other functions?

The simple answer is the lack of people to perform the many and varied tasks needed to manage our 11 hectares.

The future direction might be uncertain but it is one full of optimism. I have often said that those responsible for Emu Valley Garden 41 years ago created a monster but a good monster. For a long time, the garden has been acknowledged nationally and internationally. This has not necessarily been the case in Tasmania but this has changed and it is because of this that will ensure we will be here for another 40+ years!

It is great to see the support being received for the conference Emu Valley will be hosting from 13 to 15 October 2023. Registration details will be out in the next couple of months. It will be a conference with a difference! Keep an eye out on emuvalleyrhodo.com or contact the garden directly.



Emu Valley Rhododendron Garden: Looking up from Lake Grebep.

The garden must be fully managed as a business and as I prepare to step aside our directors and myself are exploring options that will provide the resources to be able to employ personnel throughout the organisation including the General Manager.

To increase visitor attraction a lot has been happening. The Moon Gate is nearing completion, tea room and kitchen renovation plans are under way and the gift and souvenir area will soon be updated. The garden looks magnificent during Spring and Autumn and the outdoor team have been working on adding more colour for the summer months. However Emu Valley is managed in the future, it must be in a manner which recognises why it was established and continues to work on preserving the rhododendron genus.

South Australian Branch

Covid has changed the way we manage all aspects of our lives, specially our recreational pursuits. Christmas lunch, 2021, which was to be held at the end of November in Stavroula's garden was again caught within lockdown regulations. No Christmas lunch. Undeterred the Committee rallied and organised a second Picnic in the Paddock to be held in March 2022, and again hosted by Ian and Robyn Wall. Of course the weather was perfect, making for a pleasant day of enjoying cheese, wine and getting to know fellow members.

The visit to Raywood at Deep Creek, was dampened by the opening rains of the season but this did not stop a small group of members becoming better acquainted with each other, Quentin and the plants available at the Raywood Nursery. Our latest visit was earlier this month to see the hellebores, rhododendrons, camellias and magnolias in David Barrington's garden in Bridgewater. At least 30 members were not deterred by the almost nonstop rain.

Propagating day was also affected by Covid rules which restricted us to ten people at one time in a property so Rob Field's suggestion to stagger the sessions was taken up by the Committee who did a fabulous job organising boxes and cuttings at St Vigean's for the participating members. Thank you Jeff and Gill, once again for the use of your property. New Rhododendron Society members were guided by Richard Illman with Bronwyn assisting, while cuttings and boxes were available at the gates for other members. Committee members supervised.

Covid wasn't finished with us. Michael Harvey, the listed speaker for April, became a 'close contact' and therefore had to isolate. Lianne Healey, who was scheduled to speak in July, unselfishly prepared her talk on landscaping over the Easter week and presented it seven days later to all of us.

Looking back over the year I see that we have made use of the talent and knowledge of members starting last September with Stephen Kingdon on narcissi and Rob Hatcher on lacewing and lace bug. As already noted, Liane in April and in June the panel of Jeff Jenkinson, Milton Bowman and Rob Hatcher answering your questions about rhododendrons.

In October 2021 Dr Andrew Black spoke on birds of the Adelaide Hills and this year was started by Sara Burchill telling us her journey to purchasing Cleveland and her plans for it. In May, John Batchelor from Valley View Nursery shared his extensive knowledge of conifers and how to use them in our gardens. Dr Uwe Stroeher spoke to us in July about Neutrog's latest product Popul8 which enhances soil microbes and therefore the plants. In the warmer months attendances at meetings have been over 50; winter always sees numbers drop to 30 but I hope that everyone who has attended has enjoyed the program set up by the Committee.

It has been really tricky trying to replenish the stock of rhododendrons needed for the raffle, gifts and pot luck, due to blueberry rust in Victoria. PIRSA will not allow any ericaceous plants to be brought in to SA from there. A small number of deciduous azaleas and other rhodos were purchased locally. Daphne Chandler's plants were bought and then sold on potluck as were a small number of vireyas purchased from Neil Puddey, NSW, who is retiring.

So far we have had four deliveries from Garden City Plastics of Jiffy peat and squat pots to help us grow our plants more easily.

As I look back over the year I see how much was achieved by the Committee and how hard they have worked, their biggest success being the plant sale held in September 2021 as part of the Stirling market. Most of you helped to make the day work so well for the SA Rhododendron Society and for some it was the catalyst to join the Society.

My thanks to the Committee for all the time they have invested and the support they have given. Also many thanks to you, the members, who make this a great gardening club.

Olivera Waterman, President.

Tamborine Mountain Regional Botanic Gardens in the Scenic Rim

Volunteer Debi Marshall has been working diligently across the Gardens' large rhododendron garden over the past year. She reports:

Between April and December 2022 we have planted a number of new azaleas, mainly in the very top of the garden to have a sweep of 'Alphonse Andersen' on one side contrasting with the alternative planting of 'Shiraz' (a deep burgundycoloured leaf Azalea) and 'Alba Magnifica' (bright green leaves with a white flower) directly across from the row of 'Alphonse'. A few other azaleas have been planted to fill gaps, some from cuttings.

In an attempt to have flowering in this garden throughout the year, we

have also planted a number of new vireyas as these flower randomly and have very eye-catching colours.

We have been gradually replacing and introducing rhododendron varieties but will need a few more as there are a number of areas that still need to be filled. Local gardener Roy Bilbie donated three rhododendrons in December, one with the name of 'Fastuosum Flore Plena' which isn't one I had heard of. These plants were gratefully received and planted.

Apart from continuing to plant the above three varieties of rhododendron, our plan is to underplant some



Debi Marshall.

of the very shaded areas with hostas and similar, also some low-growing perennials in the sunnier spots in the lower garden to add more colour and interest.

Now that the automatic irrigation system has been installed, the plants are flourishing and I am sure that the entire garden will benefit from regular watering.

Tasmanian Rhododendron and Rare Plants Group Inc.

Our AGM was held in August 2022 with members agreeing to form a planning group which will consist of active members each who would be responsible for a month's activity. This was intended to encourage individuals to introduce a personal input for each month. The event would be organized by that person and information relayed to our Newsletter Editor for distribution.

A review of this system will be made at our next AGM in 2023.

In September Debbie Farmilo hosted an event covering her methods of seed raising. Members shared seeds and with extra information from Ken Gillanders, members went home with trays of seeds and have been delighted with their success.

In October, Joy Stones organized a two-day outing to the north-east of Tasmania where we enjoyed viewing a range of gardens ranging from smaller suburban sized plots to historical acreages, all filled with interesting plants. Of course, we also had to visit various nurseries to stock up for our gardens at home.

Despite the damp weather and Covid problems we all agreed to repeat such an event next year possibly to the north-western gardens of Tasmania.

November being the best blooming time for rhododendrons and to promote our group, Peter and Maruta Boyd set up a stunning display of blooms from members and their own garden at the plant fair at Crawlieghwood garden in Nicholls Rivulet.

Our Christmas luncheon was enjoyed at Joy Stones' and Ted Cutlans' home in Kettering. Members were so impressed with their colourful garden, which is only a few years old, illustrating what can be achieved due to their expert knowledge of choice and care of plants.

Covid and wet weather has certainly had an effect on activities for all this year and hopefully the year ahead will be kind to members and their gardens.

ARS (Victorian Branch) Report

The 2021/2022 financial year was mainly a year of preparation for activity. The ongoing Covid pandemic reduced our activities both in groups and in the garden at Olinda prior to Christmas, with much of the time after that just catching up.

The building of the new shade house and refurbishment of the old one were organised but did not take place until after this reporting period. This work is now being finished off and we will soon shift all the plants back into an excellent, spacious and efficient nursery, better able to produce a greater range of plants at a high quality.

The ARS-Vic and Parks Victoria negotiated a donation arrangement which was mutually agreeable for the funding of the Australian Cloud Forest Garden (the North Queensland project). This sees the ARS-Vic contributing \$180,000, made up of \$100,000 from the Simon Begg bequest, \$20,000 from the Ian Potter grant and \$60,000 from ARS-Vic funds to the \$280,000 total project cost. This contribution will be paid as project milestones are reached, thereby protecting our funds, but also ensuring that this important project proceeds. It is currently envisaged that the garden will begin construction after the Phillip Johnson garden and its access track are completed, probably about February 2023.

The Tuesday Olinda group have continued their excellent work both in the nursery and in the Garden. The quality of the plants for the Garden at Olinda and for sale is improving with updated automation of the nursery and increasing experience of our members. This is vital as we go forward with our attempts to preserve the range of plants available to us in Victoria within the genus *Rhododendron*. Some of the plants produced in the nursery at Olinda were used to plant a new rhododendron garden around the newly refurbished police station at Olinda. Prue Crome's work on the refurbishment of the Australian hybridisers bed is reaching its conclusion, with the bed very much improved and the survival of the various cultivars now much more assured. Elizabeth Xipell's decades of work in the rock garden at Olinda is now really bearing fruit with Parks Victoria dedicating a staff member to help her with her work each Tuesday and between the two of them the rock garden is now returning to the major garden asset that is should always have been.

The New Zealand Rhododendron ex-Situ Project

Andrew Brooker Rhododendron Collection and Projects Officer, Pukeiti Rhododendron Trust

In 2016 the Pukeiti Rhododendron Trust embarked on a project for the "Development of an *ex situ* conservation plan for *Rhododendron* species in New Zealand". This project is led by Dr Marion MacKay, supported by a team of knowledgeable plants people from the Trust.

The overall aim of the project was to develop an ex situ conservation plan that gained national coverage with four key elements:

- Identification of priority species for propagation, focussing on rare species (those assessed as threatened in their native habitat by the conservation assessments (Gibbs et al, 2011. Argent, 2015)), or those held in limited collections in New Zealand.
- Identification of key collection sites in New Zealand, and identification of priorities for further collection development on a national scale.
- Determination of collection-holders roles, for those who wished to participate in the project. For example, certain collection-holders may agree to hold certain sections of the genus that suit their climate zone.
- A proposed program of propagation and dissemination to participating sites.

These elements set out the initial groundwork for the project the first stage being creating data sets of what taxa we have represented in New Zealand, negotiating access where necessary.

Once the plan was adopted Marion spent the first two years collecting and collating information from collections, both public and private. Assisting her with the fieldwork and verification process was Graham Smith, former Horticultural Director for the Pukeiti Rhododendron Trust, Doug Thomson, curator of the rhododendron collection for the Dunedin Botanic Gardens and Sue Gardiner-Davies of the NZRA. This task took some time to collate a very concise and invaluable data set which was to inform all of the decisions and actions taken in the future.



Figure 1: R. himantodes at Pukeiti, a vireya species distributed to other NZ public gardens.

Figure 2: R. taxifolium label. An example of the management labels use at Pukeiti.



The New Zealand data set was then carefully analysed against those of key international collections of rhododendron taxa, these being

- Rhododendron Species Botanic Garden.
- Royal Botanic Gardens Edinburgh.
- The list of rhododendrons in Australia (supplied by Simon Begg, 2009).
- German Gene Bank database.

This analysis was critical in establishing the true value of what we were collectively growing, and was carried out to further build on the strategy's key elements to inform the next stages.

Early on, the project team identified that the gardens at Pukeiti, which had passed into public ownership in 2010, was best placed to play a critical part in the project given its well established collection, and a strategy and database in place to support the good management of the collection.

2019 saw a Memorandum of Understanding (MoU) signed with the Taranaki Regional Council forming one of the partnerships that support the work of the project. The author's role changed with this agreement to that of Rhododendron Collections Officer with primary focus on the ex situ project. Another of the key partnerships was created with the New Zealand Rhododendron Association, this merger enabling further expansion of the Association's own project in conservation of the genus. Massey University is also involved supporting Marion's research work.

Milestones for this year built quickly on the success of the project team's analysis, drawing on what has become a well-supported team who have pooled their individual knowledge and skillsets to great effect. The team is currently;

Dr Marion MacKay	Project Lead	PRT and
		Massey University
Graham Smith		PRT
Doug Thomson		PRT and DBG
Dr Sue Gardiner-Davies	Lead Day/Hendriksen Project	NZRA and PRT
Andrew Brooker	Rhododendron collections	TRC

The project team is supported with the willing assistance of members from all partner organisations as required.

In 2019, the key milestones were:

- Propagation harvest trips to four large private collections.
- Continued evaluation of a large private collection in the South Island led by Sue. Twice yearly visits to identify, label and harvest cuttings. The fieldwork

on each visit is carried out over three days.

- A vireya DNA project undertaken by Sue Gardiner-Davies sponsored by the New Zealand Rhododendron Association and the Australian Rhododendron Society with support from NZ Plant and Food.
- Connections with Australian rhododendron groups strengthened with Andrew Brooker and Graham Smith visiting both Olinda and Emu valley.
- Establishing propagation hubs at Pukeiti, Dunedin Botanic Gardens and Sue Gardiner Davies' property, Omahuri.
- Presentations given to the Pukeiti Rhododendron Trust



Figure 3: Doug Thomson examining indumentum, South Island collection.

membership to detail the project and its achievements to date.

This momentum early on in the project continued into 2020 which, despite

the Covid pandemic, seemed as busy for the project team, If not busier.

The key milestones were:

- Further propagation harvest trips within the North Island.
- Two more field trips to the South Island collection. We were lucky to achieve the first visit one week prior to the national lockdown.
- The development of our dissemination protocol and subsequent MOU which sets out the expectations for both Project and Host gardens.
- The first host MOU signed with Gore District Council in the South Island. It is worth noting that due to the pandemic we were not able to reconnect with this until the following year.
- PHD student Ling Hu started her studies at Massey University researching the DNA of Subsection Maddenia.
- Presentation, "Conserving the world's Rhododendrons an international effort on a local scale" given as a part of Taranaki's garden festival.



Figure 4: Graham Smith and Doug Gordon encounter *R. kesangiae* in a North Island collection. *Figure 5:* Andrew Brooker with the plants disseminated to Wharepuke Garden.



• Continue to strengthen established ties with BGCI, RSBG and others.

These relationships continue to grow and expand as we continued into 2021 and 2022 along with the list of achievements. Early on in the project it was determined that for us to successfully achieve our goals we needed to work with the biosecurity protection agencies to grow their knowledge of the genus *Rhododendron*, and potentially expand the approved list of taxa in a similar way to Simon Begg's efforts on behalf of rhododendrons in Australia. To this end we continue to seek out evidence that taxa not included in New Zealand's Biosecurity Index were not only present in cultivation but hold no biosecurity threat.

Alongside the now regular propagation excursions and the field trips to the South Island which have become a standard part of the program, in 2021 we



Figure 6: R. exasperatum foliage.

celebrated the first dissemination of ex situ plants to Eden Gardens in Auckland. This enabled us to spread part of the Pukeiti vireya collection to one other site. Eden Gardens is a private Trust garden in the heart of Auckland and as such was a valuable first step in the dissemination programme for a number of reasons, key being that with its high visitation, it would generate interest in what we were doing and start to build a network of support for horticulturists working with rhododendrons.

This trip also enabled us to present the conservation message to the local rhododendron group, a part of the NZRA thus confirming the value of each of the partner organisations.

2022 has been no less busy as the momentum we created at the beginning continues to tick off milestones, including:

- Gore district Council now hosts 41 of our ex situ plants in one of the public gardens in their care. This year's Rhododendron Conference will be visiting Bannerman Park especially to highlight this success.
- Vireya rhododendrons have also been disseminated to Wharepuke in Kerikeri and Whangarei Quarry Gardens – both in Northland.
- Seed collected at Pukeiti has been sent to Emu Valley to help grow their collection.
- July saw the success of our first Section 26 application to the Environmental Protection Agency. This saw 40 taxa added to the index, which was no small feat as it involved some 400 pages of evidence collated and linked by Marion.

