



# Correa Mail

Newsletter No 347 – June, 2019

## MAY MEETING - Roger Wileman – ‘Carnivorous Plants’.

Our speaker at the May meeting was Roger Wileman. We all know Roger’s enthusiasm for native plants and he brought that enthusiasm to the meeting in great quantities.

Carnivorous plants are those that derive some or most of their nutrients from catching and consuming animals. Australian species would be more accurately described as ‘insectivorous’, but some of the larger ‘pitcher plants’ in Asia and south America will trap lizards and small mammals. In one case a baby monkey was found, partly consumed, inside a plant.

Carnivorous plants are found mostly on nitrogen poor soils. Australia has an abundance of those soils and as a result, a large number of carnivorous plants. There are about 1000 species recognised world-wide with about 180 found in Australia. Australian flora is in six genera - *Aldrovanda*, *Byblis*, *Cephalotus*, *Drosera*, *Nepenthes*, and *Utricularia*.

Roger’s presentation showed us photos of all these plus *Sarracenia* and *Dionea* from the Americas.

Roger divided the plants into loose groups based in their method of entrapping prey items.

Pitfall traps have ‘pitchers’ – modified leaves filled with a fluid containing digestive enzymes. Insects and small animals are attracted to the trap, probably by scent, and find their way up a clever path to the lip of the pitcher. Downward facing hairs prevent the animals from approaching from any other direction. Once on the lip they enter the trap where again, downward facing hairs direct them to the liquid at the bottom but prevent them climbing out again. Unable to get out of the trap, they eventually fall into the liquid, drown and are consumed.

The ‘Active’ trap group includes the *Drosera*, *Aldrovanda* and *Dionea*, plants who are able to manipulate their traps with the movement capturing the animal for digestion.

The last group is the ‘Bladder’ trap group, plants associated with water and in this context, the *Utricularia*. These have a bladder-like trap which opens suddenly carrying the prey into the trap with the in-rush of water.

## *Aldrovanda* – The Waterwheel Plant

*Aldrovanda vesiculosa* is the single species of this genus, and is the most widely distributed carnivorous plant species. It is native to Europe, Asia, Africa, and Australia. *Aldrovanda* is spread mainly through the movement of waterbirds. Plants which adhere to the feet of a bird are transported to the next pond, river or lake on the bird's route. So, most *Aldrovanda* populations are located along the flight paths of migratory species. It is a free floating water plant with submerged traps which close very rapidly to catch tiny water-fleas when sensor hairs are triggered.



*Aldrovanda vesiculosa* – Photo: [sarracenia.com](http://sarracenia.com)

## *Byblis* – Rainbow Plants

*Byblis* is a genus of seven little known Western Australian species. They have sticky appendages along all their stems, and large colourful flowers.



*Byblis filifolia* – Photo: [www.carnivorousplants.org](http://www.carnivorousplants.org)

President: Bruce McGinness – [bsmcginness@gmail.com](mailto:bsmcginness@gmail.com)

Treasurer: Frank Scheelings – [ftscheelings@gmail.com](mailto:ftscheelings@gmail.com)

Australian Plants Society, Geelong: P.O.Box 2012, Geelong . 3220

Secretary: Phil Royce: [phil.i.royce@gmail.com](mailto:phil.i.royce@gmail.com)

Editor: Ade Foster – [adefoster@internode.on.net](mailto:adefoster@internode.on.net)

Website: [www.apsgeelong.org](http://www.apsgeelong.org)



### ***Cephalotus* – Albany Pitcher Plant**

Though similar in many respects to the pitcher plants of Asia and the Americas, *Cephalotus follicularis* is the only member of its genus. It is found in south west Western Australia, and is a low-growing herbaceous plant. Leaves form from rhizomes and may be a deep red in strong light or green in shady positions. The 'pitcher' is a modified leaf which contains a fluid with digestive enzymes to consume prey items.



