ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS Inc.

EPACRIS STUDY GROUP

Group Leader: Gwen Elliot, P.O. Box 655 Heathmont Vic. 3135

NEWSLETTER

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October 2006

Greetings to all Epacris Study Group members,.

This issue of our Study Group Newsletter has a very special *Epacris* species Profile Page, as we are featuring *Epacris grandis* which was named by our founding Study Group Leader, Dr. Ron Crowden. Ron continues to provide wonderful inspiration and support to our Study Group, and I would like to thank him personally, for checking this Profile Page for us, before it went to print.

An aspect which has featured significantly in this Newsletter relates to the topic of Climate Change, and the value now being placed on the recording of flowering times and other seasonal events of nature. All this ties in somewhat with our ongoing project of noting the flowering times of *Epacris impressa* and other species. Further information is on page 3.

At this time we must say farewell to Dr. Nita Lester of Brisbane as ASGAP Study Group Co-ordinator. Thank you Nita for your time as Co-ordinator, and very best wishes for your future endeavours.

A warm welcome to Philip Robinson of Mornington Victoria, who now takes over the role of Co-ordinator. Philip is also Editor of the A.P.S. Victoria newsletter - Growing Australian so he certainly is a very active person in his retirement years. We look foward to our future contact with Philip and his wife Moira as together we endeavour to extend and increase the understanding of our native plants, while at the same time finding it a very enjoyable road to travel.

For many regions of Australia at the present time the major topic of conversation and concern relates to rainfall - or the lack thereof. This is particularly applicable for farmers and home gardeners. The selection of suitable species for planting in each region is of prime importance. Plants which need supplementary water in times of drought are now being grouped together, so that only those sections of the garden need to be watered - which often involves the use of grey-water recycled from the house.

As we look towards a summer which is likely to be both hot and dry we trust both you and your *Epacris* survive and even thrive.

One tip from Study Group member Shirley Carn in Victoria is that after her *Epacris* have flowered she prunes the plants back heavily then covers them with old bracken fern fronds, to provide protection from the hot summer sun. Alternatively she plants taller grasses or other plants nearby to provide some shade.

If you have any plant survival and water-saving tips in the garden or if you know any effective rain-dances, now is the time to put them into practice!

We would also be delighted to pass them on via our next Newsletter in March 2007.

Warm greetings, and happy gardening,

Gwen E.

News & Notes from Members

Welcome to a new Study Group member

A warm welcome to **Helen Kennedy** of **Wheelers Hill Vic**, who has recently joined the EPACRIS STUDY GROUP. Helen and her husband Max have been members of the Australian Plant Society for many years and currently Helen is Vice-President of APS Victoria. Helen is also a Selector for Australia's Open Garden Scheme and the Kennedy garden was recently opened in conjunction with the Scheme on September 9th and 10th.

Several Epacris contributed to the delightful garden display, including a white-flowered form of Epacris longiflora in full bloom.

We hope you enjoy being part of the Study Group Helen, and are delighted to welcome you as a new member.

Warm greetings also to renewing member **George Wade** who has now moved from Kingston Tas. to a retirement home in **South Hobart.** George is not as actively involved in gardening as in previous years but is still very interested in *Epacris* and continues to enjoy the newsletters. Thanks for your note George.

Follow-ups on Frost

Further to the note in our March 2006 Newsletter regarding the frost tolerance of **Epacris petrophila** being grown by Study Group member Tony Parry, in Switzerland we have received a couple of additional reports from members. Tony mentioned that his plant was purchased from **Will Fletcher** Fletcher in Tasmania, and Will has now sent the following response:

'The **Epacris petrophila** now growing in Switzerland is certainly from alpine or sub-alpine Tasmania, although I can't remember exactly where! In its natural habitat it would experience around -10°C or even less in some areas and some could be under snow for months.'

Jeff Irons in England also has plants of Epacris petrophila and has sent in his notes.

'I too have found *Epacris petrophila* to be unaffected by night minima of -10°C. More importantly it is unaffected by being grown in soil that freezes to a depth (in this relatively clement part of Britain) of 6". My plants are now dead, a fate that has affected several Australian epacrids, most tragically *Epacris stuartii*. I believe that this is a consequence of soil that is insufficiently acid.

Epacris and soil Acidity

Jeff Irons continues his above note, as follows:

'My garden has soft yellow clay 1ft to 2ft down and it is noticeable that, as the years pass, the flowers of blue Hydrangeas change to purple, then to pink. This change can occur in as little as 2 years. An autumn dose of sulphur puts them back to blue.

I have decided that the clay is almost certainly alkaline and that during the months when evaporation exceeds precipitation alkali (HCO3-?) rises up through the soil, changing its pH.

