Alpine Garden Club of British Columbia

Aspidotis densa growing in the E.H. Lohbrunner Alpine Garden

Volume 63, Number 3 Quarterly Bulletin, 2020
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Membership Renewals Due

If you have not already renewed your membership for 2020, please contact our Membership Secretary to send a cheque for $30 with your name and contact info. Cheques should be made out to the Alpine Garden Club of BC.

Or renew online using your credit card through PayPal on our website www.agc-bc.ca/membership-renewal

Membership status can be checked on the website, after you sign in.

AGC-BC meetings are typically held on the second Wednesday of each month except July and August in the Floral Hall, VanDusen Botanical Garden. Doors and Library open at 7:00 p.m. and the meetings start at 7:30 p.m.

2020 AGC-BC Upcoming Events

All in-person meetings and events are cancelled until further notice. The following events may be online or at Van Dusen Floral Hall. Check website for details closer to the date

- Sept 9 - AGC-BC Meeting
  - Matt Mattus: Autumn and Winter Blooming Bulbs for the Cold Greenhouse or Conservatory
- Oct 14 - AGC-BC Meeting
  - Plants from the Seed Exchange to Grow and Enjoy
- Nov 11 - AGC-BC Annual General Meeting
  - Ben Stormes: Traversing North America in 350 metres: The North American Gardens at UBC.

For more information, visit http://www.agc-bc.ca/events
Hello everyone! For the heat lovers, I hope summer has found you. It came late to Vancouver, which is fine by me, as I am now patiently waiting for the cooler autumn temperatures to return.

In this Bulletin, you’ll likely notice that we’ve gone green! And by that, I mean focused on gorgeous green plants not known for (because they don’t have!) flashy flowers and/or fruit. In my regular perusals of historic Bulletins, I found a lovely little article (reprinted in the issue) on propagating ferns. I find ferns to be a bit underrated in general.

Certainly, there is a long history of misconception around the group. Medieval fern seed collecting instructions specified they could only be retrieved Midsummers’ Night Eve, with a stack of 12 pewter plates beneath the fronds. Unsuccessful collecting was blamed on pesky fairies and goblins that came and stole them in the night (A Natural History of Ferns, Robbin Moran). Even though we now have a better understanding of the fern lifecycle, not many gardeners attempt it at home. Perhaps the articles on spore collection and sowing in this edition will change that for some of our members. And if you need inspiration, I’ve added a photo journal of some of the ferns in the E.H. Lohbrunner Alpine Garden (my favourite of which I gave the cover).

In addition to the ferns, we have great contributions from members. In lieu of her regular recap of the Spring Sale, Linda Verbeek has provided a thoughtful and interesting analysis of the online show. All images are still on the club website if you would like to return to visit it, or perhaps you missed something that Linda has highlighted. Ken Gillanders has provided a cautionary tale, something I’m sure many of us will learn from, so we don’t suffer the same heartache. And David Sellars Garden’s Rock provides a helpful plant identification tip that was new to me, and perhaps will be for you as well!

I hope you enjoy it!
Editor’s ID Challenge

Too easy? Too hard? Let me know at bulletin@agc-bc.ca
Club News

Chris Byra

I am confident that COVID 19 has impacted we gardeners less than most people. In conversations with members, most have been gardening more than ever. The long spring has provided plenty of weeds and slugs, but also opportunities to continue to plant new specimens. COVID 19 has slowed our ability to meet, however I ensure you that we are moving ahead with both a fall sale/event and the seed exchange. Meetings have already been scheduled until December and will be held on ZOOM if face to face meetings are still not permissible. We recognize that using this technology is somewhat daunting for some and would like help out with installing and teaching you how to attend the meetings. In the next while I encourage anyone that is unfamiliar with ZOOM to reach out to me or Jay Akerley for assistance.

As to the plant sale, we are discussing options but are leaning toward a sale at two and possibly three gardens in the Delta/South Surrey area that would include a garden tour. Social distancing measures, such as time slots to ensure control over number of people at any given time, will be in place. Further details will be sent out as plans are finalized in a few weeks. Mark Sunday, Sept 13th on your calendar for the event, as long as we are allowed to meet.

