

THE RHODODENDRON NEWSLETTER

April 2015

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Australian Rhododendron Society, Victorian Branch Inc. (A5896Z)

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www.rhododendron.com.au

FACEBOOK: Do you have some interesting garden photos, information about your garden, visits or tours, etc., you have done, which may be of interest to other members? You are invited to send them to Prue Crome via email and she will put them on Facebook and/or the ARSV website. Email prue.crome@fcpl.net.au

2015 PROGRAMME

APRIL

Early April; Newsletter

Saturday 18th and Sunday 19th: Gardening and Plants Expo at Tesselaar Gardens 357

Monbulk Rd, Silvan, 9.00am-4.00pm. The ARSV will have a stand selling plants grown at the NRG. Helpers would be very welcome. Please contact Alex Pottage by email or phone (see back page).

Saturday 25th and Sunday 26th: Ferny Creek Horticultural Society Autumn Show. ARS members are very welcome to enter flowers, especially rhododendrons. For information see the Ferny Creek HS website or ring Pam Alsop 97551583.

MAY

SATURDAY 16TH , 2.00PM: ARS members are welcome to join the Ferny Creek HS Rhododendron Group to visit Simon and Marcia Begg's new garden at 13 Taruna Rise, Montrose. Please let Simon or Marcia know by email or phone if you are coming. mnbegg@gmail.com or 9728 4466

JULY

Newsletter

PRESIDENTS REPORT APRIL 2015

A very brief President's Report this month. Not so much because not much has been happening but more that it has just been business as usual.

Our propagator is full of cuttings of some very choice plants, hundreds of very desirable Rhododendron species and hybrids both Asiatic and vireya, that will in due course be made available to members.

Our nursery is full of plants propagated in recent years, again giving a wide range of species and hybrids that are now available to members. Contact either myself or any other committee member and arrange a time or any Tuesday will find a group of us at Olinda only too happy to help you access material you just can't get anywhere else.

Our seed-raising box (Rouse House) is full of germinating seedlings mostly from the annual RHS seed sale. These are primarily wild collected species that we will use to slowly improve the stock of plants of known origin in the garden at Olinda. There will also be more plants than we will need for the garden and so these will also become available to members.

The garden at Olinda has been fortunate to have the assistance of a group of Green Army workers over the last few months. Their work has made a noticeable difference to parts of the garden. The most obvious difference is in a particularly overgrown part of the old golf course. This is the start of the exciting work involved in making this ten acres a valuable part of our garden.

We have been honoured in recent weeks to be given the remaining stock of plants from the late Lyn Craven's collection. These will be housed in the Vireya House. Some, in due course, will be kept in a, soon to be added, annex to the Vireya House.

Work continues on Tuesdays on labelling plants at Olinda. In the last month this effort has concentrated on the main rockery. You will now find much better and more complete labelling of this important collection of plants.

I wrote last year about confused azaleas flowering in January. This year I have noticed a lot of old hybrid Rhododendrons flowering in February. I've seen what looks like the same hybrid almost fully out in flower in Brighton, in Elsternwick and the photo on page 11 is of an old plant in a tiny front yard in Carlton.

Don't forget the Garden Expo at Tesselaar's on the 18th and 19th of April. Come as a worker to man our stall if you can find the time. If not just come and buy some of our plants.

John O'Hara

NATIONAL PRESIDENT'S REPORT APRIL 2015

This is my second President's Report. In the first I set out what I hoped to achieve in my term. What I now do is report on progress. Sadly progress is glacial. But not without hope.

Study of Australia's Native Rhododendrons

What I reported back in January was that:

- * Professor Darren Crayn [James Cook University and Australian Tropical University] was to organise collection of the samples needed for the DNA study, funding permitting;
- * Dr Sue Gardiner [Principal Plant Scientist Plant Gene Mapping, The Horticulture and Food Research Institute of New Zealand Limited] was to supervise the DNA study on provenanced samples from North Queensland and other sources
- * the participating academics were to jointly author resulting research papers
- * the Society was to receive permitted provenanced cuttings for *ex situ* collections and be able to send helpers on collecting expeditions
- * the Society would contribute to funding
- * Darren's plan A for his funding had failed forcing him to plan B which would be slower
- * Sue and Darren would discuss the next steps

Nothing has changed. A couple of initiatives for funding have occurred to me. I am following these up. It would be wrong, at this stage, to be over hopeful or to name them. Maybe next time.

Securing the collections of Rhododendrons

I reported in January on ARSV's initiatives

- * GPS locations and accession numbers of all species and hybrids planted at NRG including those in the Vireya House
- * an electronic database for species and for hybrids containing multiple fields expected of a Botanic Garden –all this is well under way
- * migration of ARSV databases to databases Parks Victoria choose for NRG to embody, also, collections other than rhododendrons, such migration to be achieved electronically not manually- I understand discussions and planning are well under way
- * ARSV is actively considering backup power options to protect the Vireya House and propagation facilities in case of a power outage in hot conditions
- * ARSV is actively propagating backup plants and is willing to provide material to other Branches and Rhodo Groups

Since January ARSV is progressing its work. It records accessions with full provenance data including, very recently, the Lyn Craven collection. It now keeps records of material under propagation and growing on and what becomes of it. Emu Valley recognises the need for similar action. Its relationship with Royal Tasmanian Botanic Garden, Hobart both dictates that it uses the same databases and can expect help in establishing the same. However GPS work is yet to start and much needs to be done. I have yet to find out what the position is at Mt Lofty or Blackheath. I have much to do.

Apart from finding what the facts are at each Branch and Rhododendron Group I need to secure a co-ordinated action plan to ensure we, in Australia, do not lose any species or important hybrid we now have and that cuttings and plants are freely available

Reconsideration of the Society Structure for the 21st Century

As I anticipated in January nothing was about to happen unless I set out a proposal. I did this. I discussed my proposal with the Victorian Branch Committee and secured their agreement; with Emu Valley and with Southern Tasmania with, I believe their general acceptance; and with South Australian Branch with, at this stage, non acceptance. I need to have careful discussions with the South Australian Committee. Until I do this this item is going nowhere. I can see no progress at the upcoming National Council teleconference on 19th April unless it proves possible to organise a discussion with the South Australians beforehand

Visit to Branches and Rhododendron Groups.