***Cephalotus follicularis* – Albany Pitcher Plant**

### ***Drosera* – The Sundews**

*Drosera* is by far the largest group to found in Australia, and undoubtedly the most familiar. Sundews are found on every continent with the exception of Antarctica. They occur right across Australia in almost all habitats from alpine regions to deserts and everything in between. Of the 194 species world-wide, 116 are found in Australia.

They trap insects by means of sticky appendages which cover most of the leaves. When an insect becomes trapped in the sticky mucilage, the surrounding appendages will move towards it, trapping it even more securely. In some species the whole leaf will curl over the prey ensuring that it cannot escape.

Like most carnivorous plants, sundew flowers are held high above the plant so that pollinators don't become prey items. In some species, individual flowers are larger than the entire plant.



***Drosera whittakerii***

Many *Drosera* have a small beetle which lives in a commensal relationship with the plant. The beetles use a pathway along the stem and centre of the leaves, which is clear of the sticky insect traps, to 'steal' the *Drosera's* meal. In turn, it defecates around the plant providing nutrients that the plant can use.

Individual *Drosera* plants may be quite large with leaves bigger than a 50c pieces forming rosettes the size of saucers. Others are very small indeed, with the entire plant the size of a thumbnail. They may be found as individual plants or can form dens and extensive colonies. Most *Drosera* are ground-hugging with rosettes lying flat to the ground, but are tall, spindly plants and others are delicate climbers.



**The tiny *Drosera pycnoblasta* from WA.**



## ***Utricularia* – Bladderworts.**

Bladderworts are found across the world on all continents except Antarctica. They are associated with water or very wet soils and are often cultivated for their flowers which are striking in some species. There are over 200 species world-wide with 64 in Australia.

Perhaps the best-known to our members would be *Utricularia dichotoma*, the Fairies' Aprons.



***Utricularia dichotoma* – Typical habitat**

It is found in the shallow margins of standing water – ephemeral wetlands, roadside ditches – flowering in the spring.

## ***Nepenthes* – Tropical Pitcher Plants**

*Nepenthes* is a group of pitcher plants found in South-east Asia, Sri Lanka, Madagascar and far north Australia. With the addition of a new, recently discovered species, there are four found on Cape York Peninsular ... *N. mirabilis*, *N. parvula*, *N. rowaniae* and *N. tenax*.



**Sheila and a huge *Nepenthes* display**

While reading more about this group, I discovered that the pitchers of *N. mirabilis* harbour a number of creatures that are not prey. On the Pacific islands of Yap

and Palau, mosquitoes use the pitchers to lay their eggs. In southern China there is a tree-frog which sits in the pitcher, unharmed by the digestive juices and eats the insects which would normally be food for the plant. In Vietnam, the pitchers are used to cook rice, while in New Guinea they are used as phallicrypts.

Thank you, Roger for an entertaining and informative look at this group of plants.

## **PLANT TABLE**

**with Frank Scheelings**

Frank conducted the plant table discussion this month with his usual dry wit and wealth of knowledge. Among those plants discussed were ...

*Eremophila cuneifolia*. There are many forms of this plant with varying leaf and flower sizes, but all exhibit the lovely mauve and pink flowers which make it a must for any garden. *E. laanii* is a lovely pink flowering plant which requires some judicious pruning. *E. oppositifolia* always seems to appear on the table when Frank is holding court. The fact that the leaves are not opposite, as the name suggests, but alternate, always has him questioning *oppositifolia* vs. *alternifolia*. Whatever, we had two colour forms on the table – a lovely pink/mauve, and a delicate yellow/white combination.

*Banksia* were numerous had elicited much discussion. Matt's talk on the *Banksias* next month should be very interesting. Among those on the table were *B. grossa*, *B. oreophylla*, *B. pulchella*, *B. meisnerii*, *B. violacea*, *B. media*, *B. spinusloa* and *B. intergrifolia*. *Banksia candolleana* is known as the Propellor *Banksia* and is a dense, low, spreading shrub with golden inflorescences.



