Volume 13 Issue 5

Weedscene

SEPTEMBER 2002 Newsletter of the Weed Society of Victoria Inc.

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Weed Society of Victoria Biennial Conference

20–21 August 2003
Bendigo

Watch Weedscene for program details and for further information on the first of a series of conferences designed to address major weed issues in Victoria.

Did you miss 13th Australian Weeds Conference?

The highly successful 13th Australian Weeds Conference has just concluded in Perth. With over 500 registrations, and a dedicated organizing committee, this conference has been a major success. Participants presented papers in the areas of weed management and ecology (subdivided into forestry and tree cropping, cropping, natural ecosystems, aquatic ecosystems, pastures, tropics, horticulture and a global perspective), modelling, invasions and eradications, herbicides, biological control, education and training, weed biology and genetics, novel techniques in weed management, policy and planning, weed mapping, herbicide resistance, community involvement, integrated weed management and economics.

If you did miss out, a very limited number of copies of the proceedings (764 pages!) are available from R.G. and F.J. Richardson, PO Box 42, Meredith 3333, phone/fax 03 5286 1533, email richardson@weedinfo.com.au. Price $77 per copy plus $10 postage within Australia.

WEED ALERT! New Weed Incursions and How to Respond

Keeping Victoria Free of Alien Invaders

A seminar presented by the Weed Society of Victoria

Thursday 17 October 2002

Main Hall, The University of Melbourne,
Institute of Land and Food Resources, Burnley Campus
500 Yarra Boulevard, Richmond, Victoria 3121

New weed species are entering Australia via many means, and at an increasing rate. The Department of Natural Resources and Environment has developed a plan that aims to prevent new weeds from entering Victoria, and will deal with new incursions of those weeds that do enter the State. The plan relies on a network of 'spotters' to report these new aliens. DNRE and the Weed Society of Victorian are co-hosting a one-day seminar on 17 October 2002 at the Burnley Campus of the University of Melbourne, which will explain how you can be part of the network.

Topics to be covered include:

- The role of the weed spotter.
- The types of weeds we should be looking for.
- Where these weeds are likely to occur and how they are getting here.
- How to take samples and where to send them.
- The structure of the Weed Incursion Rapid Response project.
- Case studies: aquatic, crop, garden, pasture, and bushland weeds.
- How the Department of Natural Resources and Environment project fits into the national response.
- Implications for local government.

If you are involved in parks management, a bushwalker or Landcare person, a water manager that needs to maintain water quality, an industry representative with farmer clients, a plant propagator, or just interested in weeds, then this seminar will be of immense interest to you.

PROGRAM

09.00–09.35 Registration
09.35–09.45 Welcome
Wendy Bedggood, President WSV
09.45–10.15 Victorian Weed Alert – a new rapid response plan. *Jack Craw, Keith Turnbull Research Institute, Frankston*
10.15–10.45 National initiatives for new incursions, pre- and post-border. *Paul Pheloung, Office of the Chief Plant Protection Officer, AFFA, Canberra*
10.45–11.05 MORNING TEA
11.05–11.45 What do 'Weed Spotters' do? *Kate Blood, NRE Beaufort/ KTRI*
11.45–12.00 Case study 1. *Gymnocoronis spilanthoides* (Senegal tea). *Jim Wilding, Murray Goulburn Water*
12.00–12.30 The assessment of new incursions. *Linda Iaconis/John Weiss, Keith Turnbull Research Institute, Frankston*
12.30–12.45 Case study 2. *Orobanche ramosa* (branch broomrape). *Mark Farrer, NRE, Horsham* and *David McLaren, Keith Turnbull Research Institute, Frankston*
12.45–13.30 LUNCH
13.30–14.00 Managing new incursion sites. *Michael Hansford, New and Emerging Weeds Officer, Port Phillip CAS*
14.00–14.15 Case study 3. *Nassella tenuissima* (Mexican feather grass). *Jack Craw, Keith Turnbull Research Institute, Frankston*
14.15–14.40 The role of other authorities. *Phil Pegler, Parks Victoria, Melbourne*
14.40–15.10 Which weeds should we be looking for? *Randall Robinson*
15.10–15.25 Case study 4. *Hieracium* species (hawkweeds). *Kate Blood, NRE Beaufort/KTRI*
15.25–15.40 Question and answer session. *All speakers*

CAWSS REPORT

The 13th Australian Weeds Conference has just concluded. It ran from 8–12th September and was held in Perth.

The Australian Weeds Conference is the premier event of the Council of Australian Weed Science Societies (CAWSS) the national umbrella body for state weed societies. Each state has two delegates which make up the committee as well as president, a vice president and a secretary/treasurer. The committee has two phone hook-up meetings a year and a face to face meeting held during the conference.