I visited both Emu Valley and Hobart at the end of March. I found these discussions to be very useful and constructive. I will try to keep the lines of communication open. I have yet to visit either South Australia or Blackheath. I hope to do this before next I write

RHS Rhododendron, Camellia and Magnolia Group Centenary

The RCM Group is celebrating its centenary. There is a photo competition for members. The rules set by Pam Hayward are:

- 1) The image must be/have been photographed in 2015
- 2) It must be photographed by the entrant, who is a member of the Group
- 3) It must never have been published before and not shared with anyone other than immediate family or friends, and Pam. (Pam likes the cover to be a secret until RCM nears publication!)
- 4) The image must be portrait and, if of a single bloom, when viewed at the ideal size measure up to 145mm wide with at least 40mm border above and 50mm below
- 5) The image will ideally be taken of a living plant, rather than a cut bloom or spray. It should be taken outdoors, with natural light.
- 6) The image will be of the highest quality your camera will allow. It will need to be of such resolution that at the size required it will be 300 dpi and approximately 3000 x 4000 pixels or greater.
- 7) Pam can work with most image formats.

- 8) There will be a monetary prize for the winning entry.
- 9) Entries can be received until the end of September 2015 and Pam will notify the winner before Christmas.
- 10) Non-winning entries will then be entered into the traditional Group Photographic Competition for 2015.

Pam can receive emails with very large attachments but would suggest that you email small files in the first instance to minimise the email burden.

Pam sent subsequent emails that started by requiring that the species had been introduced into cultivation by 1915 but finished by stipulating discovery by 1915 after I raised the *Vireya* case and the difficulty identifying cultivation dates.

I am a RCM member and I can identify a few 1915, or earlier, *Vireya* discoveries. Will someone climb Bells Peak again to repeat Prue Crome's 2012 photograph of *R lochiaie* that I expect will appear in George Argent's second edition? No doubt there are many non *Vireyas* that qualify. And many at NRG, Emu Valley and Mt Lofty to choose from before 30th September. ARSV, I think is RCM member. Hopefully there are a few Society members who are RCM members.

Wouldn't it be great if the Antipodes could make the RCM Centenary cover!

Feedback

Back in January my expectations of feedback were muted. I received none. May RCM's competition provoke some!

Simon Begg

THE SPECIES COLUMN.

R leptothrium -Subsection *Azaleastrum*. [photo page 11]

Rhododendron leptothrium is an attractive little plant with pink flowers which tone in with bronze young foliage. We had a lot of these planted in the *Maddenia* Walk but most were lost over the last 10 years or so. They were growing on a dry shady bank and probably died due to lack of moisture. One plant growing in the Main Rockery near the creek is doing very well so I think we have learned from experience. Fortunately this species strikes well from cuttings and we have a number growing on in the shade-house.

Name:

The name means thin leaves. This should not be confused with "lepido", meaning scaly. The *Azaleastrum* Subsection shows some affinity with azaleas and are elipidote.

Distribution:

A fairly wide distribution from upper Burma, Yunnan, Sichuan, and Tibet, from 1500 to 3400 metres. It grows in the open or in mixed forests. It is said to be common in the wild but not well-known in cultivation due to it's lack of frost hardiness.

Characteristics:

This is a rather leggy species and can grow up to 7 metres high. The leaves are narrowly elliptic or lanceolate and up to 11 cm. long. The young foliage is particularly attractive and is shiny bronze, gradually turning green. The flowers are pale to deep rose and sometimes rose-purple, around 5 cm. across.

There are only 4 species in the Azaleastrum Section, and they come from relatively warm climates so are not well-known overseas. The other species are easily distinguished from *leptothrium*:

hongkongense has smaller leaves and smaller white flowers, spotted purple. The young growth is usually purple. We have two plants in the rockery.

ovatum has small broad leaves and pale pink flowers spotted purple. This is an attractive and easy plant for our climate.

vialii is a rare species with striking red tubular flowers. We have one plant in the rockery and aim to propagate more.

Where to See this Plant.

We have 3 plants in the main rockery, 2 near the centre and one near the creek, which flower in mid-November. There are also several survivors in the Maddenia Walk.

Our original plants were raised in 1996 from seed collected in Yunnan by Terry Smyth.

Alan Kepert.

INVENTORY OF SECTION CHONIASTRUM AND AZALEASTRUM AT THE NATIONAL RHODODENDRON GARDENS OLINDA (NRG)

In January 2015 I undertook a plant hunt at NRG to ascertain what species and the number of specimens in Section Choniastrium and Azaleastrum are still present in the collection at NRG.

Background

For some years, a group of ARS-VIC volunteers have been conducting plant hunts at NRG. The purpose of the plant hunt is to re-find plants in the living collection, record their GPS location on the database, and place an in-ground staked label next to the plant. The approach taken with these plant hunts is to tackle a garden bed, and once that has been completed, move onto another bed.

As the location of many specimens planted in the 1960s-1990s was not recorded, this exercise is the key method of re-finding plants and recording their location.

For *Rhododendron* species, about 27% of the total number of specimens recorded on the database have a GPS waypoint (3,125 out of a total 11,749 records). The actual percentage of living plants with a GPS waypoint will be higher as, judging from this exercise, there are many dead plants on the database that are still recorded as alive. For a plant to be recorded on the database as dead, the dead plant has to be found with its original numbered tag in order that the database record can be updated. Many dead plants no longer have their tag – with no means of identifying the plant its death cannot be recorded on the database.

Choniastrum and Azaleastrum plant hunt

To complement the existing approach to plant hunts, in January 2015 I decided to undertake an inventory of the species in a Sections Choniastrum and Azaleastrum. The purpose of a ‘Section’ or taxon-based plant hunt was to determine whether it is feasible to conduct an inventory of a particular group within *Rhododendron* in order to compare our living collection with what is recorded on the database. I selected these taxa as they only have 17 species between them and therefore a manageable size to complete an inventory quickly, and more importantly, the plants in these Sections can be readily identified amongst other *Rhododendron* when not in flower.

A database selection was undertaken, capturing 163 records for plants in Sections Choniastrum and Azaleastrum. After filtering out dead plants and a couple of hybrids, a total of 92 specimens needed to be re-found.