Donating to the Seed Exchange

Linda Verbeek

It is time to think of seeds again. The Seed Exchange is a major activity for the Club, and it depends completely on people sending in seeds. Therefore seed donors get special treatment when it comes to ordering seed from the seed exchange: they get the first chance at seeds that are in short supply, and they can order more packets than non-donors. So why not give it a try this year, if you are not already a donor? We all grow interesting plants, and it is actually quite fun to hunt for seeds – in your own garden or in the wild. Please ensure that the seed is as free as possible from chaff and other kinds of contaminants. Also please make sure the seed is dry, especially if you send it in plastic baggies. We don’t recommend plastic baggies as we end up throwing away seed every
year because it arrives moldy (sometimes to the extent that it is hard to recognize any seed). Please make the label easily legible – I am sometimes left guessing, and I might guess wrong.

You need 5 different kinds of seeds to qualify as a donor, and for people in North America, these need to be natives of North or South America. Overseas members get donor credit for seed from any country. That said, we like seed from anywhere, and we do take into account how many kinds of seeds you send, so we certainly hope you’ll go beyond the minimum!

It is a great help to us if you can include with the seed an alphabetical list of what you are sending. Also, if you have wild collected seed, please include the location where you collected it, and if you are not sure of the species, some details of height, flower colour (if you know it), possibly growing conditions, etc. Seed is less likely to be interesting to others if described as Penstemon sp., than if it is described as: Penstemon sp., 20 cm, compact, small leaves, flowers pink, growing at 8000 ft

The seed should be mailed in a package labeled: flower seeds of no commercial value and mailed to arrive before 28 October 2020. This gives us barely enough time to complete the seed list by the time the fall bulletin is due. Please address your package to:

Linda Verbeek

Some mail has been very slow in coming lately, presumably because of Covid-19. So please also e-mail a list of your seed donations to me when you mail your seeds. Or, if you feel you cannot make the deadline because seed is ripening late or whatever, please, before 28 October, e-mail a list of what you will be sending. And also, please make sure that you actually send what you say you’ll send.

Finally, to end as I started, the donors are the pillars of our exchange – without you there wouldn’t be one – so I’d like to thank in advance everyone who’ll be sending seeds this year.
Collectors Classifieds

Collectors Classifieds is a feature to connect people looking to acquire or share plants and seeds. This is not intended to replace or undermine our great plant sales and/or the seed exchange in any way. Rather, a means to connect people when the sales or seed exchange isn’t suitable.

If you would like to participate, please send your “ad” to the editor at bulletin@agc-bc.ca. Make sure to include contact information (not required for seed exchange wish list items), so interested parties can contact you directly. Please note, that all personal information only appears in Bulletins sent via email or paper copy to members. Versions available online (e.g. the high quality pdfs available on the website) have all personal information removed.

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<tr>
<td>I have <em>Brunsvigia radulosa</em> (pictured below)</td>
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<td>seed available. Must be sown immediately.</td>
<td><em>Corydalis caseana</em> or any subspecies of same.</td>
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<td>Past experience is 100% germination.</td>
<td>Willing to pay cash or negotiate plant/ seed trade. Contact: Dan Schwarz</td>
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<tr>
<td>Contact: Laura Caddy, <a href="mailto:bulletin@agc-bc.ca">bulletin@agc-bc.ca</a></td>
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Trade

I am looking for red hepatica plants or seeds, and also double Japanese hepatica seed or plants. I have fresh *Adonis vernalis* seed. Contact: Ivan Beuker,

