



Volume 19, Number 1
June 2016

Principal Editor
Murray Dawson

Associate Editor
Andrew Maloy

Contributors

Derrick Rooney
Brian Murray
Bryan Gould
Hayden Foulds

Murray Dawson
Keith Hammett
Andrew Maloy

Typesetting and Production

The Printery, Massey University <http://printonline.massey.ac.nz>.
The *New Zealand Garden Journal* is published twice a year. All rights are reserved.
If there is a desire to reproduce any material in any form, permission is required from the publisher.

The views expressed in the *New Zealand Garden Journal* are not necessarily those of the Royal New Zealand Institute of Horticulture (Inc.).

Editorial Address

Murray Dawson
c/o Landcare Research
PO Box 69040, Lincoln 7640, New Zealand
Ph: (03) 321 9645 Fax: (03) 325 2418
Email: dawsonm@rnzih.org.nz

ISSN 1173-7425 (Print)
ISSN 1179-9153 (Online)

For Membership information please write to:
Royal New Zealand Institute of Horticulture,
PO Box 85012, Lincoln University, Canterbury, New Zealand
Email: office@rnzih.org.nz Website: www.rnzih.org.nz

Front Cover

Carmichaelia glabrescens (pink broom), a native species endemic to Marlborough and an outstanding garden plant.
Photo: Murray Dawson.

From the Editors

Our regular contributor Derrick Rooney begins this issue with two short articles, based upon his observations and insights as an expert plantsman from inland Canterbury.

Most of us are familiar with the widespread and invasive European brooms, which are dominant weeds of many New Zealand landscapes. Less well known are our native broom species – treasures that are threatened in the wild and often overlooked in horticulture. Murray Dawson provides an overview of this remarkably diverse native plant group.

The 2016 RNZIH AGM, awards ceremony and Banks Memorial Lecture was held in Christchurch on 13 April, nestled between the BGANZ-NZ and RNZIH New Zealand Gardens Trust conferences. Prof Brian Murray of Auckland was our lecturer this year. His cytogenetic career (chromosome studies and genetics) has included long-standing collaborative research in plant breeding of ornamental plants with our President Dr Keith Hammett and numerous graduate students at the University of Auckland. Brian Murray's lecture is presented in this issue as an article.

Congratulations to our RNZIH awardees for 2016. Toni Sylvester of Northland received the Award in Garden History for her work on heritage roses and Terry Dowdeswell of Whanganui received the Plant Raisers' Award for his breeding of delphiniums. Brad Cadwallader of Nelson became a Fellow of the Royal New Zealand Institute of Horticulture (FRIH), recognising his outstanding contributions to notable trees. Our Editor and Webmaster, Murray Dawson of Christchurch and our outgoing Treasurer, Eddie Wullems of Hamilton became our newest Associates of Honour (AHR IH). Our awardee citations are published here.

We record the passing of Alan Mason, who was a nurseryman from Fielding, a long-standing member of the RNZIH, a former member of the National Executive, and an Associate of Honour (AHR IH).

This issue concludes with book reviews compiled by Murray Dawson.

Murray Dawson and Andrew Maloy

Contents

2 Trees in winter: Frost, snow, and the lame duck syndrome

Derrick Rooney provides some examples of how plants avoid frost damage.

4 Flowering of cool climate bamboos

Derrick Rooney discusses the flowering of cool climate bamboos that he grows.

6 New Zealand's native brooms: Overlooked treasures?

Murray Dawson extols the virtues of our threatened and often overlooked native brooms (*Carmichaelia* spp.).

14 The 2016 Banks Memorial Lecture: Cytogenetics and ornamental plant breeding: An ongoing partnership

Prof Brian Murray provides examples of how chromosome studies play an important part in ornamental plant breeding programmes.

19 2016 RNZIH Awards

Toni Sylvester: Award in Garden History
Terry Dowdeswell: Plant Raisers' Award
Brad Cadwallader: FRIH
Murray Dawson: AHR IH
Eddie Wullems: AHR IH

27 Obituary

Alan Livesey Mason (MNZM)

28 Book reviews

New Zealand native ground cover plants

By Lawrie Metcalf and Roy Edwards, reviewed by Murray Dawson.

From pasture to paradise

Paradise through the seasons

Two books by Alan Trott, reviewed by Murray Dawson.