



**AUSTRALIAN  
PLANTS SOCIETY  
SOUTH EAST NSW GROUP**

**Newsletter No. 101 – August 2014**

**NEXT MEETING- SATURDAY 6<sup>th</sup> SEPTEMBER 2014 AT 10.30AM**

**At Moruya's SAGE gardens**

**Details page 6.**

**And**

**AGM 1<sup>ST</sup> NOVEMBER 2014 AT 10.30AM**

**At Michael Anlezark's Lowland Grassy Woodland Endangered Ecological Community**

**75 Dwyer's Ridge Rd, Moruya. RSVP 0412 376965.**

**(For directions see page7)**

Don't forget SHOW and TELL(bring samples of native plants)

Please bring morning tea, lunch and a chair...also walking shoes, hat and warm clothes.

<b><u>FUTURE MEETINGS</u></b>		
<b>DATE</b>	<b>GENERAL/COMMITTEE</b>	<b>TIME/LOCATION</b>
Wednesday 3 <sup>rd</sup> December	Committee	tba

***Will the AGM in November be the last meeting for the APS SE district group? It's up to you!***

The membership of our group has been declining slowly and, despite our best efforts, we are not getting enough new members – particularly younger people.

At the 2012 AGM we were only just able to form a committee because of a couple of new volunteers and the steadfast commitment of some of the existing committee. Last year we were fortunate enough to have new volunteers for the committee so we were able to keep going for another year.

But this year the President, the Vice-President, the Secretary and some other committee members are standing down and will not nominate at the AGM in November. Most of the remaining committee members would prefer to stand down but have valiantly said they would keep going if new office bearers could be found.

This means that our group may cease to exist after the November AGM: if members don't nominate for the committee, and take on the roles of President, Vice-President and Secretary, the group cannot continue.

This means that all members have to think about what they want to happen: if you want the SE group to continue, **YOU** have to do something about it. It is not enough now to leave it to others to act.

Many members are already involved in other similar activities, such as garden clubs, the Friends and volunteers of the Eurobodalla Regional Botanic Gardens and Landcare. It may be that you don't mind if the group ceases to exist – just be certain that you are happy for this to happen, and that it doesn't happen by default.

If we are unable to form a committee at the AGM, the group must finish. If that happens, there are options if you want to remain part of the APS, but not take an active part in a local group. Depending on where you live in our large region, you could just retain your membership directly through NSW, join the Nowra Group of APS, or the ANPS in the ACT or a Victorian group. The ERBG is always pleased to have more Friends and volunteers.

But this is your choice: **YOU** will decide if this group will still exist in 2015.

If you would like to keep the group going by nominating to be an office bearer or committee member, please contact the secretary Mog Bremner on 0401 968 899 or email her on [mogbremner@mogajon.com.au](mailto:mogbremner@mogajon.com.au) by 11 October 2014.

## ***Hibbertia dentata*: riches on the forest floor**

*by Jennifer Liney*



Like golden sovereigns hidden in the leaf litter on the forest floor and up the base of eucalyptus trunks, are the springtime flowers of *Hibbertia dentata*, a non-aggressive climber of the Dilleniaceae family, and cousin to the more flamboyant climber *Hibbertia scandens*. J. H. Maiden, one time Director of the Royal Botanic Gardens Sydney, in 1889 wrote that “so often does it display its beauty in our hedges that the appellation of ‘hedge pride’ might suit it.” However, nowadays we opt for a more descriptive common name, namely Twining Guinea flower, or Trailing Guinea Flower, or Tooth Leaved Guinea Flower.

*(Photo by Jackie Miles, copied with permission from <http://thebegavalley.org.au/plants.html>)*

*H. dentata* was first described by a Swiss botanist, Augustin Pyramus de Candolle, born in 1788, who established scientific criteria for determining natural relationships among plant genera. He contended that plant anatomy (i.e. the number of reproductive organs and their positions relative to each other) must be the sole basis for classification, for which he coined the term ‘taxonomy’, a term still widely used. De Candolle was also the first to put forward the idea of ‘Nature’s war’, meaning different species ‘fighting’ each other for space and nutrients. Today, we call this process species competition. The idea was taken up by Charles Darwin, who considered that the pressures produced by this ‘war’ contributed to ‘natural selection’.

During his professional life, de Candolle published many papers, as well as contributing to botanical books. He prepared the first seven volumes (of a total of 17) containing a descriptive classification of all known seed plants that was finally completed in 1873, long after he died in 1841.