Seed Exchange Requests

I am trying to build up my collection of *Erythronium*, so I hope to see some different species and hybrids in the seed list, if possible. Thanks from Brenda Wilson, Somerset, UK.
Like every other amateur organization, our Club had to cope with the sudden cessation of all in-person interactions when the Corona virus pandemic hit. The Sale and the Show had to be canceled with only a few weeks’ notice. But it didn’t take our Program Chair (David Sellars) long to adapt. He had an on-line show (not only his idea, but also his execution) set up so quickly that the first pictures were on the website even before the date of the actual (canceled) pot show. The on-line show ran for 6 weeks, and is still accessible on the website (on the home page, just above ‘plant of the month’ is a link to the ‘on-line show’ or go to www.agc-bc.ca/agcbc-spring-show). It turned out to be a completely different experience, and one that gave me a great deal of pleasure. For the first time, we saw pictures of plants in their garden location, sometimes even in their garden setting – which is making up for the lack of garden visits, too. Also, we are seeing pictures of shrubs and even some trees, and plants which one would never dare to dig up, like some of the shots of plants grown in tufa.

The second new thing was that people could participate from outside the Lower Mainland – and they did, enthusiastically. We had participants from Vancouver Island, Saltspring Island, the BC Interior, Ontario, Saskatchewan, and even one person from Belgium. All in all 37 people submitted photos which I think is more people than have been bringing plants to the show, but I can’t find recent numbers for participants. Of course, we did cast a much wider net.

During the 6 weeks, many more plants would have been in flower than on just the one Saturday for the show, and a plant didn’t have to be at peak beauty on a particular day, so that added to the diversity, too. All in all there were more than 400 photographs and there was remarkably little overlap. Saxifraga oppositifolia, Trillium rivale, Gentiana acaulis, and Jeffersonia dubia are a few that come to mind, but even they were only represented three or four times. Obviously I can’t even begin to talk about all of them, not even a sizeable fraction, so I’ll just pick a few items that were highlights to me.
There were a remarkable number of *Rhododendron*, many of them species, and I only want to mention one, *Rhododendron forrestii* subsp. *forrestii*, grown by Bonnie Moro in Victoria, which after 10 years seemed to be not much more than 10 cm tall and maybe twice as wide, and was flowering for the first time, solid deep red bells.

As far as plants you couldn’t lift – it is hard to beat the waterfall of *Gentiana acaulis* that the Byras photographed in their garden; it must have been 50 cm wide by 25 cm deep, and a solid sea of blue trumpets. I must say, I’d dearly love to know how they do it – it’ll grow for me, but the buds always get eaten before they even show!

Other highlights: a *Lewisia rediviva* growing and flowering happily in David’s garden in tufa without protection, and a *Callianthemum anemonoides* in a pot, covered with the daisy-like flowers and beautifully compact, grown by Liz and George Knowles in Ontario. We only got submissions from east of the Rockies in the last two weeks, but I suspect that was because spring starts so much later there. Ivan Beuker in Saskatchewan sent a picture of *Adonis sibirica*, mentioning that it is always the first one to come in bloom for him – and that was in the last week of the show! Both Willy van Riel in Belgium and Paul Krystof here in the Lower Mainland sent pictures of various oncocyclus irises. Of all the irises, I think they are the most fussy and demanding, but boy, if you can make them happy, they are sure spectacular!

There was, I think, only one miniature garden, but it was the most original one I have ever seen. Dana Cromie photographed his rock covered in mosses and lichens, quite unique. Goes to show you don’t have to have flowers to have an enchanting miniature garden. Considering how slowly lichens grow, it must also have been a long time before it matured.

There were relatively few bulbs – a few *Fritillaria*, among which I’ll mention David’s *Fritillaria pallida*, which is actually quite happy in the garden if you can give it some drainage, and the large, creamy white bells are very attractive. And I can’t omit Ann Jolliffe’s *Fritillaria recurva*, a plant from the Siskiyous with
narrow, scarlet bells. All those California frits are very difficult – they mostly live in heavy soils, where they do not quite dry out in the summer, but they don’t want any wet either, a situation that is very hard to reproduce in a pot. So it was quite an achievement for Ann to have one in full bloom, with a number of flowers, and grown from seed, too!