The starting point for the plant hunt was those records with waypoints. Of the 92 plants, 41 had a waypoint, and re-finding the plants proved to be a relatively efficient exercise. With the exception of a couple of *R. moulmainsense* specimens dating back to the 1970s, the bulk of the Choniastrum were planted since 1980 in the Maddenia Walk, and Azaleastrum since 1995 in the Maddenia Walk and Main Rockery. Given the more recent planting of these Sections, a higher percentage of the records have a GPS waypoint (40% and 47% respectively) than for the entire species database (27%).

The waypoint for a specimen was manually entered into the GPS device and using the ‘Find’ function, the device would lead you to within 5m of the location. As many of the specimens were massed planted at the same time, once one plant had been found, typically other specimens were also found, including some that had not previously been GPS’d. The exercise was also made easier with nearly all of the specimens in two locations – the Maddenia walk and the Main Rockery. It took about 4-5 hours to manually enter the 41 waypoints and check the location to determine whether the plant is still alive.

Updating the database and plant labelling following the plant hunt

The database was updated as follows:

- *Plants with existing GPS waypoint on the database*
Plants found that had an existing GPS waypoint had their database record updated with 'Plant found 1/15'. This will help with any subsequent inventories of these Sections with information on when the plant was last sighted. If after a thorough search a plant could not be found, its record was updated with 'Plant not found 1/15, presumed dead', and '2015' given as the date of death. Given the accuracy of the GPS, and the ease of identifying these plants from other *Rhododendron*, it is reasonable to conclude they are dead;
- *Plants with no location information on the database (no GPS waypoint or bed location)*
Some of these plants were found in the January 2015 inventory and GPS'd and their database record updated as per above. The remaining plants, should they still be alive, have no known location, could not be found where other specimens have been planted, and are therefore presumed dead. Their record was updated with 'plant not found 1/15, presumed dead' and '2015' given as a date of death. The rationale for treating them as dead is they cannot be located and therefore should not be considered part of the living collection. Should they subsequently be found during a plant hunt their record will be updated.

Information on plants requiring labels was forwarded to Parks Victoria for labels to be made.

Findings

Of 92 records on the database, only 25 plants were found alive that could be identified (see table). About five *Choniastrum* were found with no number tags and therefore cannot be identified. The overall survival rate – from 163 specimens planted out – is about 15%. Given the high rate of loss, it was a relief to see that we have only lost one species (*R. stamineum*), though only one specimen could be found for four species and two specimens for another six species, noting that the database captures specimens in the garden and glasshouse and does not include seedlings or plants in the nursery (so there may be other specimens in the nursery yet to be recorded on the database). Even taking this into account, the number of each species for these two Sections is perilously low and since completing the inventory cuttings have been taken of *R. ovatum*, *R. hongkongense*, *R. leptothrium*, *R. latoucheae*, *R. moulmainense* (*R. ellipticum*), *R. hancockii* and *R. henryi*. By way of example of the risk of only holding one plant, between finding the sole remaining plant of *R. hancockii* and knocking in its labelled stake a couple of weeks later, a large tree branch had fallen on the plant!

Species in Section Choniastrum and Azaleastrum listed on database				
Prior to January 2015 Plant Hunt				January 2015 Plant Hunt
Section	Species	Total no. of specimens	Number of plants where location is recorded (GPS waypoint or bed)	No. of plants found
Azaleastrum	<i>R. hongkongense</i>	3	3	2
	<i>R. leptothrium</i>	11	4	3
	<i>R. ovatum</i>	14	3	2
	<i>R. viallii</i>	2	2	2

Total		30	12	5
Choniastrum ¹	<i>R. championae</i>	6	4	3
	<i>R. hancockii</i>	1	1	1
	<i>R. henryi</i>	4	3	1
	<i>R. latoucheae</i>	4	2	1?
	<i>R. latoucheae</i> (<i>R. amaniense</i>)	7	3	2
	<i>R. moulmainense</i>	13	3	4
	<i>R. moulmainense</i> (<i>R. ellipticum</i>)	18	5	2
	<i>R. moulmainense</i> (<i>R. stenaulum</i>)	4	4	2
	Unknown	5	4	Not checked
Total		62	29	25

¹ the last *R. stamineum* died in 2005.

In the 1986 revision of Section Choniastrum a number of previously described species were sunk into *R. moulmainense*. It is quite likely than any further revision could re-instate some of these species, given the range of *R. moulmainense* - from the islands south of Japan, through China, west to Burma and as far south as the Malay Peninsula – and the considerable variation in morphological features. For example, the type specimen of *R. moulmainense* was collected in south Burma at the western extreme of its range, and other species now considered *R. moulmainense* were similarly described from specimens at the geographical extremes of the range, including *R. ellipticum* (Japan), *R. klossi* (Malaysia) and *R. stenaulum* (W Yunnan). It's pleasing to see therefore that the NRGGO database has retained the former species name for those now considered to be *R. moulmainense*. This will mean, in the event of a further revision, we will be able to identify species such as *R. ellipticum*, *R. klossi* and *R. stenaulum* should they be split from *R. moulmainense*. Whilst *R. klossi* is not present in the garden, we do have specimens in the nursery. Likewise, we recently struck cuttings of *R. stamineum* from a private collection.

The high rate of plant loss is also due to the unsuitability of the Maddenia Walk for species in these two Sections, where they have been outcompeted by other *Rhododendron* more suited to the low light environment. We have a healthy specimen of *R. leptothrium* in the Main Rockery, and two struggling plants in the Maddenia walk from 32 planted in the late 1990s. The horticultural requirements of Choniastrum are similar to Vireya and would do much better grown amongst vireyas where there is more sunlight and more frequent watering. For example, they would make good companion plants in the vireya species bed.

The two remaining *R. ovatum* specimen found are mature plants in the Maddenia Walk. In time they will be outcompeted by larger growing *Rhododendron* around are unlikely to

survive. Cuttings have been taken and another location should be selected for planting out. It was also pleasing to come across the sole plants of *R. henryi* (thanks to Alan Kepert who pointed it out in the rockery) and *R. hancockii* (near the low retaining wall above the Maddenia Walk).