His description of *H. dentata* was published in 1817, noting that the Type specimen (i.e. the first one collected) is 'habituated in New Holland, on the coast of the East, near blue mountains and the sea'. (I could only find this phrase in Latin, so had to ask Mr Google for help in translation; this is what we came up with.)

Which takes us back to *Hibbertia dentata* and its golden flowers. A common species of open forest, even persisting in degraded situations, it has been called a light climber, twining around the stems of nearby herbs, and, if they are within reach, a little way up the trunks of saplings and small trees. The twining stems are reddish, and the alternate oval or oblong leaves with toothed margins are purplish when young, often retaining reddish or bronze tinges throughout their life. The bright yellow flowers are about 30mm across, with a central cluster of stamens. Each flower lasts only about a day, but the flowers appear continually over a long period.

The genus is named after George Hibbert, an 18<sup>th</sup> and 19<sup>th</sup> century English merchant and nurseryman and collector of rare and exotic plants, with an enthusiasm for the family Proteaceae, called at the time Proteae; *dentata*, of course refers to the toothed leaves. As far as I could ascertain, this species has not had any major name changes during its botanical life.

**Welcome to new members Justin and Kerry Eckersley from Merimbula**

## **The Ins and Outs of plants-Making sense of botanical names.**

*by John Knight*



**As members of APS, it can be assumed that we all grow at least some Australian plants.**

**When I first joined APS in Victoria over 40 years ago, a big deal was made of knowing about the plants being grown, not only the requirements for successful growing, but also a bit about the taxonomy of plants as well. To many, Botanical names are presented as an obstacle to enjoying our gardening, rather than an important part of the reason why we enjoy plants.**

**Also, over the years it seems to me that the importance of names has waned, and commercially at least many plants now have fancy cultivar names with little relevance to the plant.**

Taxonomists describe a plants characteristics, and its relationship to other close relatives which are placed in the same Genus or Family.

They show how, in minute detail, what character determines the classification of each and every of over 550,000 plants currently known worldwide.

Up to the 17<sup>th</sup> century, classification was ad hoc, and depended upon the interpretation of users of the plants, mostly herbalists and other medical people, and could be known by a different name everywhere the plant was grown or used.

All people involved in naming plants were driven by the need to sort and order, but none could agree on what that system should be. An example of naming, known as polynomial tag, follows:

**Plantago foliis ovato-lanceolatis pubescentibus spica cylindrica scapo tereti, tells us that this is a plantain with ovate lanceolate leaves becoming softly hairy, with cylindrical head and a round stem.**

This is obviously an impossible way to describe every plant.

John Ray, English plantsman, produced “Synopsis methodica” in 1690, which laid down the rules for a modern system of nomenclature. In 1696 it was he who first used the term botany which described the subject of his life’s work, from the Greek botane (= plant). Hence botany is a division of biology which treats plants with reference to their structure.

**In 1753, Swedish botanist Carl Linne (Linnaeus)** further developed a system of classifying and naming plants based on the sexual parts of plants, the flower structure of stamens and carpels, which are consistent features not relying on external factors which might alter growth. His published “**Species Plantarum**” described 6000 species of plants then known in Europe. In this work he introduced a consistent approach of describing plants using just 2 words (binomial system) firstly the Genus (surname) and then species (first or christian name). Plants which were found to be sexually close to each other were grouped in Families, a system which more than 250 years later is still valid. Books which describe plants scientifically are known as “Flora’s”, and list the plants according to their perceived evolutionary antiquity, the oldest plants first then progressively till the plants believed to be most recent in their evolution last. The only part of a Flora to be listed alphabetically is the index.

Until recently, botanists have used morphological, readily seen characters to determine plant names, but DNA testing has proved that some of our plants actually belong in different Genera, and even different Families. An extreme example is the lotus, previously grouped with water lilies, but DNA has proved that it belongs with the Plane tree and South Africa’s Protea.

In Australia, the Genus Dryandra proved to have the same DNA structure as Banksia, and transferred to that Genus. Hakea tests genetically the same as Grevillea, and it is also likely Callistemon and Melaleuca will merge. DNA will change the way future botanists study plants, but for we mere mortals, morphology is still the most reliable tool for identification.

Plant identification is different from plant recognition, where you guess what a plant is based on previous experience or using pictures and plant books to come to a conclusion.