I was very pleased to see a picture of *Globularia incanescens*. The *Globularia* are an odd-ball group, the genus used to be in its own family, but has now been placed in Plantaginaceae. They are mostly very low-growing subshrubs, and they make round balls of blue flowers. They look very much like *Jasione* in Campanulaceae, but are not related.

*Azara serrata* is a shrub from Chile, related to the willows. Richelle Renton sent a picture of a large specimen, covered in yellow flowers (catkins, I suppose, if they are in Salicaceae). We still see relatively few plants from South America, so it was neat to see such a mature, healthy plant.

I’ll conclude with a few plants we have never, or not for a very long time, seen on the show bench: *Anemone patens (Pulsatilla nuttalliana)*, from Jim Lawrence in Kaslo, BC. This is more of a prairie plant, but I think it makes it into BC. It has lovely soft blue flowers. *Lysichiton camschaticense* from Dan and Vel Rhodes/Schwartz in Port Alberni. This is the Asian version of our regular skunk cabbage (*L. americanus*), but it has white flowers. It is rather large for most gardens, and surely not suitable for a show bench, but it is very beautiful. *Calanthe tricarinata* is one of a group of Japanese terrestrial orchids. Heidi Baloun actually grew more than one kind. At one time I bought one too, but it didn’t like me at all. Obviously Heidi has a better sense of their needs.

I hope I have given a bit of the flavour of this new endeavour. It seems to me that it beautifully complements an actual show (whenever we’ll be allowed to have one again), and I for one would very much like to see this an annual feature. It might also be good advertisement for the Club – I have told various non-member friends about it, although I have to admit I have had no feedback on it.
A Disaster
Ken Gillanders

I have grown my *Tecophilaea cyanocrocus* for many years in hypertufa troughs. These have a large drainage hole in them covered by broken terra cotta pots and some pieces of a concrete slab to raise the troughs above the ground for drainage. For years they have done very well and I had four troughs full, but this year something happened which I've never experienced before. I noticed in their dormancy the compost they were growing in was subsiding slightly in places. I thought this was due to the compost breaking down, but I decided to dig them and was amazed to find just one bulb in the four troughs. It appears that mice have come up through the drainage hole and cleaned the lot up! There was no digging from the surface. I will have to use some mesh with any future planting. Luckily, I still have a few bulbs growing in the garden which are ok. I estimate that there would have been 40 - 50 flowering size bulbs in each of the troughs.

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Collecting Spores

Ben Stormes

As with many gardeners, I take great joy in the process of propagating my own plants. Being involved in all stages of growth of a cherished plant feels like a shared journey, and a certain emotional investment develops within us. While not inherently difficult, fern propagation from spore can be an exercise in patience. Here I share with you my process for collecting fern spores, prefaced by some helpful information about fern morphology and spore production that is necessary to have a grasp of before setting out to collect.

Unlike the seed plants, ferns and their allies reproduce via spores – minuscule dust-like structures carrying the genetic material that will give rise to free-living haploid plants that go on to produce sperm and egg cells, and thus sexual reproduction. Spores are produced with a tiny structure called a sporangium (sporangia plural), the equivalent to what we might think of as a capsule in the flowering plants. Usually dark brown in colour, some ferns may produce orange, rusty, or even green sporangia and spores.

Sporangia are nearly always grouped together in tight clusters, appearing as darkened circles, crescents, or lines on the underside of the fronds. These sporangia clusters are known as the sori (sorus singular). The sori often have a protective membrane covering them as they develop, and this membrane is known as the indusium (indusia plural). In some ferns, such as *Adiantum*...
species, the sporangia are clustered along the edge of the frond segments, and the margin of the frond segments roll over to cover them in what is termed a false-indusium. Others, such as *Polypodium* lack any sort of protective structure over the sori. Like with most things, nature has created lots of variation.