Conclusion

The NRGGO collection contains a large number of species and hybrids. Keeping abreast of attrition has proved to be a challenge, and this exercise has shown that a plant hunt based on a Section (or other taxonomic grouping), is a relatively efficient way of undertaking an inventory of the plant group within the collection. It also complements bed-based inventories that amongst other things enable us to re-find plants that have no location information on the database.

This exercise reinforces the importance of capturing and retaining information on the database record. Currently, when a plant is re-found in the collection and a waypoint recorded, the waypoint is added to the database however not the date the plant was found. I believe it is important to capture the date as next time an inventory is undertaken there will be a record of when the plant was last positively sighted. It is also important to retain somewhere in the record all changes to the plant name so that in the event of further revision we can re-instate a former name, if required. It was pleasing to see that previous names have been retained in the records for *R. moulmainense*.

I don't know whether the attrition rate for *Choniastrum* and *Azaleastrum* will be evident in other Sections – only plant hunts such as this will tell.

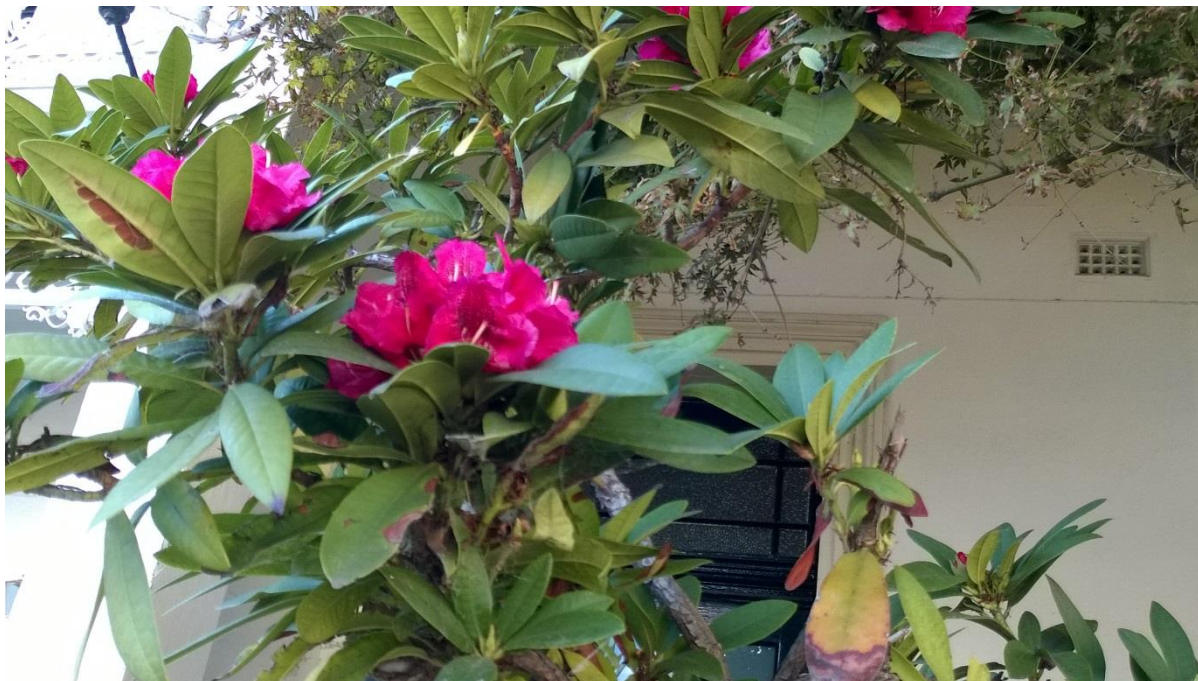
A 'Section-based' plant hunt improves our ability to keep tabs on survival rates within a taxon. For example, many of the smaller *Maddenia* species such as *R. lyi*, *R. levinei* and *R. kiangsiense* were introduced into the gardens in the 1990s and mostly planted out in the Maddenia Walk. It would be interesting to undertake an inventory of the smaller *Maddenia* to see whether they have survived amongst the much larger growing *Maddenia*. More accurate information on survival rates will also help in prioritising species for propagation as well as giving us data on the suitability of plant groups in each part of the garden where they have been grown.

Members interested in a particular Section could undertake periodic inventories of that Section using the approach described here. It would greatly improve the data on what is growing the garden, how well it is doing and where we need to focus our propagation efforts.

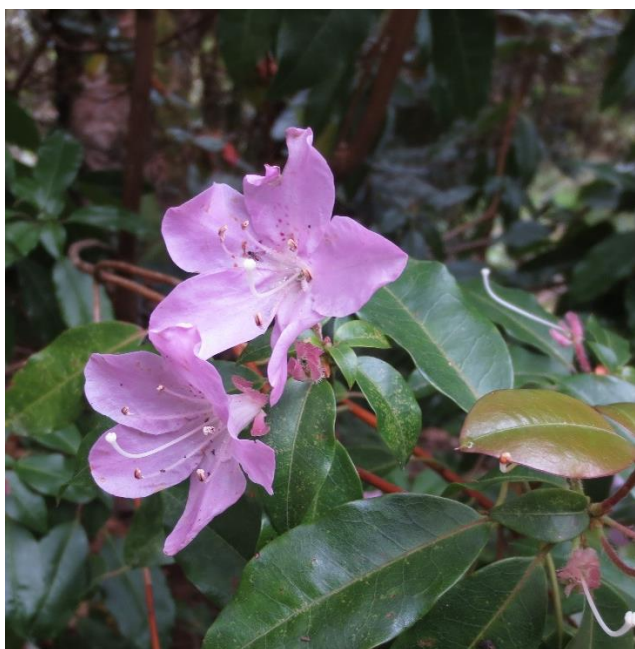
A special thanks to Tom Noonan for his diligent management of the database including regular updates following plant hunts, database selections and general data review and clean-up. Tom has been most patient with my endless queries!