This valuable work continues with three more sites to evaluate for hosting collections in the South Island, more analysis of data and harvesting of cuttings. Each of the host gardens then needs to be visited regularly and the relationships strengthened for the overall success of the project, but the future looks secure. *

Acknowledgements

The valuable contributions of all the project team, the support of the project partners and host gardens.

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Emu Valley Rhododendron Gardens – a plant museum? you tell us.

Maurice Kupsch, Honorary Curator, Emu Valley Rhododendron Garden, Burnie, Tasmania.

Rescuing rhodos from around the world – that has a nice ring to it. Or amassing a collection of rare plants to become a museum perhaps. Whatever you call it I am very humbled to have been a part of it from the very beginning. So how did it all come about you may well ask! I will try to paint you a picture.

In the beginning, when interest in the genus *Rhododendron* was very popular, keen gardeners had to access plants of quality from the Australian Rhododendron Society based in Victoria. Here we have to thank Bob Malone, being one such keen grower, who started a nursery which became very popular amongst collectors.

Others also keen to promote rhododendrons were Ron Radford from Cedar Lodge Nursery and Josh Deen from Melbourne and they started a quarantine set up and imported plants from overseas. Bob Malone became a member of the Victorian branch of the ARS and then wondered if it would be feasible to start a Tasmanian Branch. Well, indeed this did happen, much to the delight of several very enthusiastic growers and here we would have to introduce Dr Noel Sullivan, noted grower and hybridizer of rhododendrons.

Next, wouldn't it be good to have a garden specifically designed to showcase and collect Rhododendron hybrids and species.

Here is where Hilary O'Rourke comes in. He just happened to have a large parcel of land the council deemed to be unsuitable for subdivision. Would it do? You bet — the possibilities were there. So ... after the small band had braved the scrub-bashing to fully appreciate the lay of the land it was game on. It was ours for a 99 year lease at a peppercorn rent.

Well, we have now mentioned the fabulous three by name, Noel Sullivan, Hilary O'Rourke and Bob Malone the movers and shakers establishing this garden -I was just the apprentice at this stage! It would take reams of writing if I were to mention all the faithful, enthusiastic members who worked tirelessly to turn the site into how you see it today. Suffice to say that all members became co-owners of the garden which we consequently bought off Hilary (the cost of insurance, rates etc. being a problem as we increased the value of the garden).

Enough about how we came to be custodians of such a diverse range of plants.

Bob and Noel had collected species seed for quite a while so they had surplus species plants available and the question arose as to how we intended to display them. Perhaps we could plant them in their series or combinations, or leaf shapes and sizes, or colours etc. But a chance publication by Chamberlain and Cullen showed where the species were to be found around the world.

This changed everything – the site was perfect for an around the world trip being an amphitheatre with the lowest portion on the eastern boundary. We chose the centre of the garden to house hybrid rhododendrons and the species around the perimeter in their geographical distribution from Europe through the Himalayas to China, Japan, Taiwan and North America. Ambitious plan? But I think we have succeeded to a large degree.

The species on hand were mainly from China – Yunnan and Sichuan, so this area was cleared first and planted out. Conifers were also planted fairly early in this area plus in North America.

Help came from other places as well – we received a financial donation from the Ladies Auxiliary of the Victorian Branch of the Australian Rhododendron Society to buy plants, and a sizeable donation of plants from Mount Lofty Botanical Garden in South Australia. Bob Malone supplied mature plants which took some effort by several chaps to dig them out and carry them onto the back of a truck to be off-loaded at Emu Valley – this made the garden look much more mature than it really was.

Seed lists became available from England and USA and so much wild collected seed was purchased over the years. Our nursery went in and hundreds of plants raised. While these were busily growing new areas were cleared, irrigation installed and pathways made. Not only rhododendrons were collected, but other gardenworthy plants, both deciduous and evergreen, from the various countries to make the areas of more general interest. At one stage we even imported live plants from the Species Foundation in America, from which we took many cuttings and they all went into quarantine in Hobart. The next year the door closed on any imported plants so we were lucky there!

At the present time we have approximately two thirds of the known collected species some of which are endangered in the wild and we are presently producing cutting grown duplicates for the plants that live in more than one country and as insurance in case of loss.

As agriculture and other threats (rhododendrons make great firewood apparently) threatens rhododendrons in the wild, it is all the more vital that we do our part in holding onto our collection here at Emu Valley Rhododendron Garden (EVRG).

We are proud of our collection and of the people who volunteer to make it all happen.

So do we have a plant museum - perhaps we have achieved just that. *

Rhododendron protistum at Pukeiti, New Zealand

GRAHAM SMITH

In 1953–1954 Pukeiti Rhododendron Trust members along with those of the New Zealand Rhododendron Association received seed from Frank Kingdon Ward, the famous plant hunter, collected in Myanmar (Burma). This was in the far north corner of the country where Tibet and NE India converge, known as the 'Triangle', and is steeply diverse with warm sub-tropical lowlands and valleys to sub-alpine mountain tops. The seed was grown on at Massey University and seedlings offered about three years later for distribution to members of both organisations. Pukeiti received three plants and after a couple more years these were planted in an area set aside for large-leaf rhododendrons in the sheltered rainforest under the name *R. giganteum* KW 21498. Another number distributed in New Zealand was KW21602.

These giants of the rhododendron family soon got a move on and two plants were spreading wider than high whilst the other was upright and tree-like but with little difference in the magnificent foliage, up to 50cm long in this pre-flowering stage and completely glabrous underneath with no indumentum visible. It took about 24 years before some marginal indumentum appeared around the edges under the leaves as a thin tan-coloured band and a further couple of years before the first flower bud appeared. We waited with bated breath for the flowers to open and in mid-winter (July) the rich pink flowers were revealed in magnificent truss of 25–30 individuals, looking like a florists bouquet ringed by a 80cm wide spread of leaves – stunning!

It took several years before each of the three plants had produced flowers and it was interesting to compare them side by side. The first one was the yardstick on a spreading plant and was given the clonal name 'Pukeiti' (Figures I-3). The sister plant beside it was a more delicate light pink and slightly smaller in size. The tree-like specimen was very similar to the first but a slightly smaller truss and not quite so floriferous and the last to flower in age. All appeared at the same time varying slightly each year by three to four weeks depending on winter temperatures. The flowers were remarkably fleshy and resistant to heavy rain but not to a decent frost but it was exciting to see snow sitting on them one winter and not causing much damage except the weight.

The naming of this species has been contentious for many years and the name R. *giganteum* was given recognising it was different from the original collection of this (same?) species by George Forrest in SW Yunnan, China



Figure 1: R. protistum 'Pukeiti' KW21498 08-05 021 *Figure 2: R. protistum* 'Pukeiti' KW21498 08-05 025





Figure 3: R. protistum 'Pukeiti' new foliage. 5.11.2004 05

more than 40 years earlier – R. protistum, meaning 'first of the first'. Eventually the botanists recognised that they were variants of one species and to segregate them slightly had R. protistum var. protistum designated as the type species and R. protistum var. giganteum the variant. More recent studies by Chinese botanists have examined the much wider range of the species along the spine of mountains running along the full length of the Myanmar–Yunnan border. The outcome of this is that they are many variants of one species only and that is R. protistum var. protistum. One difference that was originally used was the lack of indumentum under the leaves compared with fully indumented leaves. At Pukeiti we observed that there was no indumentum until the plants were approaching flowering and after that the indumentum band increased in width until after a few years it covered the whole underside. We confirmed this with self-sown seedlings starting to appear and this pattern remained for most, but with hybridity very likely with so many species planted closely the indumentum could appear at a much younger age.

One aspect that concerned us was, that despite many years of trying to self pollinate R. protistum 'Pukeiti', it failed to produce any seed, but natural pollination from nearby plants provided masses of seed capsules. The arrival of numerous seedling plants in the surrounding area was a nice problem but the original collections were sacrosanct and so some re-siting of good looking seedlings was done, often with a tractor and bucket. Some of these are now six metres or more tall and have flowered at a younger age than the parents. Many are stunning, mostly paler than the parent but with football sized trusses in mid-winter (Figure 4).

Sadly the two spreading specimens succumbed to Phytopthora root disease but not before earlier layering meant we were able to transfer the original 'Pukeiti' clone to several other areas to ensure its preservation and a grafted plant is also flowering well closer to the original site. Preservation of such botanically important species often means taking action to increase the number of individual specimens and spread them around, even to other gardens, so that a lifetime's work is not lost.

The second part of this story began when I read an article in 1991 by nurseryman Craig Carroll from the Blue Mountains area west of Sydney, about his short trip to the original George Forrest collection site north of Tengchong, Yunnan. Joined by scientists from the Kunming Institute of Botany, he and three other nurserymen, with local assistance to actually walk to the 'Protistum Glade', it resembled army manoeuvres! Leaving the nearest village at 6am, it was into two jeeps for a 2.5 hour off-road drive before reaching the village closest to the site – but then a 20km trek to find it!!! When the cluster of ancient rhododendron trees were found they were in awe of the size, and the



Figure 4: R. protistum hybrid sdlg, V. of Giants, 22.8.20 03.

whole group of them could sit on the forked branch at the base of the largest specimen. Unfortunately there was no sight of any flower even though it was the known flowering time, so the plantsmen and scientists had to scramble around in the leaf litter below to find old seed capsules. They were fortunate to find some and after photos were taken it was time for the 20km trek back to the village, arriving about 7.30pm for an arranged dinner and then into the jeeps back to Tengchong by 1.30am next day and then back to Sydney.

It was only at the end of that year when Craig's story of the expedition was published in the ARS Journal that I contacted him in the hope he might have a pinch of seed left and would he share it with Pukeiti? A few weeks later an envelope arrived at Pukeiti with a stamp pocket inside with seed in it and nothing else. I was thrilled but conscious that this was a once in a lifetime chance to have the original Forrest collection at Pukeiti. Seed duly sown the next day and watched over like an expectant father, it took a month before a tinge of green appeared on the pot surface. For something so majestic in a rain forest it was in no hurry to get a move on and it took about 12 months before I was able to prick them out into individual pots, all 20 of them. It took another four years to get them starting to make vigorous growth and when they were one metre high we planted them out in a section of bush opened up just for them alongside a pathway that would set them off and be close to the original Kingdon Ward clones.



Figure 5: R. protistum dark, Craig coll, 22.8.2020 44.

These plants were different in their growth habit being more tree-like and open on a single trunk. The leaves were similar and the growth period exactly the same. It took 28 years before the first flower bud was spotted and it was like a new child arriving with daily visits to see how close it was to opening. When it eventually opened it did not disappoint, being a slightly richer colour but not quite as large as the KW form (Figure 5). Gradually each season since has seen more plants flower and in the third year a deep crimson-coloured form appeared matching descriptions from the original Forrest collection.

It gave me a lot of pleasure to send photos to Craig so he could see for himself that his 'ordeal' was all worthwhile. It was only then that I heard that no seedlings had been raised in Australia making the Pukeiti trees even more important in the rhododendron world. Nothing stands still and I am now encouraging the garden staff at Pukeiti to cross the two very best forms of our wild collected *Rhododendron protistum* to produce even more specimens of this special species and hopefully share seed around the world to rhododendron enthusiasts. \mathfrak{B}

Graham Smith Dip Hort Kew, AHRIHNZ.

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Rhododendron kawakamii a pseudovireya from Taiwan

MAURICE KUPSCH, CURATOR, EMU VALLEY RHODODENDRON GARDEN

This bright little species of subgenus vireya is native to the Chung-yang Mountain Range in Taiwan where it is found growing on the lower slopes of Mount Morrison in humid rain forests, usually as an epiphyte at elevations of 2,000–2,135m.

It was first collected by T. Kawakami and U. Mori in October 1906 on Mount Morrison, and by Sir John Holford in 1969, and widely distributed by John Patrick in 1970. It was introduced to Edinburgh in 1971 and in 1993, where it was found to be easily grown outside.

Rhododendron kawakamii grows into a shrub to 1.5m, producing its obovate to elliptic leathery leaves in loose pseudowhorls, the upper surface dark green, lower surface covered with small brown scales. The white to yellow flowers are produced in terminal clusters of 3–7 and are saucer shaped.

At Emu Valley Rhododendron Garden we find it grows well outdoors in our vireya section, where the bright yellow flowers appear from May onwards. Only once a year, but still a pleasing sight. \mathfrak{B}

Editor's note: R. kawakamii is also growing in the vireya species bed at the Dandenong Ranges Botanic Gardens, and I have a specimen outdoors in a hanging basket in suburban Melbourne.



Illawarra Rhododendron Gardens: past, present and future

BRUCE CHRISTIE

President, Illawarra Rhododendron and Rainforest Gardens

Hello from the Illawarra Rhododendron and Rainforest Gardens in Mount Pleasant, Wollongong. It's been a while since we have been in contact, so we have a lot of news to pass on as well as catch up on.

As you may know, our gardens were established in 1969 by Donald Stanton and William. F. (Bill) Mearns. The site was leased from Australian Iron and Steel (AIS) and was part of the land where the Mt Pleasant coal mine had been.

Both Don and Bill were lovers of the genus *Rhododendron* and when they were told that rhododendrons wouldn't grow in Wollongong, they set out to prove the naysayers wrong.

We now have roughly 14 hectares of gardens on an area high up on the Illawarra escarpment. Our front gate is approximately 215m above sea level rising sharply to 295m at the back boundary. Two thirds of the gardens are native Illawarra rainforest and one third is planted with rhododendrons, vireyas, azaleas, magnolias, camelias and a mixture of other exotic species interspersed with some natives. A deer fence has been constructed to protect the exotic gardens from the ongoing onslaught of deer damage but unfortunately the rainforest is still open to attack.

We now lease the land from NSW National Parks and Wildlife Service. Our main source of funding is from weddings and other celebrations and a \$5 honesty parking fee per car. We receive no ongoing funding from government at any level.

The beautiful gardens we have now are the result of some very dedicated volunteers working and experimenting over many years. In its heyday, there were around 50 volunteers, but this number hit a low a couple of years ago when it dropped to five. We are happy to report that since then, things have been improving.

What has happened in 2021–2022?

Our volunteer numbers have increased! We now have around 25 volunteers plus another 15 financial members because we started a campaign post-Covid, to promote our gardens and encourage new volunteers to come and help.

This includes establishing an active social media presence for the gardens on Facebook and Instagram as well as tapping into local community Facebook groups.

In addition to our regular weekly Saturday and Tuesday volunteer working bees for the exotic gardens, we have also started holding working bees one Saturday and one Tuesday morning per month for a bush regeneration group. This group started in June 2022. It is focusing on the rainforest and is being led by two of our new volunteers. Some of these volunteers are now also helping with the exotic part of the garden.

Like everyone our finances took a severe hit with the Covid closures but that didn't stop everything. Our eight volunteers at the time all lived within 5 km of the gardens so we were able to continue working in the gardens throughout the lockdowns. As a result, we were able to get on top of a lot of maintenance tasks and the ongoing weeding and mulching so when the gardens were opened to the public again they were in good shape.

Since then, however, our region has been hit with severe storms and significant rainfall. From November 2021 to the end of September 2022, 2,805mm of rain has fallen here. That's almost three times our annual rainfall! The worst months were April with 819 mm falling over four days and July with 694mm. These deluges caused significant damage to our waterways and have silted up our beautiful lake. To date it has been too soggy underfoot to even think about getting in any heavy equipment to rectify the situation, so we have been patching up the worst areas only to see further damage with the next huge downpour.