What does all this have to do with collecting spores? A LOT. It is important to ensure you are collecting ripe spores, and to assess this you need to know what you are looking at. The visual character of the sporangia and indusia are the easiest way to assess spore ripeness. On ferns that have an indusium over the ripening sori, a good indication of spore ripeness is the lifting, drying, or splitting of the indusium. For those species that do not have an indusium, try to find fronds in which the sori are large and plump looking, but not “shaggy” or that crumble with a gentle rub. Close observation can help inform judgement, and a hand lens makes things easier.

Now, on to the business of collecting spores!

Fronds with ripe spores do not store long, and will release spores as soon as they start drying out - sometimes just a few short hours after harvest. For this reason, it is good to plan a little, know what you are after, and assemble some materials ahead of time. Set out for harvest with a separate plastic bag for each species you hope to collect, and labels for each bag with species name. Inspect your fern to ensure ripeness (again, look for indusial splitting/lifting and full, dark sporangia without a lot of ‘shag’). If in doubt, collect fronds at various stages of ripeness to ensure some degree of success.
Top left: Unripe sori on *Athyrium filix-femina*.

Top right: Ripe sori on *Athyrium filix-femina*.

Bottom left: Overripe/spent sori of *Athyrium filix-femina*. 
Carefully place harvested fronds into plastic bags, with one bag per species, and label the bags. Always use a separate bag for each species - you are dealing with minute dust-like spores released from delicate structures, and cross contamination can easily happen. Because the fronds dry down quickly and sporangia will release spores as they dry, try to keep harvested material out of the sun, and get it indoors to set up for the next steps within a few hours of harvesting, at most.

Indoors, find a flat area that is away from strong drafts, accidental spills, inquisitive cats, or any similar disturbance. Lay out sheets of white printer paper, and then place the collected fronds/frond pieces spore-side-down on these sheets. Note species name on the sheet. Now cover the fronds with another sheet of paper, effectively making a fern sandwich between two pieces of paper. Place light weights in the corners to hold this top sheet in place. You want to ensure there is enough space for ambient air movement to facilitate drying down of the frond, so do not place heavy books, baking sheets, or other heavy objects upon the collecting setup.

Over the next 24 hours the sporangia will dry, split, and release countless spores that will drop to the bottom sheet. In doing so they create a spore print, and these can be truly beautiful. While the majority of spores will be released quickly, it never hurts to leave the fronds in place for a few days. Anything not dropping spores by the fourth day will not do so, and was either not ripe or had already shed its spores.

Spore print, dried fronds, and weighted paper of *Adiantum pedatum* collection.
After drying, lift away the top sheet and dry fronds, revealing the spore print left on the bottom sheet. Take a moment to admire it! The term spore print is a bit of a misnomer, as there will no doubt be debris on the sheet, primarily bits and pieces of the sporangia that once held the spores. To sort the debris from the spores, lift the opposing long sides of the paper to form a ‘u’ shape, and then slightly tilt one end. Next, gently tap the paper. Gravity will do the work for you here, and the larger, heavier debris will slide down the paper chute first, while the smaller, lighter spores will move more slowly. This takes some practice, and I’d suggest grabbing some lady ferns (*Athyrium filix-femina*), sword fern (*Polystichum munitum*), or any other commonly found fern to get use to this process before trying it with a choice collectors gem.

Once you have successfully separated the debris from the spores, discard the debris. Don’t just put it aside, put it in the compost. All this stuff looks like piles of nondescript dust, and it’s far too easy to confuse what is what if you let things accumulate. What you are left with are the spores, cleaned and ready for packing or sowing. If you are packing them away for future sowing, store the spores in folded paper packets only. Glassine or plastic bags will generate static, and this in combination with the minute size of the spores results in plenty of expletives and frustration.

As with any other plant, be sure to label your packets with species name, collection date, and any other pertinent information. Fern spores are best sown reasonably fresh, but can be stored in a fridge, similar to seeds. Share with others any excess spores and be sure to tell them the lengths you went to collect them.
Raising ferns from spores is a simple and easy means of increasing your plants or adding new ones to your collection. Most spores remain viable for a relatively long time with the exception of the *Osmunda* family, and one or two other lesser known species, which produce green spores that remain viable for just a few days or a few weeks.

