### **APS EAST HILLS GROUP NEWSLETTER**





## September 2018

#### **NEXT EHG MEETING:**

7.30 pm, Wednesday 5 September 2018

SIR JOSEPH BANKS, HIS LEGACY,
AND THE JOSEPH BANKS NATIVE PLANTS RESERVE IN KAREELA.

#### **Rhonda Daniels**

This talk comes highly recommended – a chance to learn more about one of Botany's heroes.

Please bring something to share for supper, and specimens for the plant table.

#### LUGARNO-PEAKHURST UNITING CHURCH

909 Forest Road Lugarno (opposite the Chivers Hill Lugarno shops)

#### **VISITORS WELCOME**

WELCOME to the September 2018 edition of the East Hills Group Newsletter. In it you'll find plenty to do – please make sure you look at page 2 and also the Dates for your Diary on page 8! And if you're more into reading than being out and about, try page 6. We have notes and photos relating to our August plant table and there is also an article about seed germination. There's no account of our July talk about Colombia though – so if you missed it, you missed it! I hope your garden is coping with the dry. If you can spare some flowers or foliage of plants that are doing well, please bring some samples to add to the plant table at our meeting. It's also our last meeting before the quarterly gathering – time to finalise our plans!

Jan Douglas Editor

http://austplants.com.au/East-Hills





## THE ILLAWARRA GREVILLEA PARK SPRING 2018 OPEN DAYS

Celebrating 25 years

To celebrate 25 years there will be special guided tours of the gardens and the rainforest, and propagation demonstrations.

## Saturday and Sunday September 1<sup>st</sup>, 2<sup>nd</sup>, 8<sup>th</sup> and 9<sup>th</sup>



The Grevillea Park is nestled at the foot of the Illawarra Escarpment near the historic township of Bulli. The park is at the rear of Bulli Showground, Princes Highway Bulli, a 10 minute walk from Bulli Station.

\$5.00 adults, children free

Large colourful display gardens with hundreds of grevilleas and other native species and cultivars

Rainforest walk

Acres to explore, including a bushwalking track

BBQ and picnic facilities

A large range of native plants for sale including difficult to obtain grafted plants

An extensive range of books for sale

Plenty of advice on growing native plants

Birdwatching

For more information:

www.grevilleapark.org The Illawarra Grevillea Park/Facebook

## FROM OUR AUGUST MEETING PLANT TABLE – AUGUST 2018

Notes by Graham Walters

Photos by Jan Douglas unless otherwise noted.

Thanks to everyone who brought along plant specimens.

Acacia cardiophylla Wyalong Wattle Acacia fimbriata Fringed Wattle Acacia longifolia Sydney Golden Wattle Acacia macradenia Zig Zag Wattle Acacia podalyriifolia Queensland Silver Wattle or Mount Morgan Wattle Acacia pravissima Ovens Wattle Acacia suaveolens Sweet Wattle Acacia terminalis Sunshine Wattle Dendrobium kingianum Pink Rock Orchid Disphyllum x 'Sunburn' Goodenia ovata (prostrate form) Hop Goodenia Grevillea lavandulacea Lavender Grevillea Grevillea sericea Pink Spider Flower Hovea sp. (Photos at right) Pterostylis curta Blunt Greenhood Ranunculus lappaceus Common Buttercup Themeda australis Kangaroo Grass





#### Acacia cardiophylla - Wyalong Wattle

This beautiful free-flowing shrub or small tree flowers in Spring with small brilliant yellow ball-shaped inflorescences of 20-30 flowers per head in fairly short racemes or panicles with short slender peduncles. The bright light green pinnules (leaflets) are ovate or cordate, 1-2 mm long, hairy, and occur in groups of 6-12 pairs, giving a feathery effect. The branchlets are also covered with short hairs. The young foliage is pendulous and pubescent.



Photo from https://austplants.com.au/Acaciacardiophylla-Wyalong-Wattle

This species occurs naturally on the western slopes of NSW from near Dubbo to the West Wyalong area, often on fairly sandy loams on banks of watercourses. It requires good drainage in cultivation, tolerates frost and has low water requirements once established.

The species name means heart-shaped and refers to the shape of the pinnules.

#### Acacia fimbriata - Fringed Wattle

This is a bushy shrub or small tree, often with drooping branches. It flowers in Spring, with small, brilliant yellow flower heads in racemes that extend beyond the phyllodes. (You can see this clearly in the right-hand photo **below**.) The phyllodes are narrow and lanceolate, 2-5 cm long, 4-6 mm wide, fringed at the base with fine hairs, and tapering to a fine non-pungent point.