On a positive note, many of the plants have thrived with all the water and our displays this spring have been spectacular. Unfortunately, the downside has been that we have also lost some plants because of too much water, we've had many wedding cancellations and visitor numbers are significantly down.

This year we have also started to reconnect with other gardening groups. Thanks to Andrew Rouse in particular, for his warm welcome back to this national rhododendron group and for his generous provision of vireya cuttings. We have a good collection of vireyas that were bred by Don Stanton and planted by his son David and the additional cuttings provided by Andrew will increase and complement our range.

The local camellia society has also returned to help us identify and tag our camellias. During this year's flowering period they have named around 60 plants.

Another project we've embarked on is to map the garden beds and tag as many plants as we can with the aim of establishing self-guided walks around the gardens.

There is much left to do but we are all very positive about our future.

At our latest AGM in September, David Stanton (son of Donald) advised that after over 22 years as president he was stepping down. David was one of the first members of the Illawarra Rhododendron Society. He and his wife Pat (Figure 1) have contributed tirelessly to the gardens for over 60 years. We can confidently state that the gardens we see today are a result of David and Pat's vision, hard work and passion. Fortunately, both he and Pat will stay on the committee so we won't be losing their expertise or experience.

The new committee is now Bruce Christie (President), Ken Kliendienst (Vice-President), Vicki Christie (Secretary), Colleen Kliendienst (Treasurer), David Stanton, Pat Stanton, John Booth and Ailish Booth (Figure 2).

What are our plans?

We are changing our name from the Illawarra Rhododendron Gardens to the Illawarra Rhododendron and



Figure 1: David and Pat Stanton cutting their thankyou cake at our recent AGM.

Rainforest Gardens to better reflect what our gardens are and broaden our appeal. We are developing communications and marketing plans that include a website. Our marketing focus will be on attracting locals to visit and volunteer as well as attracting more visitors from across other parts of NSW and Australia and overseas.

We will be developing long term plans for the gardens that will maintain its heritage value as a rhododendron garden as well as regenerate our unique Illawarra rainforest. *****

Figure 2: IRRG members (from left to right) Bruce Christie, Vicki Christie, Ken Kliendienst, Colleen Kliendienst, Margaret Connery, Pat Stanton, David Stanton, John Booth, Gordon Bradbury (Wollongong Mayor), Andrew Connery.



From Bhutan to Vietnam

Rhododendron Introductions in the Second Golden Age of Plant Exploration (from 1980 to the present) A 40 Year Overview

(excluding vireyas, Tsutsusi azaleas and anything new but not actually in cultivation)

Steve Hootman Executive Director & Curator Rhododendron Species Botanical Garden

 Λ s we are all aware, there has been a tremendous amount of new plant Π material collected in the Sino-Himalayan region over the past 40 years. Within the genus *Rhododendron* alone, literally dozens of taxa, many of them previously unknown to science, have been introduced into cultivation. With the re-opening of China, portions of Tibet, northeastern India (specifically the floristically rich states of Arunachal Pradesh & Nagaland) and Vietnam to foreign tourists and scientists, a whole new range of species has made its way into scientific collections and our own gardens. Although a great many of these new introductions have come from the classic plant-hunting region of southwestern China and the adjacent eastern Himalaya, many others have been collected in the vast, and, until fairly recently, relatively unexplored "outlying" areas such as the mountains of central and southern China and northern Vietnam. In addition to this great variety of new material, including some species that have yet to be described, we are now blessed with outstanding new forms of many well-known species including such stalwarts as strigillosum, sinogrande and irroratum.

I have arranged this treatise more or less in the same taxonomic/alphabetic order as the subsections are arranged in *The Encyclopedia of Rhododendron Species*.

Section Azaleastrum:

R. uwaense – This has openly funnel-shaped pale rose flowers with a small dark blotch. First discovered in 1984 on the island of Shikoku in Japan where it is quite rare. It remains quite rare in cultivation.

Section Choniastrum:

These are typically large evergreen shrubs to very large trees with foliage similar to that of many members of subsection Triflora but completely lacking

scales and with flowers often like those of the various deciduous azaleas. Most of the species in this group are native to lower elevation forests and mountains and so are probably not bone hardy in most rhododendron-growing climates. That being said, I have been very surprised by the hardiness I have seen in some of these new species over the past few years and they should all be viable candidates for culture in warmer climates such as California and Australia. The deep green and smooth foliage of the various species is remarkably similar and most of them can only be distinguished by their flowers or fruit. The new growth on most of these species is quite ornamental as it is very glossy and brightly coloured.

- **R.** *cavaleriei* This has funnel-shaped white to rose or lavender flowers. Widespread throughout southern China from Yunnan to the Pacific coast.
- *R. hancockii* This has large and fragrant, openly funnel-shaped white flowers with a strong yellow-orange blotch in the throat. My current favourite in this group. Native to south Yunnan and Guangxi.
- **R.** mackenzianum This has funnel-shaped white flowers with a small yellow blotch. Native to the Yunnan/Burma border and adjacent regions of southeast Tibet.
- *R. westlandii* This has funnel-shaped white to rose flowers with yellow flecks. Native to south-central China, Hainan and north Vietnam.

Subsection Arborea:

R. fansipanensis – This was originally collected in the early 1990s as "arboreum ssp. delavayi affinity" but we have now seen these original collections in flower and it is obvious this is a completely new species. The deeply bullate leaves of this shrubby plant are somewhat reminiscent of the foliage of arboreum but the indumentum is distinctly different (thin, cinnamon-coloured and somewhat spongy) and the flowers range from pale pink to lavender with dark purple nectar pouches. The stunning new growth and stems are densely coated with cinnamon indumentum. Seems to be quite hardy in the Pacific Northwest, at least so far. Native to northern Vietnam.

Subsection Argyrophylla:

R. *argyrophyllum* ssp. *omeiense* – First introduced in 1980, very similar to ssp. *argyrophyllum* but with smaller leaves. Of little merit in the garden. Native to central Sichuan.

- **R.** coeloneuron Very large and vigorous shrubs to small trees. The attractive bullate foliage has a dense rufous-brownish indumentum on the lower surface. The flowers range from white flushed pink to purplish with red-purple flecks, very similar to *denudatum* but flowering earlier in the season and with a looser, rather lax inflorescence and a narrower, more bullate and convex leaf. Native to Guizhou and adjacent regions of south Sichuan and northeastern Yunnan. I consider this the southern end of a cline including *floribundum* in the north and *denudatum* in the middle.
- **R.** *denudatum* This is another very large growing and vigorous new introduction. It is similar to both *coeloneuron* and *floribundum* and is distinguished from the former in its larger and wider, flattened, rugose foliage and pale lavender to deep rose-lavender flowers with purple spots and a prominent blotch in a much tighter and rounded inflorescence. It is distinguished from the latter by its paler flowers and darker indumentum, the leaves are shiny and dark green compared with the matte green of *floribundum*. Native to southwest Sichuan and adjacent regions of northwestern Guizhou and northeastern Yunnan.
- **R.** *haofui* This unusual and still quite rare species has long hanging leaves and pale pink flowers. It differs from other *Argyrophylla* in its 18–20 stamens (vs. 10–15). It has proven to be difficult in cultivation. Native to south-central China.
- **R.** *longipes* Very similar to the species *argyrophyllum* but with pale pink to purplish flowers, and with narrower leaves with a long narrow apex. These have a thin brownish indumentum beneath. Native to northeastern Yunnan and adjacent regions of eastern Guizhou and southern Sichuan/ Chongqing (including var. *chienianum* which is endemic to Jinfo Shan in Chongqing).
- **R.** oblancifolium affinity A curious taxon collected in northeastern Yunnan that bears a remarkable resemblance to the species *formosanum* which is endemic to Taiwan. Both species have similar pale pink flowers in early summer. Similar indumentum as well and while not a perfect fit, this keys most closely to *oblancifolium* which was thought to occur only on Fanjing Shan in northeastern Guizhou.
- **R.** *ririei* **affinity** Another curious taxon only recently collected in northeastern Guangxi. This has little or no indumentum and does not match anything currently known. A more appropriate name will hopefully emerge once it has flowered.

Subsection Falconeri:

- **R.** *heatheriae* This recently described new species is very close and similar to *arizelum* but with a tapering leaf base and a more or less winged petiole. Native to southeast Tibet and adjacent regions of Arunachal Pradesh.
- **R.** *hodgsonii* affinity From a single known population in Bhutan this beautiful big-leaf is very similar to *hodgsonii* but with a thick red-brown indumentum. The leaves are held very erect compared with the leaves of *hodgsonii* and often have a distinctive bi-lobed apex.
- **R.** *mechukae* A new species known only from a very small area in the eastern Himalaya. This has very distinct buds and very unique foliage, the large leaves with deep ribbing on the upper surface and a thin and felted, orange-brown indumentum beneath. Unfortunately, it typically flushes into growth and flowers (pink to magenta) quite early in the season and so is often damaged by spring frosts in our climate (Figure 1).
- **R.** sinofalconeri A vigorous and relatively hardy (for a big-leaf) new introduction. This quickly forms a small tree with large inflorescences of pale to deep yellow flowers. The form from south Yunnan (rounded leaves with a much looser and paler indumentum) is quite different in appearance from the form from adjacent northern Vietnam (longer elliptic leaves with a denser and deeper coloured indumentum).
- **R.** *titapuriense* A new species known only from a very small area in the eastern Himalaya. This forms a massive tree to at least 100 ft. The foliage has a *"mallotum*-like" deep red-brown indumentum. White flowers (Figure 2).
- **R.** species nova This is another new species (has yet to be officially named) from the eastern Himalaya. The buds are smooth and quite distinct, and the large leaves are deeply ribbed on the upper surface with a thin, suede-like indumentum beneath. I have not seen the flowers (Figures 3 & 4).

Subsection Fortunea:

Wow! The taxonomic changes and new additions of species in this subsection have been nothing short of amazing over the last few decades. Subsection Fortunea, with 18 very familiar species as of the 1982 revision of the genus by the Royal Botanic Garden Edinburgh, was thought to be probably the best known and most widely understood subsection in the genus and included such well-known and widely cultivated species as *sutchuenense*, *orbiculare*, *fortunei*, *calophytum* and *decorum*. As now understood, we are looking at 31 species



Figure 1: R. mechukae (Subsection Falconera).

Figure 2: R. titapuriense (Subsection Falconera).





Figure 3: R. species nova (Subsection Falconera). *Figure 4: R. species nova* (Subsection Falconera).





Figure 5: R. cardiobasis.

Figure 6: R. species nova (Guangxi province).



and counting, many of them among the most spectacular of all woody plants introduced since 1980. Several have not actually been introduced into cultivation as of this writing and so are not included here.

- **R.** *asterochnoum* Forms a large upright shrub or small tree similar to *calophytum* but with a thin indumentum on the lower surface of the leaves. The flowers are very similar to those of *calophytum* ranging from white to pink with a deep blotch. Native to Sichuan.
- **R.** calophytum var. openshawianum This variety is very similar to var. calophytum, differing primarily in being smaller in all its parts and with fewer flowers per inflorescence. Most forms seen in cultivation have very distinctive shiny and smooth, narrow leaves and are quite different in overall appearance when compared to "typical" calophytum. Native to south Sichuan.
- **R.** cardiobasis An as yet poorly understood taxon. Plants at the type location in eastern Guangxi were found growing at fairly low elevations (4,000 ft. or so) in deep forest. Later observations of what are assumed to be the same species on different mountains in Guangxi vary a bit in morphology and on one mountain it is found only on the very top of the peak at 7,000 ft.! Very distinct large and elliptic-rounded leaves with a rounded to more or less cordate base. This has long been considered a subspecies of orbiculare which is native far to the north and west in Sichuan but has absolutely nothing to do with that also very distinct species (other than they both have rounded leaves). It is obviously much closer to *R. fortunei* and has similar flowers in May (Figure 5).
- **R.** *davidii* This forms a large rounded shrub with purplish flowers in early spring and smooth, very thick-textured leaves. Differs from the closely related *huanum* in its very small calyx. Native to a few widespread locations in Sichuan and northeastern Yunnan.
- *R. decorum* ssp. cordatum Very similar to the type but with rounded cordate leaves resembling those of *orbiculare*. Similar flowers to those of ssp. decorum white to pink and fragrant. Native to northeastern Yunnan.
- **R.** "discolor" affinity or species nova? A vigorous and very large growing plant with very narrow, pale green and smooth foliage and relatively small, white flowers in mid-summer, often with a green blotch. Quite different from what is seen in cultivation as *discolor* but does key to that species, differing primarily in its much later, always white flowers and its very distinctive foliage and buds. Found growing with "true" *discolor* and *fortunei* in the wild

in many regions of south and central China. Note: there are many plants of this taxon in cultivation that were grown from seed collected in 1994 by the late Peter Wharton as "*davidii*" (Figure 6).

- **R.** faithiae Large and vigorous shrubs somewhat similar to auriculatum and serotinum but with much larger and completely glabrous leaves. The very large fragrant white flowers do not appear until mid-September in the Pacific NW. A stunning foliage plant, the leaves are quite large and smooth with an auriculate leaf base. Probably the largest leaves of any non "big-leaf" in the genus. Native to scattered locations in eastern Guangxi and adjacent southwestern Guangdong (Figure 7).
- **R. glanduliferum** Large and vigorous shrubs somewhat similar to *auriculatum* but with much larger and more glabrous leaves. The large fragrant white to pink flowers do not appear until mid-summer (Guizhou form) or late summer (NE Yunnan form). They are quite large and showy and range in colour from white to rose or pink and are fragrant. Native to widely scattered locations in northeastern Yunnan and adjacent N. Guizhou. Note:



Figure 7: R. faithiae.

an isolated population of this species has recently been observed in northern Guangxi, far to the south of any other known populations.

- **R.** griffithianum ("eastern form") This taxon from central Arunachal Pradesh, differs from the typical form of this well-known species, native in the eastern Himalaya from eastern Nepal to western Arunachal Pradesh, in several features. It shares the same smooth and peeling bark and long-tailed buds but differs strikingly in its much wider leaves which are two or even three times as large with a glaucous-blue cast, an undulate leaf margin and a strongly auriculate leaf base. The flowers are similar to typical griffithianum but appear a full month later in the season.
- **R. huanum** This forms a large rounded shrub or small tree with purple-red to lilac flowers in early spring. Somewhat similar to *davidii* but with a large and persistent, very showy calyx. The new growth is a distinct shiny, olive green with reddish perulae. Native to south Sichuan and adjacent regions of northeastern Yunnan & Guizhou.
- **R.** *jinchangense* Large shrub or small tree with large pink flowers; similar in general appearance to some forms of *fortunei* but generally with larger flowers and leaves that are both longer and narrower. Native to south Yunnan and adjacent northern Vietnam.
- R. jinchangense affinity Similar to the above but differing in some minor botanical characteristics and with larger leaves. I have not seen the flowers. This was observed in a newly explored region of Vietnam on a limestone ridge south of Hanoi – so technically in the tropics!
- **R. jingangshanicum** Large shrubs closely allied to the familiar *calophytum* with similar very large leaves but slightly different in shape and more shiny. The flowers are somewhat similar as well, also appearing in early spring. They differ from those of *calophytum* in their slightly different shape and in the fact that they are a solid pinkish-purple in colour. Quite rare in the wild, two separate expeditions have failed to locate this species in the Jinggang Shan of western Jiangxi where it is endemic. This appears to be an isolated, far eastern extension of the *calophytum* complex (Figure 8).
- **R.** *leigongshanense* Large and vigorous shrubs very similar in general appearance to the closely related *glanduliferum* and *magniflorum*. This has recently been named as a new species based on the presence of long stalked glands on the lower surface of the leaves, these are lacking in the other two species. Like *auriculatum*, the new growth does not emerge until late



Figure 8: R. jingangshanicum.

summer. A stunning foliage plant, this is known only from the Leigong Shan of Guizhou.

