

# NEWSLETTER No. 3

## May 2022

Email: fabulouspeas2022@gmail.com Website: https://apsvic.org.au/fjc-rogers-seminar-2022



Fred Rogers		
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Eutaxia microphylla var microphylla Common Eutaxia.

## Introduction

Welcome to our third newsletter of the 14<sup>th</sup> FJC Rogers Seminar. It features information on our two interstate speakers.

We are delighted that we have received a number of registrations and expect many to take advantage of booking early for the weekend. **The early bird discount will continue until 30<sup>th</sup> June, 2022.** 

If you know of someone who is not already on our email list and would like to be, they can contact us on:

> email: <u>fabulouspeas2022@gmail.com</u> or ph: 0409 694 623

Propagation of plants for sale at the Seminar is progressing well and we hope to have a wide range of different pea plant varieties for sale.

We have another volunteer to assist with the planning and running of the seminar, so welcome Alison Fisher to our sub-committee.

### Dates

Saturday 15<sup>th</sup> October 2022 Presentations, Plant Sales & Dinner

> Sunday 16<sup>th</sup> October 2022 Coach Tour - Garden Visits

### SATURDAY SCHEDULE

8.15am	Registration, sign in and plant sales
9.00am 9.30am	"A Guide to Identifying the genera of Faboideae"
5.50din	presented by Marilyn Bull
10.15am	Morning tea
11.00am	Keynote address presented by Professor Mike Crisp "The egg-and-bacon peas: origin, distribution and evolution."
12noon	Lunch
1.00pm	"Legume Rhizobia Symbiosis" presented by Dr Julie Ardley
1.45pm	"Propagation of peas" presented by Mandy Thomson
2.20pm	Afternoon tea
2.50pm	"Horticulture and Cultivation of peas" presented by
	Royce Raleigh
3.25pm	"Peas in Art" presented by John Thompson
4.15pm	Close
4.15pm	Kuranga Native Nursery and Paperbark Cafe will be open
6.00pm	Pre-dinner
6.30pm	Dinner at York on Lilydale
7.30pm	Guest speaker, APS Vic President Chris Clarke
9.00pm	Close



Gastrolobium racemosum Net-leaved Poison

- The bus tours, on Sunday, will all depart from York on Lilydale around 9.00am.
- All bus tours will return to York on Lilydale around 5.00pm.
- The tours will visit 2 private gardens Bev Fox (in The Basin), Marilyn Bull (in Montrose), and 2 public gardens - Maranoa Botanic Gardens and Karwarra Australian Botanic Garden and Nursery.

**SUNDAY SCHEDULE** 

• The Donvale garden of Bill Aitchison and Sue Guymer will also be open on the Monday morning.



Kuranga Native Nursery is located about 1km further along York Rd. Their normal closing time is 5.00pm but they have kindly agreed to remain open late on the Saturday. For anyone wishing to buy further plants you should visit

Kuranga following the close of the Saturday proceedings (around 4.30pm).

#### ERRATA Nightcap at York on Lilydale

The phone number is:(03) 9736 4000The booking Code for a discount:YORKEVENT22Book at:yorkonlilydale.com.au

NOTE: booking information in earlier newsletters was incorrect. The above details should be used.

#### **PROFESSOR MIKE CRISP**



Professor Mike Crisp studied long-term change in arid zone vegetation for his PhD at the University of Adelaide and graduated in 1976. From 1975-1989, he was a research scientist and herbarium curator at the Australian National Botanic Gardens in Canberra. He was posted as the Australian Botanical Liaison Officer at the Royal Botanic Gardens, Kew, London, in 1981-2. In 1990 he took up a lectureship in plant systematics in the Division of Botany and Zoology at The Australian National University, where he became head of school in 2001-3 and Professor from 2004.

He has developed an expertise in phylogenetics and

classification of Australian plants, particularly the pea-flowered legumes, revising (with collaborators) the large genera *Daviesia*, *Gastrolobium*, *Gompholobium* and *Jacksonia*.

In 2020, he made a permanent move to Brisbane, although he remains active in research and still has an emeritus position at ANU, as well as an honorary position at the University of Queensland. In recent years Mike has been mainly working on eucalypts, but continues to be interested in the peas. He is currently collaborating on a research project with *Pultenaea*.

Professor Mike Crisp will present: "The egg-and-bacon peas: origin, distribution and evolution."