Andrew Rouse

February 2015



Unseasonal Rhododendron in Carlton- see page 2



***R leptothrium* Alan Kepert Photo
November 2014
See page 5**



***R adinophyllum* Michael Hare Photo April 2015
NRG Vireya House- a first flowering in Australia?
See page 22**



Kirsty Craven and Andrew Rouse in the Vireya House NRG

7th April 2015- see page 22



***R. mendumiae* Simon and Marcia Begg's deck. Simon Begg photo 10 March 2015. Page**



R (“Rogue Red” x *gracilentum* ?) x *wentianum* Simon Begg Photo 27 December 2015

An Andrew Rouse Hybrid worth registering



***R retivenium* Simon Begg photo 27 December 2014**



Rhododendron longesquamatum



Rhododendron torajaense



Rhododendron gumineense



Rhododendron dissilistellatum

RHODODENDRON UPDATE - 4

INTRODUCTION

This is the fourth part of our Rhododendron species update and contains 4 Near Threatened (NT) species, all almost meeting the IUCN criteria for Vulnerable, and three new vireyas recently described. It also includes a range of other vireyas recently elevated from subspecies to species status by the late Lyn Craven.

Our methods are described in the July newsletter but are summarized in Appendix 1.

For these threatened species we have searched on line to determine whether it is in cultivation and where. Our major sources were the Global Survey of Ex situ Rhododendron Collections (BGCI 2011), the Multisite Search page of the Royal Botanic Garden Edinburgh (MSEBG 2014) and the Database of Asian Plants in Cultivation (DAPC 2014)

SPECIES ACCOUNTS

In the following accounts the species name and author is given followed by the journal reference for the original description. Then follows a small account of the species. More detailed descriptions can be found in the references with each account.

Part 1 Near Threatened Species

***Rhododendron longesquamatum* C.K. Schneid. [for photo see page 14]**

1909. Ill. Handb. Laubholz. 2: 483

Subgenus Hymenanthus, Section Ponticum, Subsection Maculifera

This is a large shrub or small tree up to 6m tall with grey bark and dense shaggy young shoots. The leaf is leathery, oblong-oblongate to narrowly obovate, 5.5-15.5 × 2-4.5 cm with a rounded base and recurved margins, dark green above and paler below and a shaggy midrib. The pink to rosy-red, open-campanulate flowers have a deep crimson blotch and are born on 6-12 flowered inflorescences. It usually grows in fir forests, sometimes on cliffs, at 2300-3400 m in a few localities in western Sichuan. It is grown in gardens overseas and is available in nursery catalogues in the USA and Europe.

***Rhododendron papillatum* Balf. f. & R.E. Cooper**

1922. Notes Roy. Bot. Gard. Edinburgh 13: 282

Subgenus Hymenanthus, Section Ponticum, Subsection Irrorata

A shrub or small tree 2- 5 m tall with somewhat leathery leaves 8-13 × 2-4 cm with round to wedge shaped bases and recurved margins and a very thin indumentum. The inflorescence bears 5 to 9-flowered campanulate flowers, pale cream to pink, with purple flecks and blotched at the base. The species occurs in Bhutan, China (Xizang) and north east India in fir forests and rhododendron thickets.

It is sometimes considered a subspecies of *R. forrestii* and is recorded as such in Fang et al. (2011) and Cox and Cox (1997). Although McQuire and Robinson (2009) say it is in cultivation and Cox and Cox (1997) mention two clones in captivity, it does not appear to be available for sale on the net.

***Rhododendron riparioides* (Cullen) Cubey**

2005. Fl. China 14: 297

Subgenus Rhododendron, Section Rhododendron, Subsection Saluenensia

These are upright shrubs to 1.5 m tall with densely scaly young shoots. The leaves are elliptic to ovate-elliptic, 1.2-3.8 × 0.6-2 cm with a generally acute apex and the undersides with dense overlapping orange-pink scales arranged in to 3 tiers; the upper surface is greenish blue-grey and matt. The inflorescence is terminal with up to 5 flowers. The corolla is open funnel-campanulate, bright purple, with darker flecks. The capsule is not known according to the Flora of China. This species has a narrow distribution in northwest Yunnan between 3600 and 4800 m in fir forests and open habitats, including rocky areas above the tree line. A picture is available on the webpage of the Danish chapter of the ARS (<http://www.rhododendron.dk/riparioides.html>). It is sometimes treated as a subspecies or variety of *R. calostrotum* but Cubey (2003) reported in Gibbs *et al.* (2011) "... has shown that

R. calostrotum var. (or subsp.) *riparioides* is consistently tetraploid ($2n = 52$) and is therefore genetically isolated from the diploid *R. calostrotum* and its var. *calciphilum* ($2n = 26$)". It may not be in cultivation.

***Rhododendron tsoi* Merr.**

1934. Lingnan Sci. J. 13(1): 42

Subgenus Tsutsusi, Section Tsutsusi

A small semi evergreen shrub to 1m tall young shoots densely covered is short stiff chestnut brown hairs and with different summer and winter leaves. The leaf is leathery, elliptic or obovate to broadly elliptic, $0.5\text{--}1.4 \times 0.4\text{--}0.9$ cm with recurved margins and an often pointed tip. The leaf under surface is covered in dense stiff hairs especially on the midrib while the upper surface is sparsely hairy only. The flowers are born in 3–5-flowered inflorescences. The flower is narrowly funnelform, rose, ca. 1 cm with a tube 3–4 mm long and the lobes $5\text{--}6 \times 3\text{--}4$ mm. The flower stalk and the inside of the flower are coated in stiff chestnut brown hairs. It is a low altitude species found in S Guangdong, C and SW Guangxi between 700 and 1600 m in open forests, arid mountains and meadows.

Part 2 New Vireyas

***Rhododendron torajaense* Craven [for photo see page 14]**

Subgenus Vireya, Section Euvireya

2014. Journal of the Adelaide Botanic Gardens 27: 30.

This species was described from near Mt Sesean on Sulawesi where it was growing on a roadside bank. It is a small shrub to 1 m tall with leaves in whorls of 4 to 6, narrowly elliptical to ovate, $85\text{--}170 \times 35\text{--}75$ mm, and slightly recurved margins. Both surfaces bear moderately dense sessile scales with irregular rims and raised centres. The flowers are born on 7–8-flowered inflorescences, short-salverform, 45–50 mm long including the lobes, white, weakly sweet-fragrant, tube 28–30 mm long, lobes 17–20 mm long and spreading at right angles to the tube, sparsely scaly outside and with or without pubescent hairs on the very proximal region of the tube. It differs from *R. rhodopus* Sleumer in the leaf, being weakly scented; size of the flower and anthers.