It is widespread in eastern NSW from coast to mountains but not common. It is widely cultivated, very showy, and the flowers are perfumed.





#### Acacia longifolia Sydney Golden Wattle

The Sydney Golden Wattle is one of the best known native plants of the Sydney district, and is very conspicuous in late Winter and Spring with its masses of golden yellow flower spikes. This shrub or small tree grows from 2 to 4 m tall. Its phyllodes are 8-16 cm long and up to 2 cm wide; most are pointed at the apex. The photo at right shows the prominent longitudinal veins. The flowers are borne in dense spikes which grow in pairs in the leaf axils – you can see this in the photo also.



This species is naturally widespread from coast to mountains, usually on sandy soil in forest and woodlands. It is generally hardy in cultivation. The perfumed flower occur from June to November.

#### Acacia pravissima - Ovens Wattle

The Ovens Wattle is a tall glabrous (= not hairy) shrub or small tree has a somewhat angular growth habit. The phyllodes are rather crowded, roughly triangular, about 10 mm long, usually with two main veins, reticulate veining between them, and a very pronounced gland about the middle of one leaf edge. The flower heads are bright yellow, rather small, with 8-14 flowers per head and borne in short racemes in Spring.



Acacia pravissima occurs naturally in the southern tablelands and south western slopes of NSW and also in Victoria.

The species name means extremely crooked, probably referring to the asymmetrical growth habit of this species. The photos **below** show the triangular phyllodes.







#### **Dendrobium kingianum** or **Thelychiton kingianum**

The Pink Rock Orchid is usually a lithophyte (growing on rocks) but can sometimes grow as an epiphyte (growing on another living plant but not parasitic in nature).

*D. kingianum* is a very variable species and a number of varieties have been described. The pseudobulbs are slender, up to 35 cm long, with a thick base. There are usually 3 to 6 leaves at the top of each pseudobulb. The flowers occur in racemes of 2 to 15 flowers per stem and are usually pink to deep mauve, although white forms are also known. Flowers are seen from late winter to spring.

D. kingianum is popular in cultivation and is easy to grow in tropical and temperate climates. It can be grown on branches of trees or on rocks where it receives nutrients through the breakdown of leaf litter that accumulates around its roots. While establishing its root system it may need to be attached using wire or twine. Eventually new roots will form which will grip the substrate firmly. It shouldn't be planted directly into soil as the root system is not adapted to constant moisture. It can also be grown as a container plant in a coarse medium such as pine bark chips. Avoid dense shade. Application of liquid fertiliser during growing season (Spring - Summer) will promote healthy growth. Keep water to a minimum during winter. Propagation is by division of the clump. The photos **below** are from <a href="https://austplants.com.au/Thelychiton-(Dendrobium)-kingianum-Pink-Rock-Orchid">https://austplants.com.au/Thelychiton-(Dendrobium)-kingianum-Pink-Rock-Orchid</a>





#### **BEATING AROUND THE BUSH**



'Beating Around the Bush' is a free electronic newsletter that profiles native plants: part gardening column, part dispatches from country, entirely Australian.

- Read more about the newsletter here: <a href="https://theconversation.com/welcome-to-beating-around-the-bush-wherein-we-yell-about-plants-96993">https://theconversation.com/welcome-to-beating-around-the-bush-wherein-we-yell-about-plants-96993</a>
- Subscribe here: https://theconversation.com/au/newsletters
- For more about The Conversation, look here: https://theconversation.com/au/who-we-are

# SEASON AND SMOKE: KEY ELEMENTS IN SEED DORMANCY AND GERMINATION A talk by Dr Mark Ooi – University of NSW

#### **Graham Fry**

On 14<sup>th</sup> July Menai Wildflower Group had a very interesting session on seed germination and how smoke treatment affects success. Dr Ooi leads a group at the university researching this subject.

Mark started by pointing out that fire is a significant driver of plant population dynamics and its effect occurs in two ways:

- fire kills the adult tree known as an "obligate seeder" or
- fire causes the tree to resprout known as a "resprouter".

Most Australian plant species recruit new members only after fire. Seeds require further treatment following fire before they sprout. This subject is known as seed ecology.

Mark then introduced a new term "dormancy classification" in relation to seed ecology.

- Physically dormant species water resprouter. These have hard seed coat that heat causes to break open, allowing water to penetrate.
- Physiologically dormant species these do not respond to water. Many have a complex requirement for sprouting which may involve temperature, soil immersion and possibly smoke chemicals.

