

2.

MAY MEETING

Speaker: Bill Aitchison

Topic: A look at the genus Daviesias

What on Earth do Daviesias have to do with Arnold Schwarzenegger and Danny De Vito? Be patient and we'll let you know!

Two figures of note in the history of Daviesias are The Reverend H Davies for which the genus is named, and Sir James Edward Smith.

Rev Davies was a Church of England clergyman in Wales, living from 1739 to 1821. The good reverend was much more interested in botany than in religious pursuits so had his curates do most of the church work whilst he concentrated on his plants, particularly Bryophytes (especially liverworts and mosses).

Sir James Smith was an English botanist, living from 1759 to 1829. As part of his work, he was required to identify many new plants and these included a plant he named *Daviesia acicularis*, which became the type species for this genus.

Daviesias are only found in Australia – quite widespread but with the majority in south west WA.

Bill divided his talk into four sections:

- Why talk about Daviesias?
- What makes a Daviesia?
- Why aren't they grown much?
- Some species information

Why talk about them?

There are few books about peas which have generally been rather ignored. Three of note are one by Dorothy Woolcock, now out of print, a monograph put out 40 years ago by SGAP Maroondah, and one on the native peas of Mt Alexander near Castlemaine. Study Groups have been short lived.

Daviesia botanical information is up-to-date in such aspects as naming, new species etc

Bill has done some work on the Top 10 genera by taxa with the following results:

Daviesia 156, *Pultenaea* 134, *Tephrosia* 132, *Gastrolobium* 114, *Desmodium* 96, *Swainsona* 85, *Indigofera* 84, *Bossiaea* 83, *Jacksonia* 71 *Crotolaria* 53, so it can be seen that *Daviesias* form an important group of plants.

What makes a Daviesia?

Seed pods are triangular in shape.

Foliage may have prickles, thorns, spikes etc. Some *Daviesias* have foliage similar to *Acacias* and frequently have names in common eg *A. ulicifolia*, *D. ulicifolia*; *A. genistifolia*, *D. genistifolia*.

Acacia daviesiodes had foliage very similar to some *Daviesias*, and is probably prickly.

Daviesias do not have stipules or, rarely, have minutes stipules



Photo: Daviesia incrassata, Bill Aitchison

Leaves often have a bitter taste (slide of Sue Guymer tasting *D. latifolia*) which is why a common name for some species is 'bitter pea'.

Flowers are generally yellow or orange with red markings. A few large species are red indicating they are probably pollinated by birds.

Standard petals (top ones) are generally round or kidney shaped.

Flowers have 10 stamens, all free.

Photo: Daviesia horrida showing prickly foliage, Ray and Eva Turner

3.

Why aren't they grown much? Do they deserve to be grown more?

Not many are sold in nurseries eg, Bill tried to buy some from Kuranga and could only purchase two species. There is little seed available. Nindethana in WA can only supply 24 species. The Seed Shed has 13, APS Vic Seed Bank only about 4.

The Geographe Community Landcare Nursery in Busselton in WA has been growing *D. angulata* and revegetating with it locally. They found seed collection hard (many pods but often contain no seed). They have tried direct seeding and planting using very young seedlings, but not many have taken. Dr Julie Ardley of Murdoch University is looking at soils and trying to establish what is needed in the soil for peas to grow eg mycorrhizal fungi, rhizobia?

Many Daviesias have prickly foliage and so provide protection for birds.

Daviesias attract native bees and other fauna (slide of dwarf bearded dragon).

They fix nitrogen in the soil (slide of *D. ulicifolia* with root nodules).

Daviesias are generally small to medium shrubs making them ideal for gardens eg *D. incrassata*, *D. trigonophylla*, *D. microphylla*.

Some interesting species:

(Photo Ben Walcott)

D. arborea is one of the few tree size species growing 8 – 12m high in SE Qld and NSW. It has pendulous foliage and yellow perfumed flowers but is hard to propagate.

Photo: *Daviesia arborea*, Ben Walcott



D. Schwarzenegger and *D. Devito*. These two resulted from a splitting of *Daviesia benthamii* ssp *Humilis*. If you have seen the film "Twins" you would know that one twin was big and strong, the other shorter and weaker. It was realised that *D. benthamii* ssp *Humilis* also had two forms – one big and strong, the other shorter and weaker – hence the new names given to the two forms.

D. Cunderdin is a rare Daviesia form WA found on a weedy roadside at Cunderdin. The flowers are red, and there are only two bushes known to remain though these are quite big. There has been no regeneration.

D. laevis or Grampians bitter pea is not listed in the Grampians field guide but there have been a few stands found.

D. euphorbioides or Wongan Cactus (right) looks very much like a cactus but has no water storage. Photo: King's Park, Perth, Bill Aitchison

D. suaveolens is a medium shrub found at Mimosa Rocks in NSW and has yellow flowers. It has been a plant nominated as needing urgent support after bushfires ravaged its habitat.