Fern spores are microscopically small and germinate on the soil surface. The first requirement is moisture, which must be continually present for germination and subsequent fertilization to occur. Secondly, the growing medium must be free of pests, soil pathogens and weeds. Mold of moss can take over the soil surface and smother the germinating spore. Spores produce a different generation in the life cycle of ferns in the form of tiny prothallus. This produces eggs and sperm, and from the fertilized egg a tiny new fern plant begins its life.

**How to Sow**

I use 2 ¼ inch pots of the soft plastic variety. Large pots produce many more plants than one would want. Hard plastic pots shrivel when boiling water is poured over them.

**Soil**

Fill the clean pots with sterilized potting soil, gently firming to ¼ inch from the top of the pot. Place the pots in the sink, cover with a paper towel, and slowly pour a kettle of boiling water so that the water goes right through the pot of soil. When the pots of soil have cooled, remove the paper towel and sow the spores. Place the pot in a baggy, tie with a twist-tie, and label, noting the date, the name and source of the spores. Put the bags in a bright window away from direct sunlight or under grow lights. They will need no further attention for several weeks, at which time they can be sprayed with water and the bags checked for leaks.
Pricking Out

Several weeks or months may elapse before the green prothalli are visible. These develop rhizoid, or hair-like roots, that take up moisture and anchor the prothallus to the soil. When fertilization takes place, tiny fronds appear and live on the green prothallus until they develop their own roots. These new fern sporelings can be lifted out and potted up separately and enclosed in a baggie for a short time. Gradually open the bag to harden the plants off.

There are other ways of growing fern spores, but for me this method is satisfactory. Sterile pots and strict attention to cleanliness are most important. Lastly, you must have lots of patience.

Other Propagation Methods

1. Division of rhizomes, clumping or creeping
2. Stem bulbils
3. Foliar embryos
4. Meristem or tissue culture

Ten Ferns for Starters

1. *Adiantum pedatum* (maidenhair fern)
2. *Blechnum spicant* (deer fern)
3. *Gymnocarpium dryopteris* (oak fern)
4. *Asplenium trichomanes* (maidenhair spleenwort)
5. *Asplenium scolopenium* (Hart’s tongue fern)
6. *Polystichum munitum* (sword fern)
7. *Polystichum setiferum* (soft shield fern)
8. *Dryopteris filix-mas* (male fern)
9. *Dryopteris erythrosorba* (autumn fern)
10. *Osmunda regalis* (royal fern)
Clockwise, from top left:
1. Freshly germinated spores forming prothalli;
2. Frond emerging from prothallus;
3. Expanded first frond;
4. Pot of germinating spores;
5. Enclosed pots kept on windowsill until ferns are visible.

Images courtesy of Ben Stormes.
Fabulous Ferns of the E.H. Lohbrunner Alpine Garden
Laura Caddy

For the next few pages I am highlighting some of my favourite ferns in the Alpine Garden. I have selected 15 (including the *Aspidotis densa* on the cover) of the 32 taxa in the Alpine Garden, and there are many more in the other areas of the UBC Botanical Garden that are certainly worth admiring in person.

*Pellaea atropurpurea* is one of the ferns that thrive in a hot, rocky (tufa) location in the Garden. There is no irrigation in the southwest facing section that it has been growing in since 2011. Note the brown sori which almost cover the underside of the pinnae (leaf segments).
Cheilanthes species are xeric-adapted ferns, often found in rocky areas and/or in crevices. These three species grow in the hottest area of the Garden, with Agave, Dasylirion and Yucca (among others). It is also an area with no automated irrigation that I water rarely.

Top left: Cheilanthes lindheimeri
Top right: Cheilanthes gracillima (a 1974 accession from Bob Woodward!)
Bottom right: Cheilanthes lanosa
Above: *Polystichum imbricans* (above) is a great addition to this minimalist, texture driving trough, along with *Tsuga canadensis* ‘Minuta’ and a very dwarf form of *Epilobium (Zauschneria) canum*.