An ailing Trochocarpa gunnii was the most recently affected plant. When lifted and put into a container containing an acid mix it was magically restored to health.

I now give the garden a surface dressing of Flowers of Sulphur every few years.

If my supposition is correct it raises the question of whether those **Epacris** that are found in very acid soil are there because they need it or whether they are there simply because they can tolerate it, and that highly acid soil is a medium where there is less competition from more vigorous plants.'

Thanks once again Jeff for your thought-promoting contribution.

Do other Study Group members have experience with *Epacris* in alkaline soils?

Please let us know.

Some comments on Epacris impressa and flowering times

Will Fletcher has commented on our initial report on the flowering times of *Epacris* impressa, noting that this species is certainly a 'variable flowerer' across its range.

The local form in Ridgeway Tas is in shades of pink and is a winter-flowerer.

As you move towards Ferntree the plants have white flowers, and a small-flowered form from western Tasmania flowers in mid-summer.

Climate Change and the Australian Flora

On Friday April 21st members of the APS Maroondah Region (Vic.) were treated to an extremely interesting and challenging talk by **Dr. Lynda Chambers**, a Senior Scientist at the **Bureau of Meteorology's Climate Research Centre**, on the topic of CLIMATE CHANGE AND AUSTRALIA'S FLORA.

It was a fascinating presentation and Lynda mentioned the value of records being kept in relation to or flora and fauna. An example was the recording of the flowering times of 56 species of native flora which have been noted for 22 years now by a lady living in Beaconsfield Vic. There are some obvious changes which are highly likely to be related to climate change.

So just when we thought we were beginning to establish some records on the flowering times of Epacris impressa forms in various garden regions of Australia - now we find there is value in making these records for this year - then continuing to record the flowering times in our gardens as an ongoing project.

We will certainly continue to receive and record this information on an ongoing basis as part of our Study Group records. You may also like to undertake records of this nature on other plants in your region, or similar records on the native birds and animals in your area. Further information can be obtained by contacting Lynda at

Aust. Greenhouse Office www.greenhouse.gov.au
National Ecological Database, Aust. Bureau of Meteorology

www.bom.gov.au/climate

Epacris Study Group Member **Malcolm Reed** has also sent information on the **Macquarie University Phenology Project** which includes a study related to numerous plant species including **Common Heath** - **Epacris impressa**.

Phenology is described as the study of the seasonal timing of natural events, including plants, insects, birds and other creatures. For plants it includes flowering, fruiting, growing of new leaves and the losing of old ones. By recording the timing of these events over many years it is possible to find out how our biota are being affected by climate change.

Phenological events in the northern hemisphere have been recorded for many years, with the earliest records for Britian started in 1736, however there has been little data gathered to investigate how climate change is affecting plants and animals in the southern hemisphere.

Macquarie University is inviting Australians to report their observations on the timing of natural events in their home region, through its **BioWatch** program. The Co-ordinator of the program is Dr. Barbara Rice, Dept of Biological Sciences, Macquarie University NSW 2109. Phone 02) 9850 8192. Email: brice@bio.mq.edu.au.

A special webpage is available at www.bio.mq.edu.au/ecology/rice/rice.htm where you can register as a participant in the BioWatch program, or you can simply browse through the website without registering for further involvement.

The program is of particular interest to Epacris Study Group members in view of the fact that one of the native plants specifically included for the registration of information is **Epacris impressa**.

Thank you Malcolm for bringing this project to our attention.

EPACRIS growing well - a long way from home

In early October Rodger and I had the pleasure of visiting the Arboretum at the University of California - Santa Cruz, in California USA.

We have been involved with this garden since the early 1970s and over the years have sent seeds or rooted cuttings of a wide range of Australian plant species for inclusion in the Arboretum. It has now become possibly the largest collection of Australian plant species outside of Australia.

A special delight on our latest visit was to see the many species of Epacris growing happily at

Santa Cruz. Some of these plants are certainly in excess of 20 years old.

The original plants were sent as very small rooted cuttings, washed free from potting medium or soil. Could there have been any minute traces of mycorrhiza from their native environment. We wonder!

Species now growing at the Arboretum include the following

Epacris apiculata Epacris barbata Epacris breviflora Epacris gunnii
Epacris impressa various forms including white , pink, bright pink and red-orange flowers
plus selections including Anglesea, Bega, Bushy Pink, Smiths and Spring Pink,
the form previously known as var. grandiflora is grown, in both single pale pink, deep

pink and double-flowered forms

Epacris longiflora Epacris microphylla Epacris mucronulata Epacris obtusifolia Epacris petrophila Epacris pulchella Epacris reclinata Epacris serpyllifolia and Epacris virgata. It is certainly quite an impressive list.