Craven suggests it should be classified as Vulnerable but the species has not been formally included in the IUCN list as yet and more would need to be known of its ecology before it could be. The fact it was found on a road embankment suggests it is a good coloniser. It occurs in collections in Australia.

***Rhododendron gumineense* Craven [for photo see page 18]**

Subgenus Vireya, Section Phaeovireya

2014. Journal of the Adelaide Botanic Gardens 27: 31.

This species was described from cultivated material growing in the glasshouse of ARSVic member Andrew Rouse. However the original plant is known to have come from Gumine, Chimbu Province in the highlands of PNG in 1971. It's ecology is completely unknown. It occurs in collections in Australia.

Like many vireyas it is a small red flowered shrub and is similar to the widespread *R. beyerinckianum* Koord. The features that distinguish them are given in Table 1.

Table 1 Distinguishing features between *R. gumineense* and *R. beyerinckianum*.

Feature	<i>gumineense</i>	<i>beyerinckianum</i>
Form	Very small shrub to 40 cm high.	Shrub or tree 1—5 m high.
Leaf blade	Narrowly elliptic to elliptic, 22–35 x 7–16 mm	Narrowly ovate, to broadly elliptic, obovate or subcircular, 30–60 x 10–35 mm
Leaf base	Wedge shaped and often very narrowly so	Broadly tapering or rounded
Anthers	1.2–1.6 mm long	2–2.5 mm long
Ovary	Subcylindrical and tapering to the style	Elongate conical or subovoid, usually abruptly tapering distally

***Rhododendron dissilistellatum* Craven [for photo see page 14]**

Subgenus *Vireya*, Section *Solenovireya*

2014. *Journal of the Adelaide Botanic Gardens* 27: 33.

A lax shrubs to 70 cm. tall with moderately densely scaly branchlets which also have moderately dense short hairs. The leaves occur in pseudowhorls of 5 to 10 and are narrowly elliptic to narrowly obovate, 25–64 × 7–19 mm with wedge shaped to obtuse bases and slightly recurved margins. The inflorescence is a 7–15-flowered umbel and the flowers are in a more or less spreading band. The flower is white, salverform, 59–79 mm long including the lobes with a long straight tube 50–67 mm long and 2–3 mm in diameter and lobes 9–12 mm long. The inside of the flower is hairy to about $\frac{3}{4}$ to the apex.

It is most similar to *R. radians* J. J. Sm. (see table 2) and occurs in lower montane rainforest on Sulawesi on the western lower-mid slopes of the Mount Sojol complex between 1153–1344 m. It occurs in collections in Australia.

Table 2 Distinguishing features between *R. dissilistellatum* and *R. radians*.

Feature	<i>dissilistellatum</i>	<i>radians</i>
Leaf blade	Narrowly elliptic to narrowly	Ovate to ovate-oblong with the base
Leaf base	Wedge shaped to obtuse	Heart shaped
Outer perulae	Elliptic to broadly elliptic	Ovate- acuminate
Style	Hairy to within c. 2 mm of the apex	Hairy in the proximal 5/6 of the style

Part 3 Change in status for some *Vireyas*

Craven (2014) has separated all the subspecies of *R. javanicum* into species as follows.

***R. brookeanum* H.Low ex Lindl.**

Subgenus *Vireya*, Section *Euvireya*

J. Hort. Soc. London 3: 823 (1848).

Formerly *R. javanicum* subsp. *brookeanum* (H.Low ex Lindl.) Argent & Phillipps, *Bot. J. Linn. Soc.* 85: 15 (1982).

May be distinguished from *R. javanicum* by the puckered leaf blade; the ovate subacuminate, glabrous outer perulae; and the ovary more or less abruptly tapering to the style. It occurs in collections in Australia.

***R. cladotrichum* (Sleumer) Craven, comb. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya*

2014. *Journal of the Adelaide Botanic Gardens* 27: 28.

Formerly *R. javanicum* subsp. *cladotrichum* (Sleumer) Argent, *Rhododendrons of subgenus Vireya* 247 (2006).

Separable from *R. brookeanum* by the branchlets being hairy and the leaf lamina midrib being densely short-hairy on both surfaces compared with being glabrous in *R. brookeanum*.

***R. cockburnii* (Argent, A.Lamb & Phillipps) Craven, comb. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya* 2014. *Journal of the Adelaide Botanic Gardens* 27: 28.

Formerly *R. javanicum* subsp. *cockburnii* Argent, A.Lamb & Phillipps, *Notes Roy. Bot. Gard. Edinburgh*, 42: 113 (1984). — *R. brookeanum* subsp. *cockburnii* (Argent, A.Lamb & Phillipps) Argent, *Edinburgh J. Bot.* 52: 364 (1995).

The pseudowhorled leaves, the subfleshy and puckered leaf lamina and the corolla with a constricted tube are diagnostic.

***R. extraneum* (Sleumer) Craven, comb. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya*

2014. *Journal of the Adelaide Botanic Gardens* 27: 28.

Formerly *R. brookeanum* var. *extraneum* Sleumer, *Reinwardtia* 5: 225 (1960).

R. extraneum occurs on Sumatra whereas the other three of the four infraspecific taxa of *R. brookeanum* sensu Sleumer (1966) are from Borneo. It supposedly differs from *R. gracile* (as var. *gracile*) by the leaf blade being narrowly ovate-oblong and the corolla 4 - 5 cm long compared with the leaf blade being narrowly ovate and the corolla 5 to 6 cm long compared with in *R. gracile*.

***R. gracile* H.Low ex Lindl.**

Subgenus *Vireya*, Section *Euvireya*

J. Hort. Soc. London 3: 84, fig. (1848).

Formerly *R. brookeanum* var. *gracile* (H.Low ex Lindl.) Henslow, *J. Roy. Hort. Soc.* 13: 261, f. 42 (fol.), 43a (fl.) (1891). — *R. javanicum* subsp. *gracile* (H. Low ex Lindl.) Argent, A. Lamb & Phillipps, *Notes Roy. Bot. Gard. Edinburgh*, 42: 114 (1984). — *R. brookeanum* subsp. *gracile* (H.Low ex Lindl.) Argent, *Edinburgh J. Bot.* 52: 364 (1995).