Left: *Polystichum dracomontanum* grows in a dry, though shady section of the African beds, under a *Genista tenera*.
For the more shady, moist section of the rock garden, there are a lot of great fern options.

Top left: Endemic to Vancouver Island, *Adiantum aleuticum* var. *subpumilum* was a treasured gift from the VIRAGS club.

Top right: *Adiantum shastense* exhibits a grace my photography skills are ill equipped to capture.

Bottom right: I find *Polystichum lonchitis* does well in shade or part sun - even hot afternoon sun, with irrigation.
Some ferns, such as the *Asplenium trichomanes* (above and below), will ‘self-spore’ around, competing for rock cracks with *Saxifraga paniculata* volunteers. The *Aspelmium septentrionale* (left), does not.
Ferns can also be great fillers. Above: The *Cystopteris dickieana* provides gentle texture for three seasons, inhabiting a shady bed with *Stachys macrantha* ‘Rosea’. Below: Dense carpets of *Blechnum penna-marina* subsp. *alpinum* (foreground) and the taller *Blechnum penna-marina* subsp. *pena-marina* (behind) provide the opportunity to compare the two in the Australasia section.
What Plant is That?

David Sellars

This may not be news to some but it was certainly news to me. I have tried a few smartphone apps for plant identification, particularly when hiking in the mountains and they have ranged from somewhat relevant to generally irritating. Then I accidentally discovered that I had a useful one on my phone all along. The reason it had lain hidden all this time (since 2018) is that it does not claim loudly to be a plant identification app. I had installed Google Photos to see if it would be better at adding image titles than the iPhone Photo app. It isn’t. But it has a rather nifty feature called Google Lens. If you click on the lens icon the software scans the image and gives you feedback from similar images on the web. It is basically using the same process used in facial recognition technology and can search the web to find similar images.

The success rate depends on the uniqueness of your image and the extent to which there are available photos on the web, whether it is a plant, insect, scenery or a historical building. For images of a plant, most of the time at least the genus is identified and in many cases the species is also recognized. You often get multiple results and some can be quickly eliminated by knowing, for example, where the plant is found.

I even use it in the garden when I can’t remember the name of a plant. For example I have trouble remembering the name of *Diphyleia cymosa*. Google Lens identified the genus as one of the options. It is very accurate with a photo of a plant like *Lewisia rediviva* as the flower is distinctive. It is not so effective if you only have leaves to photograph. Google Lens can be used without even taking a photo using the general Google app. Just point your phone at the plant and you will get a good indication what the plant might be.

Of course, even the most knowledgeable plant experts cannot always identify a plant from a photograph especially in the mountains. Keying out the plant is often required to obtain a correct identification. But Google Lens should be able to give you a good first draft.
Editor’s ID Challenge

Well, once again I find myself choosing a plant from the Australasian section of the Garden for this feature. Even though this species is endemic to Tasmania, the genus is quite widespread. As with most Ericaceae, this group of plants do quite well for us, and I have at least one species from the genus growing in every continental area, except the European section.

The lovely white (and hard to photograph!) ‘fruit’ on this little shrub are actually the persistent, fleshy calyx (sepals) of the flower. This is perhaps the most identifiable trait of the genus, though not a feature of all species (e.g. former members of the now defunct genus *Pernettya*). The actual fruit inside the calyx is often a berry in this genus, but in this case it is a capsule, which means all one needs to do to collect the seeds is allow it to dry to release the seeds. I collected from these shortly after the photos were taken by gently shaking them into a bag.

This is quite widespread in Tasmania and can be found growing in rainforests and wet *Eucalyptus* forests, up to 1000 m. We received the seed for this plant in 1988, and it about 50 cm high by wide. Contrary to the desired conditions for it that I’ve read online, our plant is doing very well in an exposed (though irrigated) area on the top of a small hill.

*Gaultheria hispida* will be in this year’s seed exchange.