***Banksia candolleana* – Photo: Brian Walters**

*Grevilleas* always provide colour and discussion at our meetings. Among the many on display were *Grevillea pimeliodes*, *G. fililoba*, *G. priesii*, and 'Midas Touch', 'Seaspray', 'Molly', 'Superb', 'Sylvia', 'Billy Bonkers', 'Moonlight' and 'Peaches'n'Cream'.



Among the Eucalypts were *E. leucoxolon*, the Yellow Gum a large tree with very bright red flowers. *E. pachyphylla*, is a mallee to about 5m with attractive red flower buds and deep, lemon/yellow flowers. *E. sepulchralis* is a tall mallee with an open and weeping habit and yellow or cream flowers.

Hakeas were represented by *H. francissiana*, *H. picnaneura*, *H. christata* and old favourite 'Burrendong Beauty'.

Correas are always a feature in late Autumn and winter, and among those on show were *C. pulchella*, *C. alba*, "Federation Bells", 'Canberra Bells' and 'Catie Bec'.



**Correa 'Catie Bec'.**

**PLANT OF THE MONTH – *Eremophila hybrid***

The door prize this month was won by Christa Jones, who has inherited the title of 'Winner of All Prizes' from Carmel. ☺ She chose a hybrid *Eremophila* which was brought in by Roger Wileman. Roger writes ...

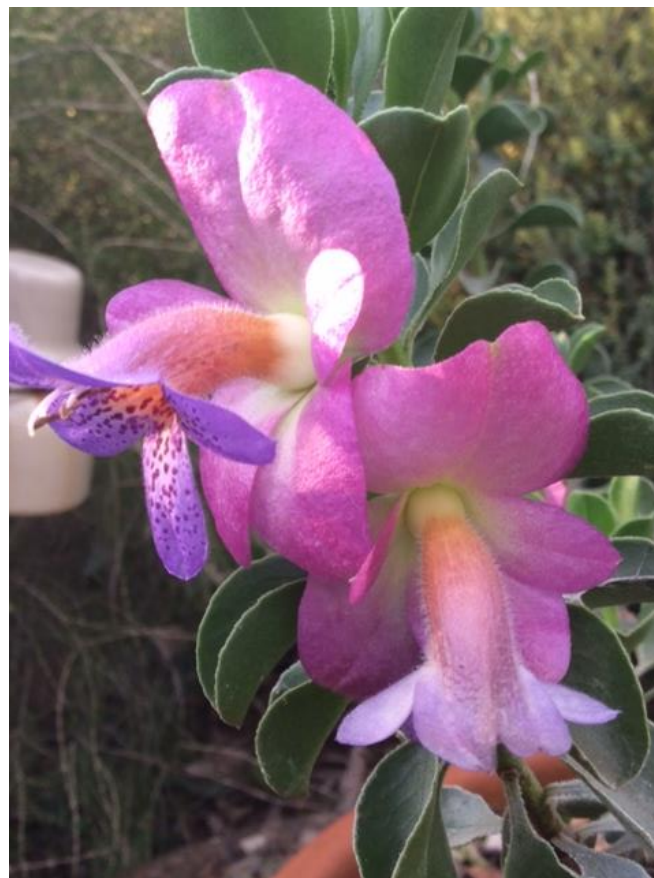
This *Eremophila fraseri* x *Eremophila cuneifolia* hybrid was found by Russell Wait on Landor station, along the Meekathara - Mount Augustus Road, in central North Western Australia. It is a one off plant - a chance seedling growing amongst the two parent species that occur in the same area.

The large flowers are very showy and rich purple in colour with a lovely spotted throat. The leaf and flower are similar to *E. cuneifolia*, but the growth habit is leaning towards *E. fraseri*. My plant is still young, but I will try some grafting at the end of the year.

