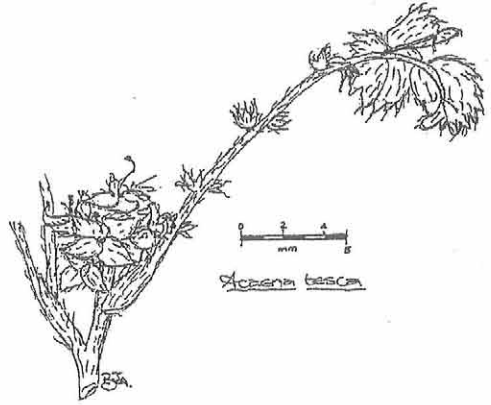


Botanical Society of Otago

Newsletter.
Number 15,
November 1999.



Botanical Society of Otago Meetings

Saturday December 4th:

Field trip to Cornish Head, Trip leader will be Brian Patrick (Otago Museum). Trip will leave from the Botany Department carpark (Corner of Union and Great King Streets) at 9.00 am back early afternoon.

A short coastal walk (10 minutes) in diverse native communities, near Waikouaiti. Be prepared for scrambling down quite steep slopes or sidling into lush herbfield. For those not so keen on the steep slopes there are nice dry shrublands nearby with an array of interesting shrubs and lianes.

Brian will bring a handout for everyone. Share transport.

Monday February 14th 7:30pm:

"Nothing monotonous about monocots." An illustrated ramble with Landcare Research botanist Dr Peter Johnson among grasses, sedges, orchids, and other monocot plants.

Monday February 14th After the talk:

Public meeting of the Botanical Society of Otago. Botanic Gardens Visitor Centre. Election of officers and committee.

Presentation of a draft constitution.

Anyone interested is welcome to come along.

Saturday February 19th / Sunday 20th:

Field trip to Blue Mountains and Tuapeka forest and Birch Island. This can be a weekend or either day. Trip leaders: Alison Knight and Adrienne Markey.

Mid to late February.

Workshop on Herbarium preparation. Contact Jennifer Bannister or Janice Lord (Curators OTA), %o OTA Herbarium, Botany Department, University .

Cover picture

Acaena tesca inflorescence and leaf. See Kelvin's article in this newsletter.

What is the Botanical Society of Otago?

The Botanical Society of Otago is a group of people interested in PLANTS AND VEGETATION, including seed plants, ferns, mosses, liverworts, hornworts, fungi, algae – basically anything that's alive, or has been alive but that isn't an animal. We have our headquarters in the Botany Department, University of Otago. EVERYONE is WELCOME, from the greater Otago/Southland region, from ANY walk of life, professional botanists, students amateur botanists and people who just want to learn more about plants.

We plan to run regular FIELD TRIPS and WORKSHOPS and to have a regular NEWSLETTER and a WEBPAGE to keep everyone in touch. We have some fieldtrips planned already and ideas for additional activities or projects for next year are welcome. Contacts on back cover.

If you would like to be a member of the Botanical Society of Otago please send us your contact details.

Botanical Society of Otago Webpage and Newsletter

The webpage will be a regularly updated place where you can get past newsletters and sometimes more recent information than the last newsletter. We would like to use the newsletter to highlight interesting **plants** in the Otago area, and **people** from the Otago/Southland region, who are working on, or who have worked on, plants from this region. We would also like to highlight **research** and publications, **books and articles**, which are likely to be of interest to "plant people" in this area. We hope to get **short articles** or **interesting notes** from members that we can publish. As well as keeping everyone up to date with activities.

<http://www.botany.otago.ac.nz/bs/>

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 1st year botany and 3rd and 4th 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.

Contact:

Phone: (03) 479 9060

Email: david.orlovich@botany.otago.ac.nz

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.)

Plant profile: *Acaena tesca* B.H. MacMill. By Kelvin Lloyd

Acaena tesca (Rosaceae) is a rhizomatous herb with attractive glaucous foliage and red-spined fruit. First described in 1991 by Bryony MacMillan, *A. tesca* is endemic to the uplands of Central Otago and northern Southland. It is a mat- or cushion-forming perennial with sessile capitula comprising approximately 10 florets, which may be hidden in the foliage. Stipules are triangular and entire, with hairy margins and tips. The broad-ovate to orbicular 2.5-5 × 2.5-4 mm leaflets occur in 3-5 pairs, gradually decreasing in size to the base of the rachis. Leaflets are hairy and have 6-9 dull red, weakly penicillate teeth on their margins. Leaves are up to 5 cm long and 1 cm wide.

A. tesca is commonly found near streams and seepages, at the bases of rock tors, and in intertussock spaces in natural and modified tall and short tussock grasslands. It can become quite abundant in these habitats, and has been observed competing vigorously with the exotic grass, *Agrostis capillaris*. The specific epithet *tesca* "wild region" refers to the wild and desolate habitats occupied by the species. *A. tesca* is easily cultivated and is non-aggressive. Its abundant glaucous foliage makes a colourful addition to the garden, and is best displayed in a rock garden setting. Fruits of section Microphyllae species of *Acaena* are unbarbed, so the fruits of *A. tesca* are unlikely to become entangled in socks or cat fur.

In 1991 the known distribution of *A. tesca* included the Crown, Pisa, Dunstan, Ida, Old Woman, Old Man, Garvie and Umbrella Ranges. However since then the range of *A. tesca* has been extended to include the Nevis Valley, the upper Mararoa catchment west of L. Wakatipu, and uplands in the upper Taieri and Teviot catchments (Rough Ridge, Rock and Pillar Range and Lammerlaw Range). It is likely that the known range of *A. tesca* will increase as the species becomes more familiar to botanists.

Reference:

MacMillan, B.H. (1991) *Acaena rorida* and *Acaena tesca* (Rosaceae) – two new species from New Zealand. *New Zealand Journal of Botany* 29: 131-138.

Membership form:

Title: Mr/Mrs/Miss/Ms/Dr/Rev./Other: _____

Name: _____

Address: _____

E-mail: _____

Phone: () _____

Waged (salary) / unwaged/student

Please **e-mail / snail-mail** my newsletter to me.

Donations are welcome (donations equivalent to the subscription rate will be treated as such after the General Meeting in February). Subscriptions are:

\$15 family (two adults + children) / \$10 waged / \$5 Unwaged.

Cheques to "Botanical Society of Otago".

Botanical Society of Otago: whom to contact

Information for the Newsletter to:

Barbara Anderson,
% Botany Dept., University of Otago,
P. O. Box. 56. Dunedin
e-mail barbjade@es.co.nz

New members, Subscriptions or Donations to:

Paul Dean,
22 Nicholson Street,
Forbury Corner, Dunedin.
e-mail: pauld@hotpop.com

Ideas for activities to:

Bastow Wilson,
% Botany Dept., University of Otago,
P. O. Box. 56. Dunedin
e-mail bastow@otago.ac.nz

For information on activities:

The trip leader
or Barbara Anderson (contact above),
or see our webpage: <http://www.botany.otago.ac.nz/bsa>