The species is shown in Argent (2006) p. 247.

***R. kinabaluense* (Argent, A.Lamb & Phillipps) Craven, comb. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya*

2014. *Journal of the Adelaide Botanic Gardens* 27: 29.

Formerly *R. javanicum* var. *kinabaluense* Argent, A.Lamb & Phillipps, *Notes Roy. Bot. Gard. Edinburgh*, 42: 113 (1984). — *R. brookeanum* var. *kinabaluense* (Argent, A.Lamb & Phillipps) Argent, *Edinburgh J. Bot.* 52: 363 (1995). — *R. javanicum* subsp. *kinabaluense* (Argent, A.Lamb & Phillipps) Argent, *Rhododendrons of subgenus Vireya* 248 (2006).

R. kinabaluense is characterised by its dispersed leaves, puckered leaf lamina, and appressed and often emarginate outer perulae. It occurs in collections in Australia.

***R. moultonii* Ridl.**

Subgenus *Vireya*, Section *Euvireya*

Ridl. J. Straits Br. Roy. As. Soc. 63: 61 (1912).

Formerly *R. javanicum* subsp. *moultonii* (Ridl.) Argent, Bot. J. Linn. Soc. 85: 16 (1982). —

R. brookeanum var. *moultonii* (Ridl.) Argent, Edinburgh J. Bot. 52: 364 (1995).

This species is characterised by the intermediate, dispersed-pseudowhorled arrangement of its leaves, the puckered leaf lamina, and the ovary abruptly tapering to the style.

***R. palawanense* (Argent) Craven, comb. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya*

2014. Journal of the Adelaide Botanic Gardens 27: 29.

Formerly *R. javanicum* subsp. *palawanense* Argent, Gard. Bull. Singapore 56: 90 (2004).

R. palawanense is characterised by the dispersed leaves, flat leaf lamina, acute (never emarginate) outer perulae, and grey pollen.

***R. schadenbergii* Warb.**

Subgenus *Vireya*, Section *Euvireya*

In Perkins, Fragm. Fl. Philippines 172 (1905).

Formerly *R. javanicum* var. *schadenbergii* (Warb.) Sleumer, Reinwardtia 5: 195 (1960). — *R.*

javanicum subsp. *schadenbergii* (Warb.) Argent, Edinburgh J. Bot. 52: 364 (1995).

R. schadenbergii is characterised by the dispersed leaves, apparently flat leaf lamina, and cream pollen. Argent (1995) comments that this plant “warrants at least subspecific status”.

***R. teysmannii* Miq.**

Subgenus *Vireya*, Section *Euvireya*

Fl. Ned. Ind., Eerste Bijv. 3: 585 (1861).

Formerly *R. javanicum* var. *teysmannii* (Miq.) King & Gamble, J. As. Soc. Bengal 74: 75

(1905). — *R. javanicum* subsp. *teysmannii* (Miq.) Argent, Rhododendrons of subgenus *Vireya* 249 (2006).

This species is characterised by the flat leaf lamina, the very commonly hairy pedicels, and the more or less densely pubescent ovary.

***Rhododendron biappendiculatum* Craven, nom. et stat. nov.**

Subgenus *Vireya*, Section *Euvireya*

2014. Journal of the Adelaide Botanic Gardens 27: 31.

Replaced synonym: *R. seranicum* J.J.Sm. subsp. *sparsihirtum* Argent, Rhododendrons, camellias and magnolias 2013, 127 (2013) (as *sparsihirtus*).

R. seranicum subsp. *sparsihirtum* was distinguished from subsp. *seranicum* on the basis of it having hairs at the base of the filaments, on the disk and inside the corolla towards the base (Argent 2013). It occurs in collections in Australia.

Francis Crome

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APPENDIX 1

Basically we had a six-step process.

1. We extracted all “accepted” names of Rhododendron that were not synonyms from “The Plant List”, an online working list of all known plant species, produced by the Royal Botanic Gardens, Kew and the Missouri Botanical Garden.¹
2. We then removed species that were on the ICON² list of Rhododendrons whose seed can be legally imported into Australia.
3. We then removed species that Simon Begg had already determined were not on the ICON list and that he has sought inclusion on that list. These species are mostly from Argent (2006) and Cox and Cox (1997).
4. This left approximately 70 ‘missed’ Rhododendrons i.e. species not yet permitted for import and not on Simon’s list of species submitted for inclusion on ICON, mostly species described since 1997.
5. These missed species were then cross-checked in two other on-line databases – The International Plant Names Index (IPNI)³ and Tropicos⁴.
6. We then consulted the Red List of Rhododendrons (Gibbs et al. 2011) for their conservation status and checked other databases, Rhododendron society websites and primary scientific literature to discover more about each species.

¹ <http://www.theplantlist.org>. The List combines multiple checklist data sets held by these institutions and others and provides the accepted Latin name for most species, and synonyms by which that species has been known. "Around 20% of names are Unresolved indicating that the data sources included provided no evidence or view as to whether the name should be treated as accepted or not, or there were conflicting opinions that could not be readily resolved."

² ICON is the Commonwealth Department of Agriculture’s import conditions database

³ IPNI is a database of the names and associated basic bibliographical details of plants developed by the Royal Botanic Gardens Kew, the Harvard University Herbaria, and THE Australian National Herbarium.

⁴ Tropicos® contains all the nomenclatural, bibliographic, and specimen data in the Missouri Botanic Garden’s databases - there are over 1.2 million scientific names and 4.0 million specimen records. It is a common source for other databases.

VIREYA SPECIES COLUMN APRIL 2015

R. mendumiae

The only introduction of this species into Australia is from the USA in 2007. The first recorded flowering in Australia was March this year, with a single flower on a plant held by Simon Begg. [Photo page 12. It was a truss of 2 but the second did not open until the first had finished **SWB**]

R. mendumiae has a very restricted distribution and is only known from Cleopatra Needle, a peak on Palawan, Philippines. It was first collected in 1998 and described as a new species by George Argent in 2004. All plants in cultivation are from the sole collection of living material in 2003. *R. mendumiae* is listed as Critically Endangered in the Red List of Rhododendrons (Gibbs, Chamberlain and Argent, RBGE) due to its restricted range and the risk to the entire population from habitat disturbance.