*Eremophila fraseri* occurs in central Western Australia, it is a variable shrub or small tree to 4.0 m with large dark green sticky leaves. The flowers are pink to red that darken with age. *E. fraseri* becomes woody with age and does not always form an attractive plant. It needs pruning to keep it compact, it is very hard to strike from cuttings, but will graft readily onto *Myoporum* species.

*Eremophila cuneifolia* also occurs in central Western Australia. I think this is one of the most desirable

*Eremophilas* it has large purple flowers and, after the flowers drop, the colourful calyx remains on the plant giving it a second show of colour for quite a long period. It is an ideal plant for a larger sized container. It will also graft readily onto *Myoporum* species.



**UPCOMING EVENTS**

**JUNE MEETING: Matt Leach – Victorian Banksias.**

Our speaker in June is our very own Matt Leach. Those of you who come to the monthly meetings will be aware that Matt has a vast knowledge of plants, and a huge collection of Banksias. This will be a very interesting talk ... don't miss it.

**JULY MEETING: Nicole Leach – Cooking with Australian Plants.**

Nicole will talk to us about the use of native ingredients in cooking and, hopefully, have some delicious examples for us to try?

**August Meeting: AGM and Photo Competition.**

See notes on the next page for more information on the AGM and Photo Competition. As an incentive to attend the AGM, financial members who come along will receive a gift ... a specimen of our Club Emblem, *Grevillea rosmarinifolia* 'Lara Form'. One plant per family. Come along and get your Grevillea, now extinct

in the wild, and help protect this lovely little plant from total extinction.



*Photo: Annie Hillier*

#### **AROUND THE GROUNDS:**

**WIDER GEELONG FLORA LECTURE.** The Geelong Field Naturalists' Club will once again host the Wider Geelong Flora Lecture. The meeting will be held at Geelong Botanic Gardens Meeting Room Entrance is at the intersection of Holt Rd and Eastern Park Circuit Tuesday 11<sup>th</sup> June at 7.30 pm.

The Guest Speaker is **Phil Hunter** speaking on Significant Remnant Vegetation in The Armstrong Creek area.

**22<sup>nd</sup> and 23<sup>rd</sup> June** – APS Ballarat Winter Flower Show, Robert Clark Centre, Ballarat Botanical Gardens, 10.30 am to 3.30 pm.

**27<sup>th</sup> and 28<sup>th</sup> July** - Cranbourne Friends Winter Plant Sale – 10.00 am to 4.00 pm. (Mel 133 K10)

#### **THE FIRST AUSTRALIANS TOUR: by Bruce McGinness Geelong Botanic Gardens Saturday June 15<sup>th</sup>**

APS Geelong is hosting the June APS Victoria quarterly meeting at the Geelong Botanic Gardens. As part of this meeting we have organised a walk to look at the plants growing in the garden used by the Wathaurong people.

Liz Bennetto a volunteer guide from the Friends of Geelong Botanic Gardens will lead this walk. Liz will explain how the plants were used for food, fibre, medicine, weapons, instruments, ceremonies and more. The in-depth Aboriginal knowledge of the plants growing around them is undeniable with about seventy percent of their food coming from plants.

We will meet at the entrance of the garden at 2pm for the tour. Cost will be \$4.00 per person.



#### **APS GEELONG ANNUAL GENERAL MEETING**

Members are hereby advised that Australian Plants Society Geelong will hold its Annual General Meeting on Tuesday August 20<sup>th</sup> at The Ballroom, Hamlyn Park, Hamlyn Heights at 7.30 pm.

The format of the meeting will be ....

1. Welcome
2. Minutes of the previous meeting
3. President's Report
4. Treasurer's Report
5. Election of Office Bearers

All Committee positions will be declared vacant and elections will be held to appoint a new committee.

Nominations are sought for the positions of President, Vice-President, Secretary, Treasurer and four General Members. Nomination forms are available from our Secretary, Phil Royce at [phil.i.royce@gmail.com](mailto:phil.i.royce@gmail.com). Nominations will also be taken from the floor at the meeting.