- **R.** *magniflorum* Large and vigorous shrubs very similar in appearance to *glanduliferum*, differing primarily in that it is larger in both foliage and flower. An extremely rare plant in the wild, known only from a single location in southwestern Guizhou.
- **R.** *maoerense* Large shrubs that are similar in general appearance to some forms of *fortunei*. This species differs in its much larger leaves with a very shiny upper surface and in its much darker flowers (solid rose-purple) that appear a month or so earlier in the season. Known only from northeastern Guangxi and might be better called *R. kwangfuense* as the plants grown from seed collected from the type location do not technically match the description.
- **R.** "orbiculare ssp. cardiobasis" These were grown from seed collected in northeastern Guangxi where this taxon was supposed to be native and they do indeed look very much like orbiculare with the leaves more or

less rounded in shape and with a strongly cordate leaf base but with the leaves a bit longer and more drawn out than ssp. orbiculare as they should be per the description and key. The problem is that the habit is very tree-like and upright like *R. fortunei* (vs. the rounded domes of *orbiculare*) and the flowers are very much a match for those of *R. fortunei* – large and fragrant, pale to deep pink, very openly campanulate and in large upright inflorescences. Very different from the deep pink and more or less pendulous bells of true *orbiculare* which flowers a full month earlier in the season. This seed, collected by Alan Clark, was distributed widely so you may want to change your labels if you are growing this collection. I am calling it simply *R. fortunei* (round-leafed form). (See discussion of *cardiobasis* above). Note: Older plants in collections under this now invalid name are invariably just *orbiculare* hybrids.

- **R.** *platypodum* This outstandingly beautiful and distinct species is similar in many ways to its probable close relative *R. yuefengense* which is native far to the south in Guangxi where it occurs only on the very summit of the tallest mountain in south China Maoer Shan at 2141m. *R. platypodum* differs from it southern relative in that it is a much larger overall plant with much larger, thicker textured foliage and shorter, widely flattened petioles. Also, the deep pink flowers appear in mid-spring (vs. the white to pale pink flowers of *yuefengense* which do not appear until early summer). Very rare in the wild, also known only from a single mountain, the Jinfo Shan in Chongqing. One of the most outstanding of all the new intros in the last 40 years.
- **R.** polytrichum/chihsinianum This is another outstandingly beautiful and distinct species which I consider to be one of the finest of the new intros. This was initially placed in subsection Maculifera, probably due to the strikingly bristly-glandular stems and slightly less so foliage. I have seen this in flower and it is definitely a member of subsection Fortunea, with beautiful, large white flowers similar in appearance to R. glanduliferum and the other species in that group but with the flowers appearing in mid-spring instead of in the summer. A second collection from another location should have deep pink flowers. The foliage is absolutely stunning and cannot be mistaken for any other species. Large and glossy leaves that emerge coated with long bristles, it certainly does not look like a Fortunea in foliage. There is still quite a bit of confusion with the taxonomy of this species and Jens Nielsen feels that this should rightly be called *chihsinianum* (a species that has never been collected that is currently, but probably incorrectly, placed in subsection Auriculata) although it was introduced and distributed as polytrichum (Figures 9 & 10).



Figure 9: R. polytrichum (R. chihsianum). Figure 10: R. polytrichum (R. chihsianum).



- *R. qiaojiaense* This newly named species is probably most closely related to the familiar and widespread *decorum*. It differs in its shorter and more rounded leaves, its compact growth habit and the longer rachis in the inflorescence. White to pink flowers in late spring. Native to northeastern Yunnan.
- **R.** serotinum This is very similar to *hemsleyanum* but with narrower leaves, a more fastigiate habit and larger flowers. The flowers are quite fragrant and appear in early summer. The new growth is bright blue-green and this is a very vigorous plant. Native to south Yunnan and adjacent northern Vietnam.
- **R.** *xiaoxidongense* affinity This is very similar to *auriculatum* but with broader, differently shaped leaves. Similar fragrant white flowers in mid-summer. This has not been introduced into cultivation from its type location in western Jiangxi but a similar taxon, possibly the same, has recently been found in northern Guangxi.
- **R.** *yuefengense* This new introduction is very similar to *platypodum* but a with a markedly more compact, less upright habit and with paler flowers on an upright rachis in early summer. The leaves are rounded and glaucous blue when young. Will bloom at three years from seed an all-around outstanding new introduction and remarkably hardy considering it is native to northeastern Guangxi.

Subsection Grandia:

- **R.** balangense Forms a large shrub or small tree with whitish indumentum on the undersurface of the leaves. Distinctive short and winged petioles with white to pinkish flowers. May be a stabilized hybrid between *watsonii* and a member of subsection Taliensia and probably better considered a member of subsection Taliensia. Endemic to Balang Mountain in Sichuan.
- **R.** *kesangiae* A fabulous new introduction that forms a small tree with large leaves up to 18 inches in length. The flowers are rose to pink and do not fade to an unsightly colour right away as do the flowers of the somewhat similar *hodgsonii*. The rounded bud and rough bark readily distinguish it from the smooth-bark and pointed buds of *hodgsonii*. Bhutan (var. *kesangiae*) and adjacent western Arunachal Pradesh (as var. *album* with pink flowers fading to white and larger leaves).
- **R.** macabeanum (high altitude or alpine form) A surprising recent collection (2003) of this woodland species from the top of Mount Saramati (c. 12,600 ft.) on the Nagaland border with Burma. Much slower growing and with

a darker, much thicker indumentum and smaller leaves than the typical *macabeanum*. Should be an incredibly hardy form of this typically marginally hardy species.

R. suoilenhense – This newly named species is from northern Vietnam and adjacent south Yunnan and was originally collected as both *protistum* aff. and *sinogrande* aff. In foliage it is intermediate between the two although it develops its indumentum and flowers at a very young age (for a bigleaf). Cream to white flowers, usually with a reddish blotch. Seems to be quite hardy considering its provenance and is an incredibly vigorous grower in cultivation.

Subsection Irrorata:

There is a great deal happening taxonomically in this large subsection and I think there will be several new species/subspecies/varieties described in the coming years as the various entities that have recently been documented in the wild are finally sorted out. This is especially needed with the swarm of currently unnamed taxa in the south Yunnan/north Vietnam region.

- **R.** *brevinerve* This species has been known to science since 1957 but never actually introduced into cultivation until a few years ago. It has rather typical smooth Irrorata foliage, but the flowers are quite distinct as they are pale purple in colour on an upright racemose-umbel and in the shape of flattened bells. Native to the region where the provinces of Guangdong, Guangxi, Hunan and Guizhou meet.
- **R.** gongshanense This stunning and distinct species forms a large rounded shrub with long narrow leaves, heavily bullate above with a thin indumentum beneath, dark pink to bright red flowers in a compact rounded inflorescence in early spring. A bit tender in most regions. Known from only a small area in northwestern Yunnan where it grows in forests of *R. sinogrande*.
- **R.** guihainianum This species was discovered and named as recently as 1995 but not actually introduced into cultivation until a few years ago. It was initially placed in subsection Fortunea by the Chinese botanists who found and described it but is a much better match for an Irrorata in my opinion based upon the native range, size of the trees, foliage, and the flowers. Rather typical smooth Irrorata foliage, with small and openly bell-shaped white flowers. This forms a massive tree in the wild with many specimens easily 75 ft. in height with trunks three feet in diameter. The outstanding, and as far as I know unique, feature of this species is the incredible bark which is

smooth and peeling in large multi-coloured patches similar in effect to the bark of *Stewartia pseudocamellia* for example. Currently known only from a small range of low mountains in eastern Guangxi (Figure 11).

- **R.** *irroratum* **ssp.** *yiliangense* Recently introduced and renamed (it was previously known as ssp. *ninguenense*), this is very similar to typical *irroratum* but with pale green foliage and the long-lasting flowers opening pink before transitioning to a lovely soft yellow. A stunning species in flower. Native to a small area of northeastern Yunnan.
- **R.** *langbienense* (syn: *irroratum* ssp. *kontumense*) A new introduction from south Vietnam, the name still needs to be verified and very little information available currently although it should be a great species for warmer climates such as California and Australia.
- **R.** mengtszense A new introduction from south Yunnan along the Vietnam border. Very little is currently known about this species in cultivation, but it has beautiful foliage with deeply impressed veins and is a bit bristly. Noted to have reddish-purple flowers and it should be a great species for warmer climates such as California and Australia (Figure 12).
- **R. pingbianense** A new introduction from south Yunnan along the Vietnam border. Very little is currently known about this species in cultivation, but it has beautiful foliage and seems quite distinct. Flowers are said to be pinkish and it should be a great species for warmer climates such as California and Australia.
- **R. spanotrichum affinity** Another new introduction from northern Vietnam. Long and narrow, slightly bullate foliage and pink or white flowers in mid-spring. These plants do not perfectly match the description for *R. spanotrichum* – a little-known species with scarlet flowers known from just across the border in southeastern Yunnan but are close enough botanically to link them with this species.
- *R. tanastylum* (Vietnam form) Very large shrubs or small trees of the temperate rainforest. Brilliant, deep red flowers on this form which appears to be quite a bit more hardy than the east Himalayan forms.
- **R.** *ziyuanense* This forms a rounded shrub with glossy foliage and small white flowers with red flecks. Native to the Maoer Shan of northeastern Guizhou and seems to be fully hardy in our climate. I am pretty sure this relatively newly described (1982) taxon does not belong in Maculifera, it has more



Figure 11: R. guihainianum.



Figure 12: R. mengstzense.

of a feel of Irrorata (including the distinguishing red punctate hair bases on the lower surface of the leaves unique to this subsection) to me which is why I have placed it here.

Subsection Lanata:

- **R.** *flinckii* Similar to *lanatum* but with a thinner leaf and a thinner, orangered indumentum. Seems to be far easier to grow in cultivation. Pink to pale yellow flowers. Bhutan and adjacent Arunachal Pradesh.
- *R. circinnatum* (syn: luciferum) Similar to lanatum but with larger more pointed leaves and with the thick indumentum yellowish brown vs. chocolate or grey-brown. Pale yellow flowers. Native to southeastern Tibet.

Subsection Maculifera:

R. henanense affinity – Another curious taxon only recently collected in southern Shaanxi. The type is native to adjacent Henan and is placed in subsection Campylocarpa in the *Flora of China* (the same group that contains

wardii, souliei, etc.!). I find this very difficult to accept and this is also the opinion of Jens Nielsen who has seen this taxon in the wild. The plants from this collection have more of a look of subsection Maculifera (esp. the species R. *maculiferum* which is widespread in that part of China) with bristly petioles and leaf margins, etc. The flowers are white to pale pink with a dark blotch.

- **R.** ochraceum This forms a rounded shrub with attractive foliage coated beneath with a thick indumentum. The deep red flowers appear a few weeks later in the season than those of its close relative *strigillosum* and are in a much tighter, more compact inflorescence. Extremely rare in the wild. Native to south Sichuan and adjacent northeastern Yunnan and with variety brevicarpum endemic to Jinfo Shan in Chongqing.
- **R.** oligocarpum This is very closely related to maculiferum but with pink to purple flowers. It forms a medium rounded shrub. Very attractive in flower due to the multi-coloured effect resulting from the blossoms emerging quite a dark pink or purplish and then quickly fading to pale pink and then whitish. Native to scattered mountains in Guizhou and Guangxi.
- *R. onii* This forms a rounded shrub with very distinct, rounded elliptic leaves with an obvious indumentum on the midrib of the lower leaf surface. This indumented midrib would indicate that this new taxon is best placed within subsection Maculifera although others have it in Parishia or even Irrorata. The striking flowers appear in mid-spring and are red to scarlet with a white throat. It has been quite hardy and blooms at a relatively young age. Native to northern Vietnam.
- **R.** sikangense var. exquisitum This forms a large shrub or small tree with white to pink flowers and a reddish blotch. Very similar to the type, differing in some minor details regarding the hair structure. Known from only a small region of northeastern Yunnan and adjacent southern Sichuan.

Subsection Neriiflora:

- R. euchroum A dwarf mounding species with a thick brown indumentum. Recorded as having red to scarlet flowers. Still quite new in cultivation. Found along the Yunnan/Burma border.
- **R.** *miniatum* Small compact shrubs with a dense wooly and dark indumentum on the lower leaf surface, crimson flowers with darker nectar pouches. Although this is placed in subsection Fulgensia by both the RBGE revision

and the *Flora of China*, it has more of the look of a member of subsection Neriiflora which is why it is placed here currently. Native to a small area in southeastern Tibet.

R. trilectorum – A dwarf alpine shrub with cream to yellow or pinkish bell-shaped flowers in late spring to early summer. The leaves are sometimes distinctly emarginate (bi-lobed) on their terminal ends. Rather reminiscent of an upright, mounded form of *forrestii* with which it occurs in the wild. Known from Arunachal Pradesh and adjacent regions of southern Tibet.

Subsection Parishia:

- R. facetum (Vietnam form) Very similar to the species as it has long been known from western the Yunnan and adjacent Burma but surprisingly more tolerant of cold temperatures, surviving for many years now outside at the RSBG. The Chinese/Burmese forms are pretty much hopeless for us outside. Similar stunning foliage and deep red flowers in early summer.
- **R. huidongense** An extremely rare species with perhaps only a few specimens still extant in the wild. This is closely related to the more widespread *facetum*, differing in its much smaller leaves and calyces and its tomentose styles. Red flowers late in the season as seen in the rest of this small subsection. Native to south Sichuan where it is quite disjunct from its close relatives to the west.

Subsection Taliensia:

- *R. aureodorsale* This is a very distinct new species that has absolutely nothing to do with *clementinae* which it was originally placed under as a subspecies. White flowers and very large leaves for this subsection and an upright growth habit. Native to southwest Shaanxi so should be quite hardy.
- **R.** *bhutanense* This forms a compact shrub with a felted grayish to orangebrown indumentum on the underside of the leaves. The flowers are pale to deep pink or even red, a striking colour for this mostly pink to white flowered subsection. Native to Bhutan and adjacent Arunachal Pradesh.
- *R. bureavioides* The northern version of *bureavii*, differing in its larger flowers (white to a very deep pink) and larger leaves that appear sessile on the leaf stems. Native to Sichuan.
- **R.** dachengense This forms a large shrub to small tree with stunning foliage. The leaves are glossy with a thick rusty-brown indumentum on their undersides. The smallish flowers are white with reddish spots. What

is most remarkable about this very recently named taxon (2001) is that it is native to very low elevation forests (actually subtropical!) in an extremely limited region of eastern Guangxi far to the east of its relatives native to the alpine slopes of the Sino-Himalaya. A most remarkable disjunction and one wonders how it got there and how it has managed to survive in such an unusual habitat and region.