Santa Cruz is approximately 90 minutes drive south of San Francisco on the coast of Monterey Bay. The region has a Mediterranean climate zone which often includes long dry summers. Supplementary watering at the arboretum is kept to a minimum, but plants do have the benefit of some moisture from frequent coastal fogs.

Other Australian plants which are thriving at the Santa Cruz Arboretum include many species of Banksia, Dryandra, Grevillea, Hakea and Isopogon from both eastern and western Australia. Correas, Croweas and other members of the Rutaceae family do well and there are numerous daisies and peaplants. The Myrtaceae family is well-represented with Callistemon, Calothamnus, Leptospermum and Melaleuca species plus a special Eucalyptus Grove.

The Australian plants have no shortage of pollinating birds as the Arboretum is a mecca for hummingbirds. *Epacris* provide a welcome source of nectar for these tiny birds which use an emormous

amount of energy and consume the caloric equivalent of 228 milkshakes per day!

If you are visiting California at any time we can certainly recommend a visit to the U.C. Santa Cruz Arboretum.

It is located on Empire Grade, Santa Cruz and is part of the large University of California campus site.

For *Epacris* puzzle enthusiasts

For this word puzzle you start at the top left corner, and fill in the answers to the clues below in a clockwise direction, spiralling towards the centre. The last letter of each word becomes the first letter of the next word. Good luck.

The solution - for any who need it - will be in our March 2007 Newsletter.

- 1 The family to which EPACRIS belongs.
- 2 A Tas. species with stamens & stigma extended beyond the floral tube
- 3 The pollen-bearing part of a stamen
- 4 The species name of NSW Sandstone Heath
- 5 Of or relating to high mountains.
- 6 Restricted to a particular region
- 7 All of the petals
- 8 A plant which completes its life cycle within 12 months
- 9 The species name of Fuchsia Heath
- 10 Borne at different levels in a straight line
- 11 EPACRIS

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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS Inc. EPACRIS STUDY GROUP Plant profile

Epacris grandis R. K. Crowden

grandis = tall, large

Common Name - Giant Epacris

Natural Habitat - Tasmania.

Epacris grandis occurs in a limited area on the central-eastern coast of Tasmania to the west and north-west of Bicheno. It grows as an undershrub in dry sclerophyll forest on shallow sometimes stony soils where surface moisture is available.

This species was described and named in 1986 by founding leader of the Epacris Study Group, Dr. Ron Crowden.

Species Description

Epacris grandis has an erect habit and plants can grow to 2.5 m tall with hairy, reddish-brown new growth. The leaves are to 1.5 cm X 0.4 cm with a short stalk and the tip is pointed. They have 5 or more conspicuous veins. Flowering is mainly during late spring to midsummer. The flowers, produced in leafy spikes near the ends of the branches have a short floral tube and spreading lobes to about 1.5 cm across. The sepals are hairy and streaked with pink providing a showy contract with the snowy white corolla tube and spreading lobes. The stamens and short style are enclosed within the floral tube and the anthers are brown.

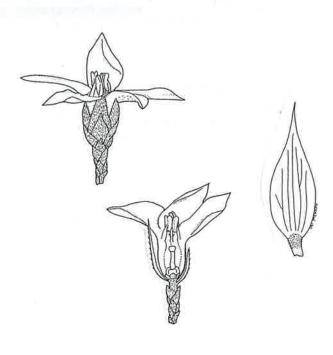
Photograph - Epacris grandis © Rodger Elliot



Illustrations © Yvonne Menadue Colleague of Dr. Ron Crowden at University of Tasmania

Epacris grandis - flower, half flower and leaf

Scale I = 1 mm



Epacris grandis R. K. Crowden

Cultivation

Epacris grandis is cultivated mainly by enthusiasts at the present time and plants are available from specialist Australian plant nurseries in Tasmania.

They are best suited to temperate regions and prefer freely draining acidic soils. A situation which is sunny to semi-shaded is suitable. Plants are tolerant of moderate frosts.

Plants are naturally of erect habit but pruning after flowering will encourage branching. This also helps to maintain good health and vigour.

Propagation

Epacris grandis is cultivated primarily from cuttings of fresh young growth. Little information is available on propagation from seed, but fresh seed is certainly worth trying.

Closely related species

E. heteronema and E. marginata are closely related to Epacris grandis but can be readily distinguished by the lack of hairs on the sepals.

Epacris grandis R. K. Crowden

Dr. Ron Crowden of Tasmania is the botanist who in 1986 described and named this species of *Epacris*.

Ron Crowden retired in 1996 as lecturer in Botany at University of Tasmania. He has a special interest in the Epacridaceae family and the genus of *Epacris*. He is also the founding leader of the Epacris Study Group.

An excellent series of articles on the Tasmanian members of this family can be found in the 'Australian Plants' journals of 2001.