Description

R. mendumiae grows vigorously in cultivation though does tend to have long ‘whippy’ branches with few side branches. All of the plants I have are eight year old seed- raised specimens that should now be at flowering age, so hopefully we will see more flowering over the coming year or two. I also hope that the plants will become bushier as they mature.

I didn’t have the opportunity to closely examine Simon’s plant in flower however it did have the short, broad corolla that is characteristic of this species that is superficially similar to some of the Rhododendron of subsection Maddenia. Argent describes the first flowering at RBGE as a single flower, so Simon’s sole flower is perhaps not that unusual.

It is a striking plant in flower, even with a sole flower in the truss, with corolla ~6cm long and up to 10cm wide at the mouth. Argent describes the flowers as very strongly and sweetly scented – I didn’t take note as to whether Simon’s plant had this characteristic.

Verdict

Further flowering is required before passing judgement on the horticultural merits of this species. On its first flowering it is an impressive species, however we do not as yet know how frequently the specimens will flower or typical number of flowers per truss.

There are 2-3 plants growing in the vireya house at NRGGO. Members will be alerted should any of these specimens flower. [I have a second plant also with a flower bud **SWB**]

Andrew Rouse

DONATION OF LYN CRAVEN'S VIREYA COLLECTION TO NATIONAL RHODODENDRON GARDENS OLINDA

We were all saddened by the death last year of Lyn Craven, a notable member of the Society who made a significant contribution to our understanding of the taxonomy of vireyas.

Lyn held a world-class collection of vireyas, all grown in pots in a glasshouse in his back yard in Canberra. Lyn was able to grow vireya species successfully to maturity, using a light potting mix and what for many might seem a frugal fertilising regime.

From the mid-2000s, Lyn started to scale back on his vireya collection and generously gave specimens to ARS-Vic members on his trips to Melbourne, and in latter years to the collection in the vireya house at the National Rhododendron Gardens Olinda (NRG), including fine specimens of *R. alborugosum*, *R. christiana*, *R. leucogigas*, *R. dissilistellatum* and *R. laetum*.

Late last year, Kirsty Craven approached the Society regarding the remaining plants held in Lyn's glasshouse. Given these plants are glasshouse-grown, their best prospect for ongoing health was to be housed in a glasshouse, or at a minimum, kept in pots under shade cloth. I am pleased to inform the ARS-Vic that Kirsty has very generously donated all of Lyn's remaining vireya species to the collection at NRGO, in all about 80 specimens! The plants arrived at Olinda in March, the specimens have been catalogued and many are already on display in the vireya house.

Amongst them are excellent specimens of species described by Lyn from his collecting in Sulawesi (*R. dissilistellatum*, *R. torajaense*, *R. rhodopus*), the largest specimen I've seen of *R. perakense*, and many other fine plants including *R. viriosum*, *R. acrophilum*, *R. himantodes*, *R. lanceolatum* and *R. adinophyllum* to name a few.

The ARS-Vic is most appreciated that Kirsty has entrusted to us and Parks Victoria the responsibility of holding Lyn's collection. The vireya house has proven to be ideal growing environment for vireyas and in time the bulk of Lyn's collection will be on permanent display in the house. Lyn and Kirsty have done much to ensure that so many vireya species remain in cultivation in Australia.

Kirsty recently visited Melbourne, and on behalf of the Society I was able to give her a guided tour of the vireya house, the nursery and the gardens, and to thank her in person for her generous donation to the NRG vireya collection. See photo page 12

Kirsty is keen that the collection be a source of material for propagation, and that cuttings be made available to ARS members for those interested in growing species vireya. Please let me know if there's particular species you'd like to grow.

Andrew Rouse

THE GARDEN RAMBLE

What a lovely summer we have had here at the Rhododendron Garden in Olinda with regular summer rain and no heatwaves to speak of. This combination has left the plants in great condition with many of them developing a healthy crop of flower buds for the coming spring. At the moment we are working towards the renaming of the Rhododendron Gardens to include the title Botanic Garden. This shift in name has come after considerable community discussion as part of the Gardens Strategic Management Plan which was signed off by the minister last year.

What advantage do we get from rebranding the gardens?

Better communication – The Rhododendron Garden is a botanic garden and holds a wonderful collection of plants along with the rhododendrons. Renaming will better communicate and advertise the rich and diverse plants and experience that is to be had here in Olinda.

Establishes a benchmark – As a botanic garden we need to hold collections of plants, labelled and recorded with interpretation. The bench marks also help us communicate the importance and expectation of the gardens in a broader context politically and internally to Parks Victoria. At this stage we are looking at a descriptive name that will give a location. The front runner so far is ‘Dandenong Ranges Botanic Garden’ with the by-line ‘including the National Rhododendron Collection’. If you have any comment please feel free to put your two cents worth in to me.

I am pleased the Tuesday ARS crew are methodically going through our collections stocktaking. As we get better at the process more and more areas are being accounted for. In the past month a detailed stocktake was completed on the Maddennii walk and the rockery. As the data builds up we are able to start to draw some conclusions about the collection and start to manage the plants better. For example the Maddennii walk is growing some species well but there are other plants growing poorly with groups of plants planted originally reduced to one or two poor specimens. With information we can target propagation and find better climates in the garden for those plants that are struggling to grow in.

The Parks Victoria Plant Database is moving along and we should see the first version released soon. It is designed to be simple to use yet sophisticated enough to generate reports on many levels. Tom has faithfully kept the ARS database going over many years and I am amazed at what he can do with what he has done. His job is not over yet and I hope he will continue to use his expertise with us. If it wasn't for his and many other members countless hours recording and sorting data the new database would be worthless as there would be no data to enter.

For those who are not involved on Tuesdays, come and join us if you can. We have a lot of fun working on various projects around the garden. The ARS valuable contribution enhances the garden for all visitors and keeps the garden significant as a Botanic Garden.

Glenn Maskell

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