Plant morphology is the study of those external features which we can recognize and differentiate.

This is where plants, which have been named using characters to describe parts of the plant, can help us to determine the correct name for a plant, and hopefully retain that information for future reference.

Plants discussed at the meeting included:

**Eucalyptus**, Eu, meaning well, and kalyptos, covered referring to the operculum or cap which covers the flower bud before the stamens are released.

**Corymbia** is named for the species previously known as Eucalypts, but which have their flowers arranged outside the foliage, in corymbs, or cauliflower like heads.

**Angophora** are closely related to Eucalypts, but do not have an operculum. From Angos, a vessel and phora bearing, referring to the urn shaped fruit.

**Callistemon** refers to the beautiful stamens of the flowers, from callos, beautiful, and stemon, referring to the stamens. The word should probably be pronounced Cally-steemon

**Melaleuca** means black and white, referring to the old bark of many paper-barked species.

**Eriostemon** is from erio, woolly, and stemon, stamens, and refers to the woolly filaments of the stamens. Most have been transferred to the Genus **Philotheca**, from psilos, naked, and thece, a box, and refers to that although the filaments are covered in long hairs, they are joined at the base into a glabrous (naked) tube.

**Tetratheca** derives from tetra, four, and thece, a box, and refers to the 4 cells of the anthers.

**Isopogon** is named for the hairs which cover the fruit, which are of equal size. From Isos, equal, and pogon, a beard.

**Leucopogon** from leuco, white and pogon a beard refers to the inside of the corolla tube which is variously covered with white hairs.

**Correa reflexa** is often thought to be named for the upturned tips of the corolla tube, but reflexa correctly refers to the 2 leaflike bracts that reflex above the flower.

**Epacris** derives from epi, upon and acris a hilltop, so described as the first collection came from such a place. It is often thought that epacris referred to the sharp leaf tip, as acris can also mean sharp

**Impressa** refers to the dimples at the top of the corolla tube.

The waratah, **Telopea**, is from tele, far, and ophis, view, alluding to the flower heads which are easily seen from a distance.

**Calytrix** is from calyx, a cup, and trichos, hair, and refers to the long awn-like hair attached to the sepals

**Prostanthera** is named for the appendages on the anthers. From prosthece, an appendage or addition, and anther, anthers

**Brachycome** is from brachys, short, and come, hair, referring to the tuft of very short hairs at the apex of the fruit.

The lily **Thelionema**, is named for the many small protuberances on the staminal filaments, from thelion, a teat or nipple, and nema a thread.

**Eleaocarpus** derives from elaia, olive, and carpos, fruit, and refers to the seed which is olive shaped.

## The Loss of a Lookout

by Leigh Murray

In our early days at Tuross Head, I planted a lovely little group of three gorgeous *Eucalyptus caesia* amongst the boulders near our north east boundary. They grew well as spindly plants for several years, and produced some stunningly beautiful flowers. But Tuross, we learnt, is subject to 150mm downpours, and despite excellent drainage down the slope, this leads to root rot. We lose a plant or two after virtually every such major rain event, in different areas of the garden each time. I never know where I'll find a surprising, sudden death.

Eventually, all three *Eucalyptus caesia* were clobbered. One outlasted the other two, but in the end it died too. But its main trunk stayed upright. For years. And this spindly dead 'spike' was the number one lookout for birds in the area. Just about any bird flying from south to north on the eastern side of our block would pause there to case the joint. A neighbouring Norfolk Island Pine, and tall, bushy *Banksia integrifolia*, were ignored. It was the *E. caesia*, alive or dead, that was perfect.



It was so popular that I left it there. It looked a bit daggy, but with a beautiful bird atop it, it looked pretty good.

It amazed us that such a spindly dead tree could stay upright for so many years, in gales, with only very slight bracing from a *Kennedia rubicunda* that popped up near its base, and wound around its lower section. A few weeks ago, I set up a small stepladder beside it to prune the top of a *Banksia integrifolia*. And something happened. Perhaps I unknowingly brushed slightly against the dead spike, or perhaps I breathed heavily on it. Whatever, I found it fallen over the next day.

So, no more lookout.

I've got a replacement, a more *Phytophthora*-tolerant *E. leucoxydon* 'Euky Dwarf', growing slowly beside that spot, but I doubt that this tree can ever take over the same function as that wonderful tall slender lookout. The birds miss it.