Some widespread species:

D. Arenaria, NSW, Vic, SA.

D. leptophylla local

D. latifolia local

D. ulicifolia the most diverse species

4.

Bill mentioned that some species eg. *D. magnifica* and *D. decurrens*, have relationships with orchids that use mimicry to attract pollinators.

Photo right shows *Daviesia divaricata* (photo Ivan Margitta) and *Diuris magnifica* (photo Jean and Fred [flickr.com](https://www.flickr.com/photos/jeanandfred/))

Some *Daviesias* should do well in containers and Bill listed several eg *D. cordata*, *D. epiphyllum*, *D. longifolia*, *D. pectinata* (*barb wire bush*) and *D. spiralis*.

Finally Bill showed slides of several *Daviesias* growing in Melbourne gardens, including Melton Botanic Garden and Cranbourne Botanic Garden.



A very interesting talk, thank you Bill, and a good introduction to the FJC Rogers seminar later this year.

SPECIMEN TABLE

Mandy, John and Marj were the contributors to our table this month.

Mandy showed the ivory curl tree, *Buckinghamia celcissima* and a piece of the firewheel tree, *Stenocarpus sinuatus*. Both of these always catch our members attention. The firewheel tree takes ages to flower but is



certainly worth having if you have a spot for it. She also had two wattles – *A. jibberdingensis* which is very long flowering, has fine foliage and bright cylindrical yellow flowers. *A. gladiformis*, above left, which was sold as *A. beckleri*, has spherical golden ball flowers which tend to start from the lower down on her tree before spreading upwards. *Thomasia solenacea* has lime green oak-shaped leaves and papery white flowers. It can grow to 3m x 3m and prunes very well. Others in Mandy's collection were a crowea and a few correas, both of which are reliable autumn flowerers.

Marj had two plants that were flowering very early – *Chorizema cordatum x varium*, left, and *Prostanthera magnifica*, centre below. *Acacia harveyi*, grown from a seed off Mandy's tree, is a small tree (3 – 4m high) with a light open habit. Also in her collection were *Epacris longiflora* which flowers continuously through the year, *Banksia spinulosa* "Birthday Candles" and more correas.



5.

John's firewheel tree had some fine flowers. Three small Thryptomenes, *T. denticulata*, *T. hyporhytis* and the more open *T. stenophylla* make reliable additions to the garden. *Acacia alata* var *tetrantha* is a small spreading shrub with white flowers. Unlike *A. alata* this variety has few prickles so is well recommended. Grows in sand or clay.



Acacia harveyi in flower April/May

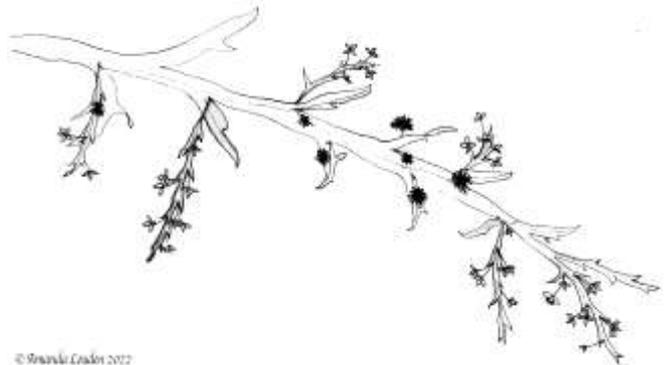


PICK OF THE BUNCH

Acacia alata var. *tetrantha* Maslin Winged Wattle
Specimen grown by John Thompson

Acacia alata var. *tetrantha* is a small spreading shrub (0.3 - 0.8m x 0.5 - 1.5m) from the south west of Western Australia. Its distribution ranges from the north of Perth to the south of Geraldton. It grows in sand or sandy clay near watercourses or swamps in low open eucalypt forest and woodland, and in mallee and paperbark (*Melaleuca* sp.) communities.

It is one of four varieties of *Acacia alata*. The others are *A. alata* var. *alata*, *A. alata* var. *biglandulosa*, *A. alata* var. *platyptera*. In botanical nomenclature, variety (abbreviated var.; in Latin: *varietas*) is a taxonomic rank below that of species and subspecies, but above that of form.



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The white flowers are produced in pairs or singularly in the leaf axils. In cultivation flowering is from April to June. The phyllodes in var. *tetrantha* are not as rigid as those in var. *alata*.

A position in partial sun is recommended. Full sun can be tolerated but some burning of the phyllodes can occur. Well drained soils that are moist for most of the year are best. Supplementary watering during the height of summer or extended dry periods is recommended. Propagate from seed.