- **R.** danbaense R. danbaense is in the bureavii/bureavioides/rufum complex and most similar to R. rufum but with thick persistent indumentum on the stems. The flowers are also very similar to that species, small, white and quite early in the season. Native to western Sichuan.
- **R.** detersile This forms a very compact and mounding shrub with an orangebrown indumentum very similar in appearance to the indumentum on its relative *R. proteoides*. The upper side of the leaves is somewhat glossy with deep ribbing and the leaves have very short petioles so appear sessile on the stems. Probably most closely related to *R. roxieoides* with which it shares deep pink flowers. Native to cliffs in southwestern Shaanxi and adjacent northeastern Sichuan.
- *R. dignabile* This is very close to *beesianum* but with little or no indumentum. White to pink flowers and seems to represent the western extension of that species in southeastern Tibet.
- **R.** *farinosum* This forms a very compact and mounding shrub with a felted grayish to orange-brown indumentum on the underside of the leaves. The upper side of the leaves is glossy with deep ribbing and the foliage is very reminiscent to that of wiltonii with which it seems obviously closely related. This relationship, as well as the mounding habit of the plant, its white flowers and its native habitat on high elevation cliffs has convinced Jens Nielsen that this is better placed in subsection Taliensia rather than in subsection Argyrophylla as it has been historically placed (it was said to be close to denudatum and coeloneuron but this is obviously not correct). I would strongly concur. One of the finest of the new introductions. Native to only a single mountain in northeastern Yunnan.
- **R.** *phaeochrysum* (yellow-flowered form) This stunning plant with yellow flowers spotted red hails from the very western end of the large range of this variable species. Should probably be described as a new species or subspecies. Native to southeastern Tibet and probably adjacent Arunachal Pradesh.
- R. purdomii There is a great deal of confusion regarding the proper taxonomy

of this species. It appears the true species has finally been introduced from south Shaanxi. It has long been unclear whether this belongs in subsection Taliensia or in subsection Maculifera but this new collection places if firmly in Taliensia. Forms a low and compact mound.

- **R.** roxieoides This forms an upright but compact shrub with a very thick rusty-brown indumentum on the lower surface of the leaves. The upper surface of the long and narrow, very thick leaves is dark green and quite glossy. The flowers are deep pink to almost red, a striking colour for this mostly pink to white flowered subsection. Incredibly rare in the wild, this is native to knife-back ridges in a very remote and localized area of Chongqing.
- **R. scopulum** This is closely related to *dachengense* (see above) occurring in the same area and with more or less the same flowers and foliage but differing in that it is found at a slightly higher elevation and forms a very prostrate and spreading plant instead of growing into a large shrub or small tree. A French expedition to northern Vietnam recently recorded a single plant of something very similar in appearance to *scopulum* but this has not been introduced into cultivation as far as I am aware.
- R. shanii This forms an upright shrub or small tree with large, thick and leathery leaves. These are rounded elliptic in shape and very shiny on top with a compacted yellow-brown indumentum beneath. The flowers are deep pink. As I discussed under *dachengense*, what is most remarkable about this very recently named taxon (1983) is that it is native far to the east of its relatives growing on the alpine slopes of the Sino-Himalaya (at least 700 miles with subtropical agriculture filling most of the land in between). Native to a few scattered mountaintops in an extremely limited region of Anhui a most remarkable disjunction and one wonders how it got there and how it has managed to survive in such an unusual habitat and region (Figure 13).
- **R.** sphaeroblastum var. wumengense Very similar to var. sphaeroblastum but with a thinner and paler indumentum on lower surface of the leaves. Native to a small region of northeastern Yunnan and adjacent regions of south Sichuan.
- **R.** *yaoshanense* A very recently named species (described in 2008) that shares some similarities to the related *R. pronum* including a completely creeping habit and persistent leaf-bud scales. Glossy and thickly leathery leaves with white flowers. Jens Nielsen feels that this very distinct species may be most closely related to *R. wasonii*. It is found growing on very steep cliffs in a very narrow altitudinal band on a mountain in northeastern Yunnan.



Figure 13: R. shanii.

Subsection Thomsonia:

- **R.** eclecteum affinity A new introduction with some similarities to the admittedly variable eclecteum but quite distinct in my opinion. This has now been collected in several locations under a wide variety of different names. The smooth and broadly obovate leaves are arranged in whorls around the stem with very short and winged yellow petioles. The petioles are so short the leaves appear to be sessile. The long and tubular bell-shaped flowers are pendulous in habit and an amazing deep blackish-red in colour. Native to alpine slopes in the eastern Himalaya.
- **R.** populare A species long known to science but not successfully introduced into cultivation until recently. This has elliptic leaves that are glossy green above with a thin and somewhat sticky white indumentum beneath (which is why it was called viscidifolium affinity when it was collected). Said to have deep crimson flowers. Native to southern Tibet.

Subgenus Pentanthera:

- **R.** *eastmanii* A newly described deciduous azalea with fragrant white flowers. This is distinguished from the closely related and similar *R. alabamense* by its later flowering time, after the leaves have fully expanded. It also has a different fragrance and *eastmanii* has marginal glands on the flower bud scales. Native to forests on limestone soils in South Carolina.
- *R. colemanii* Very recently published new species of deciduous azalea native to the coastal plain of Alabama and Georgia, similar in general appearance to *alabamense* but much more variable and blooming later in the season.

Section Pogonanthum:

- *R. cephalanthum* (Nmaiense Group) Similar to the type but with yellow flowers. Found in south Tibet.
- *R. cephalanthum* ssp. *platyphyllum* Similar to the type but with much larger leaves and slightly larger flowers (white). Seems to be quite distinct morphologically. Native to western Yunnan and adjacent northern Burma.
- **R.** *fragrans* This is a dwarf alpine species with white to pink flowers. Very difficult in cultivation. Native to open slopes from Siberia to Mongolia.
- **R.** *heteroclitum* Closely related to the familiar species *primuliflorum* differing in a few minor botanical details. Said to look similar to *cephalanthum* according to Jens Nielsen who has observed it in the wild. Native to western Sichuan.
- **R.** *laudandum* var. *temoense* A dwarf alpine shrub with white to pale pink flowers and a dense layer of very dark brown scales on the lower side of the glossy leaves. Native to southeastern Tibet.
- **R.** *xiaoxueshanense* Similar to the familiar species *trichostomum* but differs in having much longer pedicels, a shorter calyx, a white corolla and a two to six flowered inflorescence. Thought to be a natural hybrid between *telmateium* and *trichostomum*. Native to northwestern Yunnan.

Subsection Boothia:

R. boothii – An epiphytic shrub of the temperate rainforest with very distinctive, hairy and leathery foliage and striking flower buds. Also adorned with smooth peeling bark and deep yellow flowers, likely to be tender in most regions. Beautiful red-purple new growth with long silver hairs. Native to the eastern Himalayas.

- **R.** oblongilobatum A cliff-dwelling shrub native to the Wuliang Shan of central Yunnan. This was originally called *R. valentinianum* var. oblongilobatum in subsection Maddenia when it was described by Chinese botanists in 1982. However, when it was finally introduced into cultivation in 2011 it was noted to have a sharply deflexed style which places it in subsection Boothia. Unfortunately, the plants subsequently collected along the distant south Yunnan/north Vietnam border were also named as this same taxon but these actually belong in subsection Maddenia and so represent a completely separate and distinct taxon/(taxa) (see *valentinioides* and *valentinioides* affinity in subsection Maddenia). It is all a bit confusing to the casual observer and it has taken us many years to get the taxonomy sorted out even to this level of understanding. In any case, this is a beautiful dwarf species with very hairy, deeply bullate and glossy foliage, deep yellow flowers and smooth, peeling bark.
- R. species nova This is an unusual taxon that appears to be intermediate between sulfureum and chrysodoron with similar yellow flowers in early spring. Known only from the Dulong Valley of NW Yunnan where it was observed growing on the mossy sides of large boulders.

Subsection Heliolepida:

- **R.** bainaense Large and bushy evergreen shrubs very closely related and very similar to the widespread and variable species *R. rubiginosum*. It differs in several minor botanical characteristics but primarily in the paler flowers and in the scales being much less dense on the lower surface of the leaves. This newly named taxon from western Guizhou is quite disjunct from the main population centers of *R. rubiginosum* in western Yunnan, etc. but might best be considered an eastern subspecies rather than a distinct species.
- **R.** *invictum* Large and bushy evergreen shrubs very closely related and very similar to the widespread and variable species *R. heliolepis*. It differs primarily in having hairs on the upper surface of the leaves and in being widely separated geographically. Native to Gansu in northern China.

Subsection Lapponica:

R. amundsenianum – Another species long known to science (1921) but not introduced into cultivation until 2012. Forms a low and compact mound with heavily scaled foliage and purple flowers. Known from only a small region of southwestern Sichuan.

- **R.** bulu Upright evergreen shrubs with tiny scaly leaves and pinkish to deep violet flowers. More or less a low elevation form of the widespread and variable nivale. Native to southeastern Tibet.
- **R.** *mianningense* A new species named in 1987 as a member of subsection Maddenia with yellow flowers and related to *dalhousiae* reported as occurring at 3500m(!) i.e. an alpine Maddenia. Obviously, a very interesting and desirable new species for gardens. As expected, when it was finally seen in the wild it turned out to be a member of subsection Lapponica, albeit with very large flowers for this typically small-flowered group. Native to a small region of southwestern Sichuan.
- **R.** *nitidulum* **var**. *omeiense* A fine dwarf shrub with blue-purple flowers and very small leaves. Very similar to the type species, differing in having leaves with scattered dark scales beneath. A relatively easily cultivated species for a Lapponica. Known only from Emei Shan in Sichuan.
- *R. taibaiense* A dense and prostrate shrub with flaky/scaley branches and pale purple flowers. Native to south-central Shaanxi.
- **R.** *tsaii* Another species long known to science (1939) but not actually introduced into cultivation until 2011. A fine dwarf shrub with purplish flowers. Very silvery scaley foliage. Native to a small region of northeastern Yunnan.
- **R.** *tsaii* **affinity** A fine dwarf shrub with pink to purple flowers. Very close to that species but collected on the opposite side of the Yangtze and sharing some characteristics with *hippophaeoides*. Native to a small region of southwestern Sichuan.
- ALSO: Several other "species", mostly variations of the widespread and variable *nivale*, have been named recently by Chinese botanists. A few of these have been introduced into the west but have yet to be adequately evaluated.

Subsection Maddenia:

Another large and very confusing group of closely related and often quite similar species. There has been a great deal of confusion amongst these and a revision of the subsection is sorely needed. The white-flowered species complex in northern Vietnam and adjacent southern Yunnan is especially problematic with individual plants in single populations keying to any number of different species and yet all obviously the same taxon. Horticulturally, it is interesting to note that many of the new introductions from southern China and northern Vietnam, which one would assume to be as tender, or even more tender, than their relatives from western China and the Himalayas, are actually substantially more tolerant of cold temperatures. Many of these are also much more compact and dwarf and often with fragrant flowers making them excellent subjects in the garden.

- **R.** *changii* This dwarf and mounding species with pale yellow flowers has beautiful leaves that emerge reddish-purple with a fringe of long silver hairs. Another member of the "*valentinianum* complex" this recently named taxon is endemic to the Jinfo Shan of Chongqing where it grows side by side with *R. platypodum* which is also endemic on this isolated mountain. Quite hardy in cultivation for a Maddenia.
- **R.** *ciliipes* A very "typical" Maddenia with lightly fragrant, funnel-shaped white flowers, these in clusters of one or two. Grows as an epiphyte or on cliffs in temperate rainforest along the Yunnan/Burma border.
- **R. crenulatum** A very unusual Maddenia probably better placed in its own subsection. This dwarf species features very small white to cream-yellow flowers and leaves with crenulate margins which is an almost unique feature in the genus (*R. vanderbiltianum* from northern Sumatra shares this unusual characteristic). Currently known from only the type location in Laos and a small area of northern Vietnam where it occurs near the very top of the highest mountain in Indochina Mount Fan Si Pan, at an elevation of 10,326 ft. and so has proven to be quite hardy.
- *R. excellens* This still poorly understood taxon is quite variable and depending upon where it was collected has leaves that range from very large to much smaller and narrower. The large and fragrant lily-shaped flowers also range tremendously in time of flower, from mid-spring to mid-summer! Overall, very similar in general appearance to *R. nuttallii* but substantially hardier. A beautiful plant with smooth peeling bark native to south Yunnan and adjacent northern Vietnam.
- **R. fleuryi** Very rare new species with unusually shaped flaring tubular flowers. These are white with pink lines on the tube. Beautiful smooth and peeling reddish-brown bark. The only documented population in the wild (south Vietnam) has probably been extirpated.
- **R.** goreri This is basically the southeastern Tibetan form of the variable *R*. *nuttallii*,differing in some minor botanical characteristics such as the lower

surface of the leaves being green, etc. Not significantly different enough from *R. nuttallii* do be maintained at species level in my opinion.

- **R.** *kiangsiense* A dwarf species with large and fragrant, openly funnel-shaped white flowers. Native to a few scattered mountains in the eastern Chinese province of Jiangxi where it grows on vertical cliffs. Quite hardy for a Maddenia.
- **R.** kuomeianum A very unusual species with a dwarf mounding habit and very slow growing. Tubular funnel-shaped, white flushed pink flowers in mid-spring and unusual obovate-oblong foliage with a fringe of hairs. Known from only a single collection in northeastern Yunnan (SEH#171) and only recently (2021) named as a new species. Has been perfectly hardy for us here in the garden.
- **R.** *leptocladon* A fantastic and relatively hardy new introduction from northern Vietnam and adjacent south Yunnan. This species has unusually coloured, very large and showy flowers in mid-spring. They emerge greenish yellow and "fade" to a rich butter yellow.
- **R.** *levinei* This dwarf and compact-growing species has smooth peeling bark with noticeably small and hairy foliage and fragrant white flowers. Similar to the also newly introduced *R. kiangsiense* but with a wider range in southeast China and quite a bit more variable, typically smaller in all its parts. One of my very favorite new introductions, quite hardy for a Maddenia.
- **R.** *liliiflorum* A choice species that is similar in general appearance to *R*. *lindleyi* but with the large and fragrant, lily-like white flowers appearing much later in the season (early summer). Very attractive smooth and peeling bark and perfectly hardy for us so far, having been in the garden for over 15 years now with no damage from the cold. You can think of this as basically the Chinese version of *R*. *lindleyi*. Scattered populations in the provinces of Guizhou, southeastern Yunnan, Hunan and Guangxi. Recently recorded from northern Vietnam.
- **R.** *maddenii* ssp. *crassum* (Chapaense Group) This is very similar to "typical" subspecies *crassum* as seen in western Yunnan and adjacent regions but differs in that it is remarkably more hardy. Very thick and leathery, glossy foliage; worth growing for this feature alone. The large, funnel-shaped and fragrant flowers have a strong orange-yellow blotch and appear in early summer. Native to northern Vietnam where it occurs near the tops of the very tallest mountains as well as adjacent regions of southern Yunnan.

- **R.** *pseudociliipes* A smaller growing Maddenia, with small, pointed leaves contrasting nicely with the single white (sometimes flushed pink), slightly fragrant, funnel-shaped flowers. Grows as an epiphyte or on cliffs in temperate rainforest along the Yunnan/Burma border.
- **R.** *pseudomaddenii* A very recently named (2015) species with strange, thick and rather "rubbery" leaves and very distinct scales. Has a single funnel-shaped flower (white flushed pink) per inflorescence in mid-summer very distinct and unusual and looks like no other species I have ever seen. Grows as an epiphyte or on cliffs in temperate rainforest in Arunachal Pradesh.
- **R.** *valentinioides* This hardy species is somewhat similar to the typical Forrest collection of *valentinianum* from the Salween but much larger in all its parts with a very upright habit. Very waxy, deep yellow flowers in late spring to early summer. Strikingly bullate and hairy, glossy foliage. Native to south Yunnan. Has been in the garden for almost 25 years with no cold damage.
- **R.** valentinioides affinity This is similar to *R.* valentinioides with similar foliage and flowers but with a dense and compact habit and blooming six to eight weeks earlier in the season. It also is quite hardy. Native to northern Vietnam and long incorrectly known as *R. valentinianum* var. oblongilobatum (see discussion under oblongilobatum in subsection Boothia).
- **R.** *wumingense* Another very unusual species, this was described in 1983 and finally introduced in 2010. This has a dwarf mounding habit and is very slow growing. The white flowers are broadly funnel-shaped in clusters of two or three and the leaves are quite small. Native to steep cliffs on a single isolated mountain in south Guangxi. Has been hardy for us so far here in the garden.