## GENERAL MEETING Saturday 6<sup>th</sup> September 2014

Many people will have been to the Tuesday afternoon markets in Moruya: these are an initiative of the SAGE Project, which is a community driven initiative that is developing a site in Moruya as an education and demonstration site for sustainable agricultural and horticultural practices, for both domestic and commercial use.

We will be meeting on the site to look around and hear about the SAGE (Sustainable Agriculture & Gardening Eurobodalla) project from the President, Fraser Bayley. It will be interesting to have a discussion about how Australian plants fit into this sort of project and we hope that many members will bring their own wide experience and knowledge to bear.

Please bring your own morning tea and lunch and any easily portable chairs will also be useful. There will be hot water for tea/coffee available.

The SAGE gardens are at 110 Queen Street in Moruya: there is lots of parking on the street. If you are interested, visit their web site at [www.sageproject.org.au](http://www.sageproject.org.au)

## Invitation from Nowra APS-14<sup>th</sup> October 2014

Nowra APS region have invited South East members to a social and activity day at Booderee National Park on Tuesday 14 October.

The program for the day is:

10.00am Meet at the Booderee National Park gates ( an entrance fee applies)

Talk on the history of the BNP by Brenda Duffy

10.45am Conducted Koori/rainforest walk

12.30 Lunch

After lunch- visit to other areas of BNP with Martin Fortescue, BNP Resource Manager

If there are enough people interested we are considering hiring a bus from Eurobodalla Regional Botanic Gardens. This will involve a cost and if you are interested in the event and/or the bus, please RSVP to Mog Bremner, phone 0401 968899 or by email, [mogbremner@mogajon.com.au](mailto:mogbremner@mogajon.com.au) by 1<sup>st</sup> October 2014.

## Directions for APS meeting 1<sup>st</sup> November 2014

Driving from the north, drive through Moruya till you pass the Caltex Woolworths Service Station, turn RIGHT on to Bergalia St. Coming from the south, turn left on to Bergalia Street just before you come to the Caltex Woolworths Service Station.

Then turn left on to Dwyers Creek Road and left again on to Dwyers Ridge Road. Keep going until you reach a turning circle up the top, Michael's is on the left. Look for signs and number 75.

If you get lost Michael's number is 0412 376965.

### Contacts

President:	<b>John Knight</b>	Ph.0434 674347	Email: <a href="mailto:john.knight@erbg.org.au">john.knight@erbg.org.au</a>
Vic President:	<b>Mal Pengilly</b>	Ph.0409 172359	Email: <a href="mailto:mjpengilly@gmail.com">mjpengilly@gmail.com</a>
Secretary:	<b>Mog Bremner</b>	Ph.0401 968899	Email: <a href="mailto:mogbremner@mogajon.com.au">mogbremner@mogajon.com.au</a>
Treasurer:	<b>Sue Sullivan</b>	Ph. 6495 7819	Email: <a href="mailto:navillusbs@bigpond.com">navillusbs@bigpond.com</a>
Membership:	<b>Jenny John</b>	Ph.4476 3576	Email: <a href="mailto:peteandjenny.john@gmail.com">peteandjenny.john@gmail.com</a>
Newsletter Ed.	<b>Jan Robilliard</b>	Ph.0400 901 331	Email: <a href="mailto:janandrob1969@hotmail.com">janandrob1969@hotmail.com</a>
Committee:	<b>Bernadette O'Leary</b>	Ph.0403 711927	
	<b>Cliff Wallis</b>	Ph 6494 5028	Email: <a href="mailto:cliffwallis@hotmail.com">cliffwallis@hotmail.com</a>
	<b>Michael Anlezark</b>	Ph.4471 3348	Email: <a href="mailto:michael.anlezark@eurocoast.nsw.gov">michael.anlezark@eurocoast.nsw.gov</a>
	<b>Jean Pengilly</b>	Ph.0429 040749	Email : <a href="mailto:jeanpengilly@yahoo.com.au">jeanpengilly@yahoo.com.au</a>

Website : <http://thebegavalley.org.au/1479.html>

**© 2014 Copyright Australian Plants Society NSW Ltd.**

### **MEMBERSHIP**

<b>Individual</b>	\$50.00	<b>Concession</b>	\$42.00
<b>Joint Members</b>	\$58.00	<b>Concession</b>	\$50.00

A concession is available to seniors, people on a limited fixed income and full-time students. This applies in joint memberships where one person is entitled to request it.

Please contact Jenny John for more information.