Acacia is a member of the Fabaceae family commonly known as the legume, pea, or bean family, a large and economically important family of flowering plants. The group is the third largest land plant family, behind only the Orchidaceae and Asteraceae, with 730 genera and over 19,400 species. The genus *Acacia* consists of about 1100 species mostly occurring in Australia.

The name, *Acacia*, comes from 'Akakia' a name given to an Egyptian species (*A. arabica*). It is derived from the Greek, *akis*; a sharp point or thorn. The species name, *alata*, means winged referring to the winged phyllodes. The variety name, *tetrantha*, means four flowered referring to the 4-flowered heads of white flowers.

NEXT MEETING

Supper: Mick Connolly

Write-up: Marj Seaton

DIARY

APS South East Melbourne Meetings:

- May 30th** Committee Meeting; Seatons, 7:45pm. 36 Voumard Street, Oakleigh South
June 7th Speaker: Malcolm Dow – "Sustainable Gardening"
July 5th Speakers: Norm and Marj Seaton – "Tanks, Silos and the Shepparton Botanic Garden"
August 2nd AGM and slides
September TBA
November Lunch at Kurunga. Details later.

APS Victoria

- 4 June** - APS Vic Comm. Hosted by APS Shepparton
16, 17 July – Cranbourne Friends Spring Plant Sale 10am - 4pm
27, 28 August – APS Yarra Yarra Australian Plants Expo, Eltham Community & Reception Centre 10 - 4
3 Sept – APS Wilson park (Berwick) Plant Sale. Date to be confirmed.

26 to 30 September – 7th Global Botanic Gardens Congress, Melbourne. *Influence and Action: Botanic Gardens as Agents of Change*. Includes a youth program for future gardens' leaders aged 18 to 24.

15 & 16 October – 14th FJC Rogers Seminar. Topic: Fabulous peas (the typical 'pea-flowered' plants from the sub-family Faboideae). York on Lilydale in Mt Evelyn. Expressions of interest and queries to fabulouspeas2022@gmail.com

22 & 23 October - Cranbourne Friends RBGV Spring Plant Sale. 10 am to 4 pm.

7.

Monthly Photo Gallery

From Gillian, three photos of *Banksia menziesii* flowers at various stages of openness, taken at Cranbourne Gardens on the same day:



Also from Gillian, *Hakea drupacea*, “sweet-scented Hakea” - Gardiners Creek Trail and an unknown moth taken at Westerfolds Park:



8.

PROMOTIONS

Australian Plants Society Ballarat District
Winter 2022
NATIVE PLANT SHOW



DISPLAYING THE REMARKABLE DIVERSITY
of
AUSTRALIAN FLORA
GROWING IN BALLARAT GARDENS in WINTER
NATIVE PLANTS for SALE

Saturday 25 June 10:00am – 4:00pm
Sunday 26 June 10:00am – 4:00pm

ADMISSION \$5

ROBERT CLARK HORTICULTURAL CENTRE
Ballarat Botanical Gardens
(Next to the Conservatory)
Access from Wendouree Parade or Gillies Street

Any Covid19 regulation that is in place at the time of the Show will be strictly adhered to

INTERNET: www.apevic.org.au
EMAIL: aps_ballarat@yahoo.com.au
CONTACT: P: 5341 6667



11 - 16 September 2022 - ANPSA Biennial Conference 2022 –
Kiama, New South Wales.

Preliminary details of the Conference, pre- and post-Conference
tours and the beautiful town of Kiama can be found on the APS
(NSW) website. <https://austplants.com.au/>

25 to 29 September 2022 – (note that this is a date change – it was
to be from 26th to 30th September)

7th Global Botanic Gardens Congress, Melbourne. *Influence and
Action: Botanic Gardens as Agents of Change*. Includes a youth
program for future gardeners' leaders aged 18 to 24.

<https://www.7gbgc.org/>



Fabulous Peas 2022

FJC Rogers Biennial Seminar
15th - 16th October 2022

Discover the extraordinary world of Australian pea plants.

Saturday York on Lilydale, Mount Evelyn

Speakers with expertise in identifying, growing and propagating peas. Learn about current
research into propagation and growing-on techniques. Evening dinner and an
entertaining speaker.

Plant sales of common and unusual pea species. Book sales. Displays. Raffle.

Sunday Coach tours to public and private native gardens which include a wide variety
of pea species.

Art exhibition and sale featuring pea plants from 8th – 16th October at Karwarra Australian Botanic Garden. Plant sales.

Expressions of interest: fabulouspeas2022@gmail.com

<https://apsvic.org.au/fjc-rogers-seminar-2022/>

Hosted: Australian Plants Society Maroondah Inc.