Subsection Micrantha:

R. *brevicaudatum* – This is considered a relative of the rarely cultivated, though widespread in the wild species – R. *micranthum*. The flowers are indeed quite similar to that species – small and white in clusters, much like a ledum, with greenish flecks. The long and narrowly elliptic, glossy foliage is densely brown scaly beneath. Quite rare in the wild, currently known only from a small area in eastern Guizhou, China.

Subsection Monantha:

It is interesting to note that none of the species in this subsection had been introduced into cultivation until the late 1990s. It is also of note that they are all autumn to winter-flowering species, a feature unique in the genus.

- **R.** monanthum An epiphytic species from the Yunnan/Burma frontier; small olive-green leaves with clusters of one to three, deep yellow, bell-shaped flowers in late autumn. Very slow and dwarf, fine in a container or hanging basket. This is the first of the entire subsection to be introduced into cultivation (1997).
- *R. kasoense* Similar to *R. monanthum* but larger growing with slightly larger flowers. Native to the eastern Himalaya.
- *R. concinnoides* This species is very similar to monanthum but with lavender to purple flowers. Native to the eastern Himalaya.
- **R.** species nova This still un-named taxon is similar to monanthum but with larger foliage and a distinct and unusual whitish waxy covering on the undersides of the leaves. White to cream flowers in early winter. Currently known only from the Dulong Valley of northwestern Yunnan.

Subsection Moupinensia:

R. *dendrocharis/petrocharis* – These two taxa (may actually be only a single, quite variable species) are basically smaller versions of the familiar species *moupinense* and share a similar range and habitat (epiphytic or on rocks). Very large flowers for the size of the foliage and plant, quite hardy and relatively drought tolerant once established. Native to southwestern China.

Subsection Scabrifolia:

R. *fuyuanense* – A recently named new species (1997), this is a relative of the familiar *R. racemosum* differing in its strongly recurved and ciliate leaf margins. Glaucous gray-blue foliage and said to be "purple-flowered" but so far only pink and white have been observed. Native to a small region of north-central Yunnan.

Subsection Tephropepla:

R. *baihuaense* – This is a very newly named species (2013) so far known only from a single location in the Gaoligong Shan of western Yunnan. It has small but very thick and leathery leaves that are quite glossy above and completely covered beneath with a glaucous white coating. The small white flowers are sometimes streaked with red and the new growth is glossy and a stunning red-purple in colour (Figure 14).



Figure 14: R. baihuaense.

R. tephropeploides – This is a new taxon from the highest mountains in northern Vietnam. It has very scaly, grey-green foliage and a dense mounded habit with pale pink flowers in mid-spring. It appears to be, and should be, quite hardy.

Subsection Triflora:

- **R.** brachypodum affinity This species is a recent introduction from Guizhou and adjacent Chongqing. It features papery and narrowly lanceolate leaves that are sparely covered with short bristly hairs and with a wavy margin. The distinct and very showy bi-coloured deep pink and white flowers appear in early spring. This has been called *R. brachypodum* by Chinese botanists although it does not really match the description in the *Flora of China* which is why I am calling it affinity.
- *R. lateriflorum* This species is closely related and very similar to *zaleucum* and the two share a similar range but this new taxon has a much less glaucous leaf undersurface. It was incorrectly placed in subsection Cinnabarina by the Chinese botanists who originally described it. Native to northwestern Yunnan and (I would assume) adjacent northern Burma.

- **R.** *triflorum* ssp. *multiflorum* This very recently introduced subspecies of the well-known species triflorum of the eastern Himalaya is distinct in having more flowers per inflorescence than the type and with rough, non-peeling bark in contrast to that of the Himalayan form. What is even more noteworthy is the range of this subspecies which is endemic to the isolated Wuliang Shan of central Yunnan, far removed from the type in the high Himalaya, a most remarkable disjunction.
- **R.** *xichangense* This species is similar in appearance to *tatsienense* and is closely related to *davidsonianum*. It is distinguished by its small pink flowers appearing in axillary clusters as well as terminal, much like you would see in subsection Scabrifolia (*R. racemosum*, etc.) but lacking the hairs of that group. Native to south Sichuan.
- *R. yunnanense* affinity This probable new species is found in northern Guizhou and may represent an eastern form of the widespread and variable *R. yunnanense.* It differs from that species in its foliage which is entirely glabrous with only a few, very widely spaced scales. White to very pale pink flowers in late spring. ❀







Save The Date!



Rhododendrons Down Under Conference 2023

Emu Valley Rhododendron Garden, Burnie, Tasmania 13–15 October 2023

The Australian Rhododendron Society and Emu Valley Rhododendron Garden are pleased to announce that the next Society conference will be held at Emu Valley Rhododendron Garden, 13–15 October 2023.

It's a great opportunity to meet or catch up with other members or the Australian Rhododendron Society and rhododendron enthusiasts from around the world.

An online booking website will open shortly, and notification will be provided through your Branch newsletter.

Please put 13–15 October 2023 in your diaries. For further information, please email Geoff Wood at geoffreywood@me.com.

Summary of hybridisation of vireya rhododendrons, 1992–2015

ANDREW ROUSE

Introduction

My first attempt at hybridising vireyas was in 1992 when I crossed *R. culminicola* with *R. retusum*. This crossed proved to be viable, the seed was collected and sown, and I became hooked on hybridising vireyas. I wonder, if that cross had not been successful whether I would have bothered trying again? Possibly not!

In the 23 year period 1992 to 2015 I completed 998 crosses, and whilst I used a range of species and hybrids, I was particularly interested in hybridising to create small, well-branched and compact plants, so I particularly focused on parents plants with these characteristics that I hoped would be passed on to the next generation.

It is only now, seven years since my last cross, that I've gone back through my hybridisation list to tally up what I've done, make an assessment of my level of success, and to provide a list of hybrids and species I've used repeatedly in crosses (& why).

Summary results

Of the 998 crosses undertaken, 368 (37% of total) produced seed that was collected and sown. Seedlings and young plants were grown on with many discarded before they got to flowering age because they did not possess desirable attributes such as vigour, disease resistance or bushiness.

Of those that have flowered, about 48 (4.8% of total crosses) of the hybrids meet the bulk of my list of desirable attributes and are worthy of registration (Table 1).

Description	No.	Comments
Total no. of crosses	998	About 20 are non-vireya crosses (mostly Section Choniastrum and Azaleastrum). The remainder are vireya crosses.
No. of crosses where seed collected and sown	368	Seed was collected from ~37% of the crosses. The 63% of crosses with no seed collected is due to factors including incompatibility, poor timing of the application of pollen (stigma not receptive) or I was unable to collect the seed.
Hybrids worthy of registration	48	About 48 hybrids (4.8% of total crosses) are worthy of registration i.e. that meet the majority of the desired attributes set out below.

Table 1: Summary of hybridising program.

Attributes sought in hybrids

The first five years of hybridising was undertaken with no goal in mind and really just for the fun of it; I wonder what attributes will be expressed if I cross A with B? It was only when I ran out of bench space at home that I realised I needed to have a stronger justification for undertaking a cross, though I readily admit that I found the 'what if' very hard to stop! Over time, I landed on the following attributes I wanted to have in the hybrids I was creating:

• Bushy, well branched plants;

The first generation of Australian vireya hybrids (1960s and 1970s) used species such as *R. konori*, *R. laetum*, *R. aurigeranum*, *R. leucogigas*, *R. zoelleri* and *R. macgregoriae*, all with attractive flowers, however with the exception of *R. macgregoriae*, they are leggy and shy-branchers, characteristics passed onto many of their hybrids. More recent introductions such as *R. inundatum*, *R. rutteni*, *R. suaveolens* and *R. goodenoughii* provided scope to produce bushier and less leggy hybrids.

• Vigour and disease resistance;

- There are a lot of registered rhododendron hybrids that have nice flowers but are lacking in vigour or a very susceptible to disease, and in my view are not sufficiently vigorous to have warranted registration. Some of the early introductions such as *R. aurigeranum*, *R. laetum* and *R. macgregoriae* are susceptible to a range of fungal diseases, a trait passed onto many of their hybrids.
- Healthy root system;
- Some vireyas have weak root systems that make them unsuitable as potted or garden bed specimens. Many of my hybrids were discarded in the first 4–5 years (& prior to flowering) because they did not develop a healthy root system.

• Early and reliable flowering;

- My preference is for vireyas to flower in the cooler months to avoid misshapen trusses that can occur when flowers open in hot weather.
- Flower-leaf size ratio;
- I don't like the appearance of small trusses on large-leafed plants, so I discarded hybrids on flowering when they displayed this characteristic.
- New colour combinations (& particularly for small, compact plants);

Many of the early introduction of small vireya species are red or pink flowering (*R. rubineiflorum*, *R. pauciflorum*, *R. retusum*, *R. womersleyi*, *R. gracilentum*), and with red being dominant, this colour is expressed in their hybrids. The white flowering *R. anagalliflorum* is an exception, however by the time I

started hybridising this species was no longer in cultivation in Australia so I used one of its hybrids (*R. rubineiflorum* \times *R. anagalliflorum*). More recent introductions of smaller vireya species, including *R. acrophilum* (yellow-orange), *R. rousei* (white) and *R. renschianum* (yellow-orange) provides opportunities to breed small, compact vireyas with other colours.

Selection of parents used in crosses

I would be stretching the truth if I said I had hard and fast rules on the selection of parents for crosses, however over time I preferred to use particular parents over others.Factored into the selection included:

- F1 crosses
- About half of the total crosses I completed are between species. This was driven in part by curiosity as many of the species were absent or under-represented in the parentage of registered hybrids. I also found that vigour was more regularly expressed in F1 crosses compared with F2 or back crosses. None of my F2 crosses produced vigorous plants.
- Fresh pollen
- Whilst I did freeze pollen, I had poor results with it and tended to rely on fresh pollen. This did limit crosses between parents that were flowering around the same time.
- Compatibility
- Noting there is increased likelihood of sexual incompatibility with a large difference in style length, I tended to avoid crosses between very large and very small flowering parents to reduce the number of unsuccessful crosses.

I also selected parents that had one of more of the following attributes:

- Bushy;
- Hardy & disease resistant;
- Floriferous or showy;
- Small, compact habit;
- White, tubular flowers with a full truss (I particularly like species such as *R. suaveolens*, *R. luraluense*, *R. loranthiflorum*, *R. inundatum* and *R. goodenoughii*);
- Suitable for hanging baskets (small, branching and/or pendulous).

I used over 200 different parents in my hybridising program of which there are 34 that I used repeatedly (seven times or more) for their desirable attributes (Table 2).

Parent	Desirable Attributes						
	Bushy	Hardy (inc disease resistance)	Floriferous /showy	Small /compact	White tubular flowers	Suits hanging baskets	
(R. macgregoriae × R. rubineiflorum)	Y		Y	Y		Y	
(R. rubineiflorum × R. anagalliflorum)	Y		Y	Y		Y	
(R. rubineiflorum × R. pauciflorum)	Y		Y	Y		Y	
R. acrophilum	Y			Y		Y	
R. caliginis		Y		Y		Y	
R. 'Clare Rouse'		Y	Y				
R. goodenoughii	Y	Y	Y		Y		
R. gracilentum			Y	Y		Y	
R. hellwigii			Y				
R. inundatum	Y	Y	Y		Y		
R. jasminiflorum	Y	Y	Y		Y		
ssp. heusseri							
R. javanicum		Y					
R. kochii	Y	Y					
R. laetum							
R. leptanthum	Y		Y	Y		Y	
R. loranthiflorum	Y	Y	Y		Y		
'Sri Chinmoy'							
R. macgregoriae	Y	Y	Y			Y	
R. orbiculatum			Y			Y	
R. pauciflorum	Y					Y	
R. quadrasianum	Y			Y		Y	
ssp. rosmarinifolium							
R. rarilepidotum	Y	Y	Y				
R. retusum	Y	Y	Y			Y	
R. 'Rogue Red'	Y	Y		Y		Y	
R. rubineiflorum	Y			Y		Y	
R. ruttenii		Y	Y		Y		
R. sessilifolium	Y		Y				
R. 'Simbu Sunset'		Y	Y				
R. suaveolens				Y	Y		
R. 'St Valentine'	Y	Y	Y	Y		Y	
R. tuba	Y	Y					
R. viriosum	Y	Y	Y			Y	
R. womersleyi	Y			Y		Y	
R. wrightianum	Y			Y		Y	
R. zoelleri			Y				

Table 2: Parents used frequently in the hybridising program and rationale for their selection.



Figure 1: {[mac × rub] × [rub × pauc]} × rousei.
Figure 2: polyanthemum × (mac × rub).



List of hybrids worthy of registration

Whilst the 'merit test' is very subjective, I've compiled a list of 48 hybrids (Table 3) that I believe satisfy the bulk of the desirable attributes. From this list I've already registered 16 of them. I will register a few more however I'm unlikely to put all of them through the registration process.

I'm pleased that about half of the hybrids in the list (23 of the 48 crosses) are small to medium size hybrids (suitable for hanging baskets), particularly given these crosses are fiddlier to complete and easier to miss the seed collection. Over time I'll establish all of these in hanging baskets, as grown this way brings out their full potential. Two awaiting registration that I particularly like are {[(R. *macgregoriae* × R. *rubineiflorum*) × (R. *rubineiflorum* × R. *anagalliflorum*)] × R. *rousei*} and [R. *polyanthemum* × (R. *macgregoriae* × R. *rubineiflorum*] – see Figures 1 & 2.

Parents that are prominent in the list include (R. macgregoriae $\times R$. rubineiflorum), R. inundatum (re-classified as R. \times psammogenes var. inundatum), R. loranthiflorum 'Sri Chinmoy', R. luraluense, R. goodenoughii and R. 'Simbu Sunset'.

Some of these hybrids are already in the collection at Dandenong Ranges Botanic Gardens, and I aim to have others propagated for the collection and from there, available for distribution to interested ARS members. *****

Registered name	Female parent		Male parent	Year
R. 'Coco Williams'	R. suaveolens	х	R. laetum	2002
R. 'Diana Manson'	(R. viriosum × R. jasminiflorum)	х	R. 'Simbu Sunset'	2004
R. 'Etty'	R. javanicum	x	R. rarilepidotum	1993
R. 'Flourish of Trumpets'	R. 'Simbu Sunset'	x	R. suaveolens	2007
R. 'Gypsy Bell'	R. pauciflorum	x	R. womersleyi	1998
R. 'Highland Bonsai'	R. luraluense	х	R. womersleyi	2000
R. 'Joan McClelland'	R. viriosum	x	R. rarilepidotum	2001
R. 'Little Lotsky' R. 'Pixie Star'	(R. macgregoriae × R. rubineiflorum)	х	(R. rubineiflorum × R anagalliflorum)	2000
R. 'Lucy Rouse'	R. goodenoughii	х	R. 'Simbu Sunset'	2006
R. 'Pink Organdy'	Unknown	х	Unknown	2011
R. 'Sarah Ormiston'	R. macgregoriae	х	R. luraluense	2001
R. 'Simon Begg'	R. kochii	х	R. macgregoriae	2005
R. 'Stonehaven'	R. goodenoughii	х	(R. javanicum × R. rarilepidotum)	2005
R. 'Sushmitam Rouse'	R. sessilifolium	х	R. 'Clare Rouse'	1998
R. 'Vicky Griffith'	R. luraluense	х	R. inundatum	2004
R. 'Olivia Manson'	R. 'Simbu Sunset'	х	R. luraluense	2002
	(R. amaniense × R. championae)	х	R. amaniense	2003
	(R. amaniense × R. championiae)	х	R. latouchiae	2003
	(R. macgregoriae × R. rubineiflorum)	х	R. pauciflorum	2000
	(R. rubineiflorum x R. pauciflorum)	x x	(R. rubineiflorum x R. anagalliflorum)	2004
	(R. rubineiflorum × R. pauciflorum)	х	R. macgregoriae	1998
	(R. viriosum × R. jasminiflorum)	х	R. ruttenii	2002

Table 3: List of "registration-worthy" hybrids.