You must be a current financial member to nominate for a position or to vote at the AGM. Membership form for the 2019/2020 year is attached to this document or available for download from our website ... <http://www.apsgeelong.org/join.html>

#### **MEMBERSHIP 2019/2020**

Members are hereby advised that subscriptions for the 2019/2020 year are due on 1<sup>st</sup> July. Please fill in the form attached to this newsletter and bring it to the meeting on 2<sup>nd</sup> July, or post it to APS Geelong, PO Box 2012, Geelong 3220. Alternatively, forms can be downloaded from our webpage.



Cheques should be made payable to APS Geelong. If you pay by electronic transfer please be sure your surname and 'membership' appears with the payment so we can identify who has paid.

Only members who have paid prior to the AGM are entitled to stand or to vote.

### PHOTO COMPETITION

Our photo competition has been a great success in the past and we will be conducting it again at the August meeting after the AGM. Please be reminded of the rules and conditions of entry ...

- \* There will be three categories: Australian Plants, Australian Animals, & Australian Landscapes.
- \* Format - colour or black & white, 5"x 7" size only.
- \* All photos must be taken in Australia.
- \* Again this year there is a cap on entries: 2 photos per person per category.
- \* Voting is one vote per person per category.
- \* Prizes this year will be Australian plants awarded for first, second and third.
- \* This year there will be no tied placings. If there is a tie for first, there will be a blind draw. The photo drawn will be awarded first, the other second. If there is a tie for second, the same procedure applies to award second and third place. If there is a tie for third, the drawn photo will be awarded third place and the other(s) given 'honourable mentions' and reprinted in the newsletter as such.
- \* Three plant prizes will be allocated to each category. The winner has first choice, second place has second choice, and third place is given the other plant.
- \* Decisions taken by Carmel and Denise are final and no correspondence will be entered into. No cajoling, pleading or threatening will be countenanced. Bribes are encouraged. 😊



**Last year's winner in the Australian Plants Category.  
*Darwinia oxylepsis*, a great photo by Tony Cavanagh**

### STUDY GROUPS – by Phil Royce

There are 17 or so focussed Study Groups available to us to join and enhance our knowledge and appreciation of Australian plants. I am the Study Group Liaison Officer for APS Vic and regularly receive newsletters from the Study Groups and prepare summaries for publication in the APS Vic newsletter. I thought I'd share with you (most of whom are not members of APS Vic) from a recent one.

#### **Garden Design Study Group Newsletter 107 (May 2019)**

The theme of this issue is: *Sunshine and Shade as a Design Tool*.

The editor (Ade's equivalent) commenced the newsletter with his random thoughts about the theme for two pages! I wish my random thoughts were so interesting and lovely to read. My takeaways from them were: never think you've got it (sun and shade) sorted because change is inevitable, and as your own garden matures so do those of the neighbours'.

Then followed input from some Study Group members experiencing sunshine and shade in Qld mostly, but also from Vic, NSW, ACT and SA. Below is an excerpt of what the well-known Diana Snape of Victoria shared:

#### **Sun and Shade**

Sunshine and shade of course play an enormous role in garden design. Obviously there are the practical requirements of plants. One of the first things we look up about a new plant (before we decide where to plant it) is whether it prefers sun, semi-shade or shade. Most can cope with semi-shade but many do best with either more or less sun than that middle-of-the-road situation. A minority are very fussy. With climate change there will be some tendency for the plants we already have to need a little more shade than they have now.