An important aspect of physiologically dormant species is that smoke is not the only requirement for sprouting success. Many people have been disappointed when trying to propagate species just with the use of smoke water and having poor success. Mark's research group is exploring the factors that can lead to successful germination. For example, in some species the seed needs to go through a period of cold temperatures, in others the seed needs to be immersed in soil for a period. Mark's main message was that smoke treatment alone does not break dormancy!

One of their research projects was on a species in the Rutaceae, *Asterolasia buxifolia*, which is an endangered plant growing only above 1100m. They found this species lives in a tough climate on exposed areas with cold winters with occasional snow and hot dry summers. They knew it was physiologically dormant species, but what were the requirements to break the dormancy? After much experimentation they found that they could achieve germination if the seed was kept in an incubator at winter temperatures for 6 to 8 weeks and then treated with smoke, a classic smoke resprouter. They found similar requirements for *Boronia floribunda*.

In summary, finding the secrets of breaking seed dormancy in Australian species is an ongoing facet of their research and has a significant value when trying to propagate rare and endangered plants.

*Note from the Editor:* 

For more information, you might like to try the following links:

http://www.markooi.com/mark-oois-seed-ecology-lab.html

http://fireandrestoration.org.au/fire-and-seasonality/

**Collette** J.C., **Ooi** M.K.J. (2017) Germination ecology of the endangered species *Asterolasia buxifolia* (Rutaceae): smoke response depends on season and light. *Australian Journal of Botany* https://doi.org/10.1071/BT17025

# THE BUSINESS East Hills Group meeting – 1 August 2018

Notes by Jan Douglas

The meeting opened at about 7.45 pm with 14 in attendance.

The speaker was Rob Walters, who gave a fascinating presentation on Colombia and his experiences there, illustrated with great photos.

Various business matters were discussed:

- The group agreed to make donations of \$75 each to the following organisations: NSW
   Environmental Defender's Office, Australian Wildlife Conservancy, Australian Bush
   Heritage and Total Environment Centre. The motion was moved by Dorothy Taylor and
   seconded by Marie O'Connor.
- Arrangements for the APS NSW quarterly meeting, to be hosted by East Hills Group on Saturday 22 September, were discussed. Marie O'Connor volunteered to provide a draft list of who does what.
- The possible workshop at Bunnings Kingsgrove will not go ahead.
- Graham Fry to contact Jessica Murphy, Visual Arts Teacher, Year 7 Advisor 2018 at East Hills Boys High School regarding a native garden at the school.
- Peter and Margaret Olde have invited members of Sutherland, Menai and East Hills
  Groups to visit their property, Silky Oaks, near Camden for a BYO picnic lunch and garden
  visit on Sunday 23 September (the day after the quarterly gathering).

After the talk, members gathered for the plant table, plant raffle and supper.

Income at meeting: Raffle tickets: \$23.30

#### **COMING EVENTS – CHECK YOUR DIARY!**

See page 2 for the Illawarra Grevillea Park Spring open days.

You can find more district group events on the APS NSW website at <a href="http://austplants.com.au/calendar">http://austplants.com.au/calendar</a>

Every Friday, Saturday, Sunday & Monday 10am to 4pm from Friday 31 August to Monday 24 September, 2018	Boongala Native Gardens and Rainforest open days. Plant sales, open garden and rainforest walk. Small admission charges for open garden and walk go to Royal Flying Doctor Service.  www.boongalagardens.com		
Saturday 1 September 1 pm	<b>East Hills Group propagation session</b> with Menai Wildflower Group. Illawong Rural Fire Brigade Headquarters. [click for map]		
Wednesday 5 September from 7 pm for 7.30 pm	<b>East Hills Group meeting:</b> Rhonda Daniels (from Sutherland Group) on Sir Joseph Banks, his legacy, and the Joseph Banks Native Plants Reserve in Kareela.		
Saturday / Sunday, 8/9 September 9.30 am – 4 pm	Westleigh Native Plants sale and garden open day. Free entry. 47 Eucalyptus Drive, Westleigh 2120		
Saturday 8 September 1 pm	Menai Wildflower Group Meeting. Illawong Rural Fire Brigade Headquarters.		
Wednesday 19 September, 8 pm	<b>Sutherland Group meeting</b> . Gymea Community Hall, 39 Gymea Bay Rd, Gymea.		
Saturday 22 September	APS NSW Quarterly Gathering hosted by East Hills Group		
Sunday 23 September	BYO picnic lunch for members of Sutherland, Menai and East Hills Groups at 'Silky Oaks', Peter and Margaret Olde's property near Camden.		

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