**ABSTRACT:** The legumes are the most diverse plant family in Australia, with ca 3,600 species. This talk will focus on the endemic egg-and-bacon pea group, Fabaceae tribes Bossiaeeae and Mirbelieae, which comprise 44% of Australia's peas with 32 genera and 766 species. He will first summarise their distribution, and their evolutionary and biogeographic origins. Much of his research has focussed on *Daviesia*, one of the largest egg-and-bacon genera, and he will talk about some recent work sorting out a problematic group of cryptic species occurring in mallee communities across southern Australia, including Victoria. Then he will describe the specialised pollination mechanisms of peas, how he and collaborators analysed evolutionary shifts between different mechanisms, and the likely effects of these shifts on the diversification of species. Finally, he will talk about ongoing research on the taxonomy of the *Pultenaea* group.



<u>Page 2 photo:</u> Gastrolobium racemosum Net-leaved Poison (photo by Marilyn Bull)

One of the WA Poison bushes, *Gastrolobium racemosum* is an erect shrub to 2.5 m high. It occurs naturally on sand or clay-loam soils in the Esperance area. It should be adaptable to most well drained soils. Tough, leathery oblong leaves have a network of veins. They are large ranging from 4-60 mm long and 8-20 mm wide, on angular stems. Stipules are present.

Well displayed terminal racemes of orange flowers to 15 mm long have yellow and red blotches and wings. They occur from late winter to end of spring.

This is a plant worth trying for a narrow place in the garden where the flowers are allowed to shine. Just remember not to chew on the leaves!





Dr Julie Ardley is a post-doctoral researcher at Murdoch University, Western Australia. She is the author of over 45 research papers and book chapters on the legume-rhizobia symbiosis. Her research is focused on rhizobial systematics and the genetic determinants of rhizobial biogeography and interactions with plant hosts.

Dr Julie Ardley will present:

"The Legume-Rhizobia symbiosis: identifying the rhizobia that nodulate Australian native legumes and using them to improve growth and establishment"

**ABSTRACT:** The nitrogen-fixing symbiosis between legumes and soil-dwelling bacteria known as rhizobia is of global importance to both natural and agricultural ecosystems. The symbiosis is initiated when the legumes and the bacteria send chemical signals to each other that allow the rhizobia to infect the host plant and result in the formation of a specialized organ known as a root nodule. Within the root nodule cells the rhizobia supply nitrogen to the legume in exchange for plant-supplied nutrients. Although many different species of rhizobia have been described, most legumes are very selective and will only nodulate with one or a few rhizobial species.

While much is now known about the rhizobia that nodulate agricultural legumes, we still know comparatively little about the symbiotic relationships between wild legumes and their rhizobia. This is especially true for the diverse and species-rich Australian legume flora. However, recent interest in growing native Australian plants and in using legume species to help with rehabilitation of disturbed sites has prompted new research into the rhizobia that nodulate Australian legumes. This talk will provide an overview of the legume-rhizobia symbiosis and will also present our recent research findings on identifying the rhizobia we have isolated from a range of Australian legumes and our progress in developing rhizobial inoculants that can be used to improve the growth of these legumes in plant nurseries, or in rehabilitation sites.







#### **BOTANICAL ART EXHIBITION**

Running from Saturday 8<sup>th</sup> to Sunday 16<sup>th</sup> October at Karwarra Australian Native Botanic Garden, Kalorama (Not Open on Monday 10th October).

Karwarra Garden will feature an art exhibition in collaboration with the Fabulous Peas 2022 Seminar.

The Botanical Illustrators and the Botanical Fabricators, from the Cranbourne Friends Royal Botanic Gardens Victoria, have joined forces to present beautiful works featuring the Australian Peas. All pieces will be for sale with pick up on Sunday 16<sup>th</sup> October afternoon or Tuesday 18<sup>th</sup> October.



The Botanical Illustrators will display between 25-30 original pieces, ranging in size from A5-A2. They will also have packets of cards available featuring some of the artworks on display.



The Botanical Fabricators are making bags, purses, eye covers, placemats, oven gloves and more. All fabrics used include peas including Sturt's Desert Pea (as seen in the photo), chorizemas and hoveas.



<u>Front Page Photo:</u> <u>Eutaxia microphylla var microphylla</u>. Common Eutaxia (photo by Peter Rogers)

*Eutaxia microphylla* var *microphylla* is a dainty, low spreading shrub to 50 cm high. It is densely branched with crowded narrow grey-green to light green leaves. Leaves are displayed in the characteristic decussate pattern – pairs of leaves, each pair at right angles to the ones below. Stems are sometimes spine-tipped.

Single or paired flowers are well displayed and profuse in spring. Their yellow petals streaked with red differ from the similar *Eutaxia microphylla* var. *diffusa* (*Eutaxia diffusa* in some states) which has pure yellow petals. A form on the basalt plains of Melbourne has orange flowers and is prostrate.

Found in grasslands and grassy woodlands, *Eutaxia microphylla* var *microphylla* will tolerate both brief water-logging and dry periods once established. It is a great little plant for rockeries, containers or hanging baskets.