We are all very much indebted to Dr. Ron Crowden for the information we now have on the genus of *Epacris* and its close relatives.

Ron Crowden also named *E. celata* as profiled in our Newsletter No. 14 (October 2002).



Space for additional notes on Epacris grandis.

The Epacris Study Group would welcome any further information on the Propagation and Cultivation of *Epacris grandis*.

EPACRIS STUDY GROUP MEMBERS to June 2006

Australian Members

Dawn & Lyn Barr, Winifred Bennett, Dr. Elizabeth Brown,

Dick Burns, Faye Candy, Shirley Carn Chris Clarke, Jeanette Closs, Ian Cox,

Dr. Ron Crowden, Betty Denton, Simone Disney, Norma Duff, Helen Dunn,

Gwen Elliot,
Pat Emms,
Will Fletcher,
Wayne Griggs,
Margaret Guenzel,
Bill Gunn,

Sandra Hammond Helen Kennedy David Lightfoot, John Mahoney, Pat Macdonald, Dr. Max McDowall,

Barbara Nevin,

Malcolm Reed, Jill Roberts, Barbara Rooks, Karen Russell, Kris Schaffer,

Marion Simmons, St. Kilda Indigenous Nursery,

Trish Tratt,

Darren Vandenberg,

Prof. George Wade,

Phil Watson, Philip Wilson,

Overseas Members

Jeff Irons, Mary Sue Ittner, Anthony Parry, Swan Reach Vic. 3903 Greensborough Vic. 3088 National Herbarium of NSW

Penguin Tas. 7316
Berwick Vic. 3806
Monbulk, Vic, 3793
Thornbury, Vic, 3071
Kingston Tas, 7050
Kenthurst NSW, 2156
Kettering Tas 7155
Eltham Vic. 3095
Leichardt NSW 2040

Hawthorn Vic. 3122 Heathmont Vic 3135 Loch, Vic. 3945 Ridgeway Tas, 7054 Sandy Bay Tas 7006 Ocean Grove Vic. 3226 Ocean Grove Vic. 3226

Lower Barrington Tas 7310

Ocean Grove Vic. 3226
Eagle Point Vic. 3878
Wheelers Hill Vic. 3150
Surrey Hills 3127
Mt. Duneed, Vic. 3216
Langwarrin, Vic, 3910
Bulleen, Vic. 3105

Saumarez Ponds NSW 2350

Epping NSW 2121 Ulverstone Tas 7315 Montrose Vic 3765 Blackburn Vic. 3130 South Hobart Tas, 7004 Legana Tas. 7277

Port Melbourne 3207 Emerald Vic. 3782 Preston, Vic. 3072 South Hobart Tas, 7004 Mt. Rumney Tas 7170 Woodend Vic. 3442

Heswall, Wirral, England Gualala, California USA Würenlingen, Switzerland

Epacris Study Group Newsletters are also sent to the ASGAP Study Group Co-ordinator, State Secretaries and State Newsletter Editors of each State member body of the Australian Plants Society, as well as to Botanic Gardens and Universities where research on *Epacris* is currently being undertaken. Several regional groups of the Australian Plant Society are also affiliated with the Study Group and receive each Newsletter as issued.

Epacris Study Group FINANCIAL STATEMENT

	IUI year 1./.2	OOS - JOINING	00		
Credit Union	55 Club Account - Balance at 1/	\$447.43			
	t Received	<u>\$ 12.11</u>			
	2 as at 30.6.06	\$459.54	\$ 459.54		
Credit Union	S1 Access Account - Balance at 1/	\$142.36			
Receipts	Memberships, donations,	\$230.00			
Keceipts	Credit Union interest	\$ 0.33			
	Croure amon most ess	\$372.69			
Expenses	Newsletter printing -	\$ 136.30			
	Postage, including Newsletters	\$ 94.95			
		\$ 231.25	\$ 231.25		
Balanc	e as at 30.6.200 6		\$ 141.44	<u>\$ 141.44</u>	
COMBINED STUDY GROUP BALANCE - as at 30.6.2006					

Epacris Study Group - Membership information.

Membership of The Epacris Study Group and other Study Groups of the Australian Plant Society / Society for Growing Australian Plants is available to all members of the A.P.S. / S.G.A.P.

Membership of any Australian state group, not necessarily that of the area in which you reside, entitles you to membership of one or more study groups.

You can join the EPACRIS STUDY GROUP for just \$5.00 for 1 year or \$10 for 2 years renewable in June. Overseas subscriptions - \$10 Aust. p.a.

Membership renewal date is shown on address label of current Study Group members. Memberships should be sent to P.O. Box 655, Heathmont 3135.

Please make cheques payable to The Epacris Study Group.

Sender:

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