Registered name	Female parent		Male parent	Year
	{(R. macgregoriae × R. rubineiflorum) × (R. rubineiflorum × R. anagalliflorum)}	x	R. rousei	2011
	{(R. rubineiflorum × R. þauciflorum) × R. womersleyi}	х	R. alticola	2003
	{[R. macgregoriae × R. rubineiflorum] × [R. rubineiflorum × R. pauciflorum]}	×	R. rousei	2001
	R. alticola	х	R. gracilentum	2004
	R. caliginis	х	R. womersleyi	2002
	R. 'Clare Rouse'	x	R. ruttenii	2002
	R. goodenoughii	х	R. jasminiflorum ssp. heusseri	2006
	R. inundatum	х	R. 'Simbu Sunset'	2004
	R. inundatum	х	R. goodenoughii	2004
	R. kochii	х	R. 'Simbu Sunset'	2002
	R. leptanthum	х	R. pauciflorum	2001
	R. leptanthum	х	R. caliginis	2001
	R. leptanthum	х	R. caliginis	2003
	R. luraluense	x	(R. macgregoriae × R. rubineiflorum)	2003
	R. luraluense	x	R. alticola	2003
	R. multinervium	х	(R. loranthiflorum x R. zoelleri)	2002
	R. polyanthemum	x	(R. macgregoriae × R. rubineiflorum)	2001
	R. radians	х	R. christianae	2008
	R. saxicolum	х	R. 'Alba Magnifica'	2012
	R. 'Saint Valentine'	х	R. gracilentum	2005
	R. 'Sri Chinmoy'	х	R. 'Simbu Sunset'	2002
	R. 'Sri Chinmoy'	x	R. suaveolens	2006
	R. suaveolens	х	R. ruttenii	2002
	R. wrightianum	х	R. caliginis	2001
	R. wrightianum	х	R. 'Simbu Sunset'	2005
	R. acrophilum	x	R. 'Saxon Blush'	2010

Deregistration of the Australian Rhododendron Society Incorporated

GRAHAM PRICE

SECRETARY, AUSTRALIAN RHODODENDRON SOCIETY INC.

Members of the Australian Rhododendron Society will be aware that several of the Society's activities have been handled by the National Council on behalf of the ARS Inc's four branches. These activities included (I) the promotion and organisation of conferences; (2) organisation of plant hunting expeditions; (3) registration of new hybrids; and (4) production and distribution of our annual journal, *The Rhododendron*.

Over the past decade a significant number of members have expressed a decreasing interest in many of the National Council activities, especially having to pay for the journal as part of their annual membership levy. After extensive discussion each of the four branches decided that they no longer wanted National Council to continue with its activities and that the incorporated national body should be deregistered.

The deregistration procedure was complicated and involved special general meetings being held by each branch at which the question of deregistration was put to the members and voted on. One of the requirements was that at least 75% of the total membership of the Society had to agree to deregistration. Another requirement was that after clearing all the Society's debts and liabilities any surplus assets had to be distributed to the branches in proportion to the membership levies that had been collected over the previous ten years.

In February 2022 an application for deregistration of the ARS Inc. was submitted to the Attorney-General's Department, Consumer and Business Services of the South Australian Government. A delay in considering the application was caused by the Covid19 pandemic but eventually it was accepted in September 2022. It is expected that final dissolution of the incorporated society will occur when its name has been listed on the Consumer and Business Affairs website for one month and then published on the SA Government Gazette, probably in late 2022.

Because the national body of the Society will no longer exist all activities conducted between the branches will be conducted under a voluntary Memorandum of Understanding (MOU) between the branches, with each branch responsible for the cost of its own activities. This includes the previously mentioned journal, research support, registration of new hybrids and any field expeditions. An MOU between the branches has been drafted and is currently with each branch for their review. *****

The living collection of R. viriosum and R. lochiae at Dandenong Ranges Botanic Gardens

ANDREW ROUSE

Update

For much of 2020 and 2021, Covid lockdowns prevented the the Australian Rhododendron Society from our regular acitivies at the Dandenong Ranges Botanic Gardens (DRBG), so it was a huge relief to find the collection of *R. viriosum* and *R. lochiae* had survived our extended absence from the gardens.

We have successfully propagated and hold 40 of the 47 discrete wild collected accessions of *R. viriosum* and *R. lochiae*, and now hold approximately 300 potted plants. A permanent potted collection has now been established on a dedicated bench in the new shade house at Dandenong Ranges Botanic Gardens (Figure 1) comprised of plants propagated from wild collected cuttings. These plants form our reference collection that we can propagate and distribute plants for DRBG and other botanic gardens.



Figure 1: New shade house at Dandenong Ranges Botanic Gardens.

Flowering

At least one accession from each mountain-top has flowered. Accessions with horticultural potential or of note include the following:

R. viriosum, Devil's Thumb form Collection Number: DMC1431B DRBG propagation Number: N16127 One of the more floriferous and vigorous forms of *R. viriosum*, with deep red pendulous flowers (Figure 2).



Figure 2: R. viriosum, Devil's Thumb form.

R. viriosum, Thornton Peak form Collection Number: LS456B
DRBG Number: N15140
A vigorous and floriferous form of *R. viriosum*. A lighter shade of red to that of the Devil's Thumb form (Figure 3).

R. lochiae, Bellenden Ker form
Collection Number: DMC1393
DRBG Number: N16100
Flowered in October 2021, possibly the first time this form has flowered in cultivation (Figure 4).

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Above, Figure 3: R. viriosum, Thornton Peak form.

Below, Figure 4: R. lochiae, Bellenden Ker form.





R. lochiae Bell Peak form.

R. lochiae Bell Peak form

This form of *R. lochiae* has flowered at DRBG however was not photographed, so photo provided (Figure $_5$) is a flowering specimen on Bell Peak. It is the most floriferous form of *R. lochiae* with up 8 flowers in the truss.

Next Steps

Parks Victoria and ARS–Vic have identified a site for the North Queensland Precinct, to be known as the Australian Cloud Forest Garden. Parks Victoria contracted Andrea Proctor Landscapes (APL) to prepare a design for the Australian Cloud Forest Garden, and in consultation with ARS–Vic, is proceeding with a modified version of APL's design.

The Australian Cloud Forest Garden and the adjacent \$6.3M Australian Garden designed by Phillip Johnson, have the potential to be major drawcards for the Dandenong Ranges Botanic Gardens. Due to their proximity, visitors are likely to walk through both attractions.

ARS–Vic has pledged \$180,000 towards the Australian Cloud Forest Garden, comprising \$100,000 bequest from Simon Begg and \$80,000 of ARS–Vic funds. This along with \$150,000 secured by Parks Victoria from the Victorian Government's *Growing Victoria's Botanic Gardens Grants Program*, provides the funding required to proceed with Phase 1 of the design.

Works are scheduled to commence on the Australian Cloud Forest Garden in Autumn 2023.

ARS–Vic and Parks Victoria are seeking to distribute specimens of R. *virosum* and R. *lochiae* to Australian and overseas botanic gardens, as part of the program to conserve these species in cultivation, and work has commenced with the necessary permits. \Re

Bush to bananas and back A Currumbin Valley journey

DALE SCHUBERT

ANDREW ROUSE

Dale Schubert on Mt Kinabalu, ARS trip 2018.



Figure 1: Sunset from Nicholl Scrub National Park.

The forests and waterways of Currumbin Valley had long been protective and productive lands for the Yugambeh people. Timber getters were attracted to the valley by species such as red cedar, blackbean and silky oak, whilst graziers and farmers followed in their wake; bringing cattle and bananas to land where the forests once stood. Latterly, scenery, greenery, rock pools and solitude attracts 'tree change' residents, cyclists, eco retreat clientele and day tourists alike to the valley.

I had always been attracted by the remnant forests and fauna here, so when circumstance and a suitable property became available in 2007, my wife and I took the opportunity presented. Our property is just under one acre, faces north and nested between the lower foothills of Mount Tomewin. We are bounded by several 15-acre properties and the 27-hectare Nicholl Scrub National Park (Figure 1). Temperatures seldom exceed 320°C in summer and winter days warm though minimums can approach 10°C, thankfully frosts are prevented by slope and tree cover. Being a north facing slope, bananas crops had been cultivated until the late 1970s, subsequently the land being colonised by camphor laurel trees and a smattering of native species.

Several threatened or endemic plant species are present including spectacular/unusual species such as the red bopple nut (*Hicksbeachia pinnatifolia*),

fine leaf tamarind (*Lepiderema pulchella*), watermelon tree (*Syzygium moorei*) and ball fruited walnut (*Endiandra globosa*). The proximity of Nicholl Scrub National Park was particularly important in deciding to purchase – our property is frequented by swamp wallabies, red necked pademelon, echidna, koala, bandicoots, mountain brushtail possum, sugar gliders, Richmond River birdwing butterflies, pink underwing moths, and at last count over 90 bird species. The small National Park is obviously the key refuge for all the aforementioned species – it is particularly significant in being recognised as the only known location in the area, which supports a complete altitudinal sequence of five different forest types: from araucarian vine forest on the ridge, to bangalow palm forest in the lower sections.

Upon occupying the property, we immediately set about removing *Agapanthus, Murraya, Duranta* and other incongruous species – none of which supported my utopian desire. Over the next two years every camphor laurel tree and sapling was also removed. The species is native to China and Japan but reputed to have been introduced in the 1930s, (almost ironically, for the shade provided by the dense canopy). The abundant seed has since been spread by native fruit pigeons to many neglected lands, in suitable valley bottoms and adjoining slopes in northern NSW and SE Queensland. Though totally dominating these 'forests' to the exclusion of almost all indigenous species, it provides roosting and feeding opportunities for winged frugivores like native pigeons. Thankfully these birds carry the seed of many plant species from remnant forests, near and far. Therefore, a reasonable 'bank' of suppressed native seedlings was present upon our site, affording a head start in re-establishing my desired regeneration.

I'd also dragged an absolute cornucopia of plants including rare palms, cycads, rhododendron and orchids with me, I quickly needed to find permanent locations for them.

Removing the camphor laurel canopy provided some excellent opportunities to establish various cycads, which given sufficient drainage and light continue to slowly expand to their potential. Most Mexican species of *Ceratozamia, Dioon* and *Zamia* adapted well, possibly too well – as a native weevil is pollinating the cones of some species. Species from tropical regions of South America have proven more sensitive to cold winters, whilst South African *Encephalartos* species resent the ever-encroaching shade.

Natural recruitment was augmented with an array of species from North Queensland forests. *Austromuellera trinervia, Stenocarpus cryptocarpus, Lepiderema hirsuta, Sarcotoechia serrata, Syzygium wilsonii, Sankowskya stipularis, Prumnopitys ladei* et al. All have grown remarkably well, tolerating suboptimal temperatures, but obviously appreciating the ~1500mm annual rainfall.

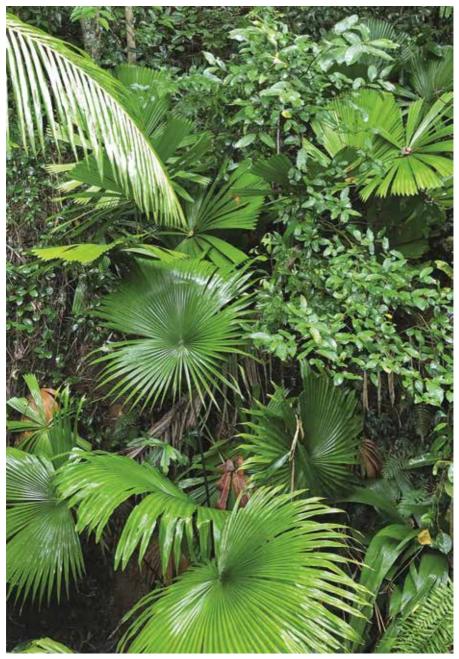


Figure 2: Kerriodoxa elegans and Licuala ramsayi.



Figure 3: Cyathea cooperi.



Figure 4: Schombergkia splendida.

Various species of rare palm species have been tried. Species of *Dypsis* from Madagascar have proven generally well suited, as have several from New Caledonian species – neither being a surprise considering the latitudes of their origin. More unexpected was the successful establishment of species from equatorial latitudes i.e. *Areca vestaria, Licuala* ssp., *Kerriodoxa elegans* (Figure 2) and the four species of *Johannesteijmannia*. These are all exceedingly slow growing, however the startling leaf shapes, sizes, colourful crowns or brightly coloured emerging leaves make them well worth the patience and effort.

Rhododendrons and orchids have been the most challenging element to incorporate into the landscape. Initially the intense sunlight in summer and heavy winter shade presented a problem – offending trees were thinned to allow morning sun to penetrate, treeferns (*Cyathea cooperi* – Figure 3) were planted to provide summer shade and garden beds raised to improve soil drainage. A select group of vireya species thrived for many years, of particular note was the dwarf form of *R. zoelleri* (West Papua), *R. sessilifolium*, *R. aurigeranum* and ubiquitous hybrids such as *R.* 'Liberty Bar', *R.* 'Sweet Wendy' and *R.* 'Simbu Sunset'. The species flourished for many years, however as surrounding tree canopies expanded, a gradual decline was evident. These have since been relocated to a shade structure in pots, to which they are generally better suited. The vireya hybrids however, continue to prove their resilience, flourishing in less than optimal conditions.

Cyathea ferns have proven to be wonderful hosts for wandering orchid roots. Epiphytic orchids especially revel in the porous, yet water retentive structure of the root mass. Genera as varied as *Oncidium*, *Cattleya*, *Coelogyne*, *Dendrobium*, *Dendrochilum*, *Schombergkia* (Figure 4), *Brassia*, *Brassavola* and *Leptotes* had established and flowered in profusion in this way during neutral and La Niña wet seasons. Extreme weather conditions during the 2019 El Niño weather event however reduced many to miserable withered masses. Accordingly, all but the most resilient orchid species have been 'rehomed' to a more controlled environment.

2023 marked the 15th year we have occupied our 'plot'. The sprawling forest landscape we set out to create is constantly evolving – tree growth alters shade and available soil moisture; they may also be felled by storms or simply die – both to more immediate and dramatic effect. Time and observation have incrementally altered my desire to cultivate so many and varied plant species. Species observed to be potential garden escapees are frequently culled. Greater satisfaction is gained from observing the forest and fauna slowly continue to reclaim the landscape. How pigeons, bowerbirds, orioles and myriad others constantly 'introduce' propagules of different plant species – both desirable and not. Our revised role is simply to enjoy the continual processes of succession and lend a hand keeping invasive species at bay. *****

New Registrations 2021–2022

Lesley Eaton

The following is a listing of registrations submitted by the Australian Rhododendron Society plant registrar and approved by the Royal Horticultural Society (RHS) during the year 2021/2022.