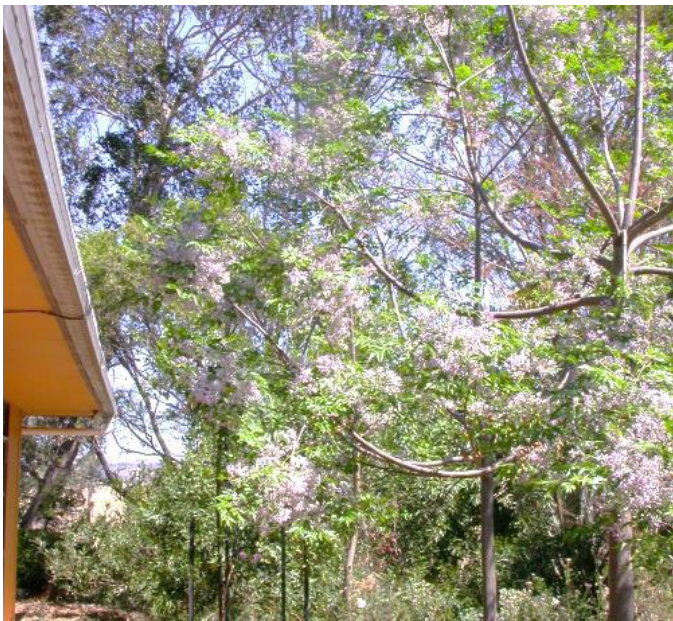
There will also be a change in the palette of plants we use, which will need to come from drier, sunnier areas. A more demanding factor will probably be water and there will be different solutions to dealing with that problem.

Sunny and shady areas bring different atmospheres to a garden. The bright light, warmth and openness of a sunny area (especially in winter) create a different mood to the dim light and cool of a shaded place, with its feeling of seclusion. It's nice to have a balance, rather like the balance between plants and open space, or mass and void.



**Light and shade in Diana Snape's garden**

From the others, I enjoyed a comment from Jo Hambrett (NSW): 'Gardening is all about working with what we've got - soil, climate, space, and time available whilst producing the most beautifully possible effects in an environmentally sustainable way!' What do APS Geelong members think?



**Melia plantings at Colleen and Geoff Keena's house**

The editor concludes the newsletter with some garden tips ...

\* Plants will bring your garden to life, softening the hard landscape, affecting light and shade and changing the perspective of everything as they grow, placing or even nestling, your house into a garden context. One of the real challenges in garden design is being able to imagine how the plants will grow and change your experience of light and space.

\* In design a whole lot of things, like unity and balance, come before excitement, so when making decisions about how to use a particular plant, concentrate on its form and function, growth habit, leaf texture and colour in relation to other plants in the design.

\* Unity is important when selecting species to achieve gardens where the plants seem to belong. A good start is to establish a backbone of taller foliage plants, then fill in the lower-growing feature plants later.

\* Weather patterns are now a lot less predictable. It's becoming equally important to select plants that tolerate more extreme conditions.

\* It is important to preserve a feeling of space in a garden; some hard structure elements of the design, such as paths, paved areas and ponds do just that.

#### **NEUTROG FERTILISER AVAILABLE**

Some time ago we offered members a great deal on Neutrog 'Bush Tucker', a great fertiliser for native plants. We had to buy a tonne to get the deal and we still have a few bags left. 20kg for \$30 is a real bargain. Email Phil Royce if you are interested and he can bring it to the next meeting, or you can arrange to collect it from Phil ...

[phil.i.royce@gmail.com](mailto:phil.i.royce@gmail.com)

#### **GREVILLEA SYLVIA**

**by Ade Foster**

With the tragic loss of my Peaches'n'Cream (yes, I'm still grieving) other favourites in the garden are getting more attention. One such is Grevillea 'Sylvia'.

Grevillea 'Sylvia' is a large shrub which can reach five metres if allowed to grow unchecked. It has deeply lobed grey/green foliage and produces large deep pink/red flowers for most of the year, although it is most prolific in spring and summer.

Sylvia is thought to be an F2 hybrid of G. 'Pink Surprise' the parents of which are *Grevillea whiteana* and the red-flowering form of *Grevillea banksii*.



It will grow in most soil types, but prefers reasonable drainage. It is mildly frost tolerant and wind resistant. It would make a fine hedge or screening plant in most gardens in our area. It can be pruned hard to control size and shape, or simply tip-pruned after flowering to encourage new growth and more flowers.