

## Botanical Society of Otago Library

The Botanical Society receives newsletters, journals etc. from other New Zealand botanical societies. These will be housed in the Botany Department Library, 464 Great King Street, Dunedin. Any member of the B.S. O. is welcome to see them, just ask at the Botany Department office.

### Profile of a Botanist: David Orlovich, Mycologist.

David writes: I've been a lecturer in the Department of Botany since June 1999. I want to use this profile to let people know what I am doing, what I am interested in, and how people can get involved in my research. I teach 1<sup>st</sup> year botany and 3<sup>rd</sup> and 4<sup>th</sup> year mycology at the University of Otago. My PhD and one postdoc in Sydney were studying mycorrhizal fungi. My skills are mainly in electron microscopy and my research was into how nutrients are transported along fungal hyphae. In 2000 I'm planning to develop a research theme based around mycorrhizas in N.Z. Myrtaceae.

When I moved to Melbourne after my PhD I worked for 4 years on the family Myrtaceae – 2 years studying floral development in the *Metrosideros* and *Leptospermum* alliances and 2 years studying evolution in the *Beaufortia* sub-alliance (bottlebrushes and paperbarks). It was certainly a big change from fungi! During that time I discovered how much I enjoyed working on “real” plants and I learnt how to sequence DNA for phylogenetic analysis. I'm interested in continuing the work I started on floral development by studying NZ Myrtaceae. New Zealand is in the unique position of having representatives of both the subfamilies Leptospermoideae and Myrtoideae (the dry- and fleshy-fruited Myrtaceae). My present task is to start collecting flower buds and pickling them in 70% alcohol. Once I've got a good collection I can start looking at them under the scanning electron microscope. The purpose is to discover patterns of development that can give clues to the evolutionary history of different groups.

My final research area is to discover the phylogenetic relationships within and between the genera *Gymnopilus*, *Phaeocollybia*, *Galerina* and *Pyr-rhoglossum*. Some of these are wood-rotting fungi and some are mycorrhizal fungi – all in the family Cortinariaceae. I'm keen to receive collections of these genera in NZ. I've still got a lot to learn about identifying fungi and I hope to lead regular fungal forays in Otago where society members can share the learning experience and we can all become proficient in identification. A long term goal is to set up permanent field sites where fungal diversity can be assessed and monitored over a number of years. I'd love to be contacted by people interested in participating in autumn forays.

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### Help for "Eagle's Trees and Shrubs of N.Z." Vol. 3.

Audrey Eagle writes: A task I started in 1952 will be completed with the publication of the proposed Vol. 3 of "Eagle's Trees and Shrubs of N.Z.". Included in this book will be:

- ❖ Discoveries made since book 2 was published.
- ❖ Varieties mentioned but not illustrated in the previous two books.
- ❖ Different forms of variable species, even though due to gradation they may not warrant a separate name.

I will be very grateful if any of the following specimens, still required from the Canterbury/Otago area, could be found:

<i>Coprosma pseudocunata</i> subsp. "S.I."	Female & male flowers
<i>Hebe brockii</i>	Flowers & capsules
<i>Hebe haastii</i> var. <i>macrocalyx</i>	Capsules
<i>Coprosma ciliata</i> var. "Eastern S.I."	Female & male flowers
<i>Hebe hectorii</i> subsp. <i>subulata</i>	Flowers & capsules
<i>Hebe hectorii</i> subsp. <i>demissa</i> (Rock & Pillar Ra.)	Flowers
<i>Hebe haastii</i> var. <i>humilis</i> (L. Alta & Remarkables)	Capsules
<i>Aristotelia fruticosa</i> var. <i>rigidula</i>	Female flowers
<i>Pimelia poppelwellii</i>	Fruit

(I will be away with Wellington Botanical Society 27 Dec. to 7 Jan.)