Colour numbers refer to the RHS Colour Chart. Accompanying colour names are taken from *A Contribution Towards Standardization of Colour Names in Horticulture*, R.D. Huse and K.L. Kelly, edited D.H. Voss (1984).

Abbreviations used: H hybridized by

- G grown to first flower
- S selected by
- N named by
- I introduced by
- R registered by

Included in the description are broad colour definitions after the RHS Colour Chart numbers. This will enable members without access to the chart to have some idea of the colour of the flower.

For information on registration and registration forms, please contact Lesley Eaton, lesley.eaton@bigpond.com

'Ava' Vireya hybrid of 'Kisses' × unknown. S: Neil Puddey (2012). G: Neil Puddey (2012). N: Neil Puddey. (2019). I: Neil Puddey (2019). R: Neil Puddey (2019). Truss: flat, consisting of 5 tubular funnel-shaped flowers. Corolla: 60mm × 50mm. Lobes: 5 flat. Buds 134D (light green). Corolla: Inside 36B (light red pink) fading to 16D (light yellow) at the centre. Outside: 36B (light red pink) on petal edge, predominately 16D (light yellow). Calyx: Length 25mm. Calyx colour: green with a reddish blush. Leaves: Elliptic. Length: 120mm × 50mm. Leaf margin: Upcurved. Upper surface: Matt. Leaf margin at base: Attenuate. At apex: Aristate. Type of indumentum: Scales. Colour of leaf indumentum: Green when young, brown when mature. Plant height: $1.2m \times 60cm$ in 8 years. Flowering time: Autumn and periodically through the year.

'Bob's Daughter' Vireya hybrid of 'Kisses' × 'Bob's Choice'. H: Neil Puddey (2012). G: Neil Puddey (2017). N: Neil Puddey (2017). R: Neil Puddey (2018). Truss: Flat consisting of 5 tubular funnel-shaped flowers. Corolla: 45mm × 35mm. Lobes: 5 wavy. Corolla: Inside 36B (light red pink) fading to 16D (light yellow) centre. Outside 36B (light red pink) edge but predominantly 16D (light yellow). Distinctive spots of 32A (orange red) at petal union. Calyx: Length 20mm. Calyx colour pinkish-green yellow to pale red. Leaf shape: Elliptic.

Length: $90\text{mm} \times 45\text{mm}$. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base Attenuate. At apex Acute. Colour of leaf indumentum when young: Green and brown when mature. Plant height: $1\text{m} \times 50\text{cm}$ in 5 years. Flowering time: Spring.

'Eddie's Choice' Vireya hybrid of 'Lord of the Rings' × unknown. S: Neil Puddey (2015). G: Neil Puddey (2019). N: Neil Puddey (2021). I: Neil Puddey. (2021). R: Neil Puddey (2021). Truss: Flat consisting of 7 tubular funnel-shaped flowers. Corolla: 65mm × 70mm. Lobes: 5 wavy. Buds: 15D (light yellow). Corolla: Inside 30D (medium orange) with 9B (medium yellow) edge. Outside: 9B (medium yellow). Calyx: Length 25mm. Calyx colour: 135D (light green). Leaf shape: Broadly elliptic. Length: 130mm × 60mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base attenuate. At apex cuspidate. Scales with green juvenile indumentum maturing to brown. Plant height: 1.2m × 65cm in 7 years. Flowering time: Spring/ summer. Plant with branching strong growth. Named in honour of a grandson. 'Lachie John Grayson' Elepidote hybrid of 'Jeanette Clarke' × R. arboreum (red form introduced by Jack O'Shanassy). H: Laurie Begg (2003). G: J.C. Gray (2010). N: Sylvia Gray (2010). I: Brindabella Country Gardens. R: Sylvia Gray (2019). Truss: Ball consisting of 16 campanulate shaped flowers. Corolla: 50mm × 70mm. Lobes: 5 wavy. Buds: 58B (crimson red). Corolla: Inside 69A (palest pink) with 58B (crimson red) edge. Outside 58B (crimson red) fading to 69C (pale mauve pink). Many crimson spots on upper lobes. Leaf shape: Broadly elliptic. Length: 95mm × 40mm. Leaf margins: Flat. Upper surface: Semi-glossy dark green. Leaf shape: Base Acuminate. At apex: Acute. Plant height: 2m × 1.5 m in 10 years. Flowering time: September. Hardiness: Very heat and sun tolerant. Free flowering, vigorous. Flowers have pale pink inner with crimson edging giving a bi-colour effect.

'Malone's Pink Perfume' Elepidote hybrid of *R. fortunei* × unknown. H: Bob Malone (1983). G: Emu Valley Rhododendron Garden (1988). N: Emu Valley Rhododendron Garden (2021). R: Juanita Wood (2021) Truss: Open umbel consisting of 9 widely funnel-shaped flowers. Corolla: 60mm × 30mm. Lobes: 7 wavy. Buds: 58 C deep rose pink. Corolla: Inside 73B (rose pink). Outside 57D (bluish rose pink) Calyx: 1mm, colour 178B (grey red). Leaf shape: Elliptical. Length: 115mm × 35mm. Leaf margin: Flat. Upper surface: Matt. Leaf margin: At base: Oblique/asymmetrical. At apex: Obtuse. Plant height: 1m × 1m in 10 years. Flowering period: Mid October. Slightly fragrant. Named in memory of a keen hybridiser and valuable member of Emu Valley Rhododendron Garden.

'**Miss Moffy'** Vireya hybrid of 'Toff' × 'Blondi'. H: Neil Puddey (2005). G: Neil Puddey (2009). N: Neil Puddey (2018). I: Neil Puddey (2021). R: Neil Puddey



Above: R. 'Eddie's Choice'. Below: R. 'Our Dorothy'.



(2021). Truss: Flat consisting of 5–7 tubular-funnel shaped flowers. Corolla: 60mm \times 80mm. Lobe margins: Flat. Buds: 1C (light greenish yellow). Corolla: Inside 2A (medium yellow). Outside: 2A (medium yellow). Calyx: Length 20mm. Calyx colour 150C (medium yellow green). Leaf shape: Broadly elliptic. Length: 100mm \times 60mm. Leaf margin: Flat. Upper surface: Glossy. Leaf shape: at base attenuate, at apex obtuse. Indumentum: When young, brown, when mature, brown. Plant height: 1.5m \times 60cm in 8 years. Flowering period: Spring/Summer. Hardiness: Average. Plant has strong bushy habit. Named after a daughter-in-law.

'Our Dorothy' Vireya hybrid of 'Lord of the Rings' \times 'Pink Jazz'. H: Neil Puddey (2012). G: Neil Puddey (2019). N: Neil Puddey (2021). I: Neil Puddey (2021). R: Neil Puddey (2021). Truss: Flat consisting of 3–4 tubular-funnel shaped flowers. Corolla: 80mm \times 75mm. Lobes: 6. Lobe margins: Wavy. Buds: 155D (white). Corolla: Inside 43D (red pink) fading to 1D (light yellow). Outside: 43D (red pink) on edges, predominantly 1D (light yellow). Calyx: Length 25mm. Calyx colour: Green. Leaf shape: Ovate. 105mm \times 55mm. Leaf margin: Upcurved. Upper surface: Matt. Leaf shape: At base Attenuate. At apex: Obtuse. Leaf indumentum: when young, white, when mature, brown. Plant height: Im \times 65cm in 6 years. Flowering period: Spring and Autumn. Hardiness: Average. Named after Neil's mother, Dorothy Puddey.

'Jane Tonkin' Vireya hybrid of *R. konori* × *R hellwigii*. H: Bill Taylor (dec). (2000). G: Bill Taylor (dec). (Unknown when first flowered). N: Kaye Hagan (2021). R: Kaye Hagan (2021). Truss: Lax consisting of 3-6 tubular-campanulate shaped flowers. Corolla: 70mm × 70mm. Lobe margins: Wavy. Buds: 53C (rich crimson) Corolla: Inside: 53C (rich crimson). Outside: 53C (rich crimson). Leaf shape: Ovate. Length: 100mm × 53mm. Leaf margin: Flat. Type of indumentum: Scales. Upper surface: Flat. Plant height: 1.3m × 80cm in 6 years. Flowering period: Spot flowering throughout the year. Named in honour of plants person Jane Tonkin.

'Our Kathryn' Vireya hybrid of 'White Rajah' × 'Highland White Jade'. H: Neil Puddey (2015). G: Neil Puddey (2019). N: Neil Puddey (2021). I: Neil Puddey (2021). R: Neil Puddey (2021). Truss: Flat truss consisting of 5 tubular-funnel shaped flowers. Corolla: 65mm × 50mm. Lobes: 6 flat. Buds: 142D (light green). Corolla: Inside: 155C (white). Outside: 155C (white). Calyx: Length: 25mm. Colour: 182A (red brown). Leaf shape: Elliptic. Length: 130mm × 50mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: at base, attenuate, at apex, obtuse. Indumentum: when young, green, when mature, brown. Plant height: $1.5m \times 75cm$ in 6 years. Flowering time: Spring/ summer. Lightly scented. Named after Neil's wife, Kathryn. **'Rosalind Mary'** Elepidote hybrid of 'Odee Wright' x *R. macabeanum*. H: M. Kupsch (1997). G: M. Kupsch (2006). N: M. Kupsch (2020). R: M. Kupsch (2021). Truss: Dome consisting of 12 campanulate-shaped flowers. Corolla: 46mm \times 52mm. Lobes: 5 flat. Buds: 26C (light apricot/orange). Corolla: Inside: 155A (greenish-white). outside: 155D (pale greenish-white). 185A (rich reddish-brown) blotch in centre fading to dots. Leaf shape: Oblong. Length: 100–140mm \times 40–45mm. Leaf margin: Flat. Upper surface: Matt. Leaf shape: at base, rounded, at apex, pointed. Plant height: 1.5m \times 1.2m in 20 years. Flowering period: Mid October. Name honouring a friend of Emu Valley Rhododendron Garden.

'Saint Leu Sunset' Vireya hybrid of 'Our Dorothy' × 'Bee Jay Bay'. H: Neil Puddey (2015). G: Neil Puddey (2020). N: Neil Puddey (2020). I: Neil Puddey (2020). R: Neil Puddey (2021). Truss: Flat consisting of 4–5 tubular-funnel shaped flowers. Corolla: 60mm × 50mm. Lobes: 5 wavy. Buds: 154D (yellow green) tipped 35C (pinkish orange). Corolla: Inside: 40C (orange red) on the petals fading to (12C (light yellow) in the centre. Outside: 40C (orange red) on outer edge fading sharply to 12C (light yellow) on the tube. It is distinctly bi-coloured. Calyx length: 20mm. Calyx colour: green with red edge. Leaf shape: Elliptic. Length: 95mm × 50mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base, attenuate, at apex, ovate. Indumentum: when young, green, when mature, brown. Plant height: $1m \times 50cm$ in 6 years. Flowering period: Spring. The flowers of this hybrid have very vibrant red orange flowers. Named after a famous surfing break, Réunion Island.

'Simon Begg' (front cover) Vireya hybrid of R. kochii × R. macgregoriae. H: Andrew Rouse (2005). G: Andrew Rouse (2015). N: Andrew Rouse (2021). R: Andrew Rouse (2021). Truss: Open consisting of 14-20 tubular-campanulate shaped flowers. Corolla: 25–30mm × 25–30mm. Lobes: 5 wavy. Buds: Translucent through to a very light green, with unopened flowers a light green. Corolla: Inside: White flushed to pink 55C on lobes. Outside: Unopened buds green (150B). Open flowers: the tube base is faint green-white (149D) gradating to off-white then flushed to pink (55C) on lobes. Leaf shape: Elliptic. Length: 50-100mm × 20-40mm. Leaf margins: Slightly wavy. Upper surface: Glossy green. Leaf shape: At base: tapering. At apex: Acuminate. Type of indumentum: Scales. Plant height: 2m × 1m in 15 years. Flowering time: December (Early summer Australia). Hardiness: Hardy. Multi-branched upright bush, floriferous, flowers on long light-green Pericles $(30 \times 35 \text{ mm})$ Sharply angled at junction with flower, anthers red-brown, bright green pistil. No scent. Named in honour of Simon Begg in recognition of his contribution to the Australian Rhododendron Society and his instrumental role in the project that led to the re-collection of Australia's native rhododendrons from the mountain tops in tropical North Queensland.





Above: R. 'Touch the Sun'.

Left: R. 'Sunny Coast Harry'.

'Sunny Coast Harry' Vireya hybrid of 'Dixie' \times unknown. S: Neil Puddey (2018). G: Neil Puddey (2018). N: Neil Puddey (2019). I: Neil Puddey (2021). R: Neil Puddey (2021). Truss: Flat consisting of 5–7 tubular-funnel shaped flowers. Corolla: 70mm \times 75mm. Lobes: 5 wavy. Buds: 28C (light orange). Corolla: Inside 23D (light yellow orange) darkening to 26A (medium orange). Outside: 26A (medium orange). Darker red/orange blotch at petal intersection. Calyx length: 20mm. Calyx colour: 132D (medium green). Leaf shape: Broadly elliptic. Length: 100mm \times 55mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base: Attenuate. At apex: Obtuse. Leaf indumentum: when young, brown, when mature, brown. Plant height: 2m \times 80cm in 7 years. Flowering period: Periodic. Hardiness: Average. Beautifully blended colours. Named in honour of a grandson.

'Touch the Sun' Vireya hybrid of 'Superfleur' × 'Scarlet O'Hara'. H: Neil Puddey (2013). G: Neil Puddey (2013). N: Neil Puddey (2021). I: Neil Puddey (2021). R: Neil Puddey (2021). Truss: Flat consisting of 6–7 tubular-funnel shaped flowers. Corolla: 70mm × 60mm. Lobes: 5 very wavy. Buds: 24D (light orange). Corolla: Inside: 24D (light orange) darkening to N30A (light red) edge. Outside: Tube 24D (light orange) to N30A (light red) frill. Calyx length: 20 mm. Calyx colour: 46A (dark purple red). Leaf shape: Broadly elliptic. Length: 150mm. Width: 75mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base: Attenuate. At apex: Obtuse. Colour of leaf indumentum: when young: red/brown, when mature, red/brown. Plant height: $1.5m \times .6m$. Flowering period: Summer. Hardiness: Average. Dark pigmentation of foliage and stems is very attractive. **'Woopi Do'** Vireya hybrid of 'Saxon Glow' × 'Noah's Gold'. H: Neil Puddey (2016). G: Neil Puddey (2020). N: Neil Puddey (2021). I: Neil Puddey (2021). R: Neil Puddey (2021). Truss: 3 flat tubular-funnel shaped flowers. Corolla: 30mm × 25mm. Buds: 16D (light yellow). Corolla: Inside: 25C (light orange) to 11C (light yellow). Outside: 25C (light orange) edge to 11C (light yellow) tube. Calyx: Length: 10mm. Colour: light green/yellow with a reddish edge. Leaf shape: Elliptic. Length: 50mm × 25mm. Leaf margin: Upcurved. Upper surface: Glossy. Leaf shape: At base: Attenuate. At apex: Aristate. Indumentum: when young, green, when mature, brown. Plant height: 60cm × 35cm in 4–5 years. Flowering period: Spring. Hardiness: Average. Bushy, compact growth habit. Name is short for Woolgoolga. \Re



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