Some of the highlights of the agenda dealt with at the CAWSS committee meeting this week were:-

- The noxious weeds Lucid key CD will be ready for trial around October/November this year. This key was instigated and commissioned by the delegates at the CAWSS meeting at the 12th Australian Weeds Conference in Tasmania in 1999.
- A strategic/business plan which has been developed over the past three years was presented and accepted for adoption. A proposal to change the frequency of the Australian Weeds Conference has been discussed by state weed societies over the past couple of months and delegates voted at the conference to change the frequency to every two years.
- A proposal was put forward by the NSW Weed Society to host the next Australian Weeds Conference and was accepted. This means the next AWC will be in Wagga Wagga in 2004 probably in September.
- Aquatic weeds are seen as an area where there are gaps and so CAWSS will look at the feasibility of setting up an email or electronic discussion group for aquatic weeds.
- With the development of the business plan and the voting of more frequent Australian Weeds Conferences there is a need to review our constitution. Some proposed changes were presented to the meeting and these require further discussion by the State Societies before being voted on by the delegates.
- Another custom which takes place at the AWC is the presentation of the CAWSS medals. These are awarded on an average of one per year and were presented to Tim Woodburn, CSIRO, Perth, for his weed biocontrol research and community based rearing of insects. John Moore from WA Department of Agriculture received a medal for extensive weed extension over many years and the detection and eradication of Kochia. A third recipient who was not at the conference was Barbara Waterhouse (NAQS, AQIS) for her work in detecting new weed invasions and surveys in neighbouring countries for potential weeds.
- The new CAWSS president is Richard Carter, NSW.

A full report on the conference will appear in the next edition of Weedscene.

Wendy Bedggood, President, WSV

Some Useful Weed Books...

Just a quick list of some weed and related books (A–M, the rest of the list will appear in the next issue of Weedscene) that may be of interest (add them to your copy of the Weed Navigator Resource Guide). Some have been around for a while (accumulating in a pile in my office!). Many of the gardening books are full of weeds and have good photos to assist identification.

Bayley, D. (2001). Efficient weed management. Protecting your investment in the land. NSW Agriculture. ISBN 0 7313 0543 4.

Blood, K. (2001). Environmental weeds: A field guide for SE Australia. C.H. Jerram & Associates, Mt. Waverley, Vic. ISBN 0 9579086 0 1.

Bloom, A. (2001). Gardening with conifers. Bloomings Books, Burnely. ISBN 1 876473 31 2.

Cochrane, A. (2001). Alien invaders. Identification, control and monitoring of the most recognizable environmental weeds of Melbourne and surrounds. Royal Botanic Gardens, Melbourne. ISBN 0958740879.

Cross, F., Leech, S., Boyle, C. and Cameron, D. (compilers) (2001). Victorian flora species index including Vascular and non-Vascular taxa. Department of Natural Resources and Environment, Victoria. ISBN 0 7311 4858 4.

Enright, N.J. and Hill, R.S. (eds) (1995). Ecology of the southern conifers. Melbourne University Press, Vic. ISBN 0 522 84566 5.

Espie, P.R. (2001). Hieracium in New Zealand: ecology and management. AgResearch, Invermay, NZ. ISBN 0 478 20900 2.

Gerritsen, H. and Oudolf, P. (2000). Dream plants for the natural garden. Bloomings Books, Richmond, Vic. ISBN 1 876473 25 8.

Hanks, M. (1999). A grower's guide to orchids, bromeliads and water plants. Murdoch Books, Ultimo, NSW. ISBN 0 86411 872 4.

Harris, J.G.S. (2000). The gardener's guide to growing maples. Blooming Books, Richmond. ISBN 1 876473 26 6.

Henderson, L. (2001). Alien weeds and invasive plants. A complete guide to declared weeds and invaders in South Africa. Agricultural Research Council, South Africa. ISBN 1 86849 192 7.

King, M. and Oudolf, P. (1998). Gardening with grasses. Frances Lincoln, London. ISBN 0 7112 1202 3.

Kingsbury, N. (2000). Bold plants. Using architectural and exotic plants to create visual impact in the garden. Ryland Peters & Small, London. ISBN 1 84172 044 5.

Kingsbury, N. (2000). Grasses and bamboos. Using form and shape to create visual impact in the garden. Ryland Peters & Small, London. ISBN 1 84172 043 7.

Mabey, R. (1997). Flora Britannica. Chatto & Windus Random House, London. ISBN 1 85619 377 2.

Macoboy, S. (2000). What flower is that? Lansdowne Publishing, Sydney. ISBN 1 86302 657 6.

McCoy, M. (2000). Michael McCoy's Garden. Florilegium, Glebe, NSW. ISBN 1 876314 109. [Good pics of *Nassella tenuissima*].

Metcalf, L. (1998). The cultivation of New Zealand native grasses. Random House New Zealand. ISBN 1 86962 023 2. [Includes NZ Carex etc. that are becoming invasive here].

Monument Hill Parklands Association Inc (*c.* 2001). Bush invaders. Identification and control of environmental weeds of Albury Wodonga and surrounds. Monument Hill Parklands Association Inc, NSW. ISBN 0 646 40068 1.

Muyt, A. (2001). Bush invaders of south-east Australia. R.G. and F.J. Richardson, Meredith, Vic. ISBN 0 9587439 7 5.

Cheers, Kate Blood

INVASIVE SPECIES COUNCIL

by Tim Low, Councillor ISC

A new national conservation group has appeared. The Invasive Species Council is dedicated to countering the threat posed by exotic plants, animals and diseases. Based in Melbourne, the ISC is an independent, non-government organization, unaligned with any other group. We have formed because existing peak conservation groups do not, on the whole, have the resources to devote adequate attention to pest issues. We will campaign for better controls over new and emerging invaders, and work to raise public awareness about the invasive species threat. We will pressure governments to increase funding for weed agencies.

The ISC only became a legal entity on 31 July 2002, and their first public event, an information evening and launch, was held on 2 September in Melbourne.

Australia needs a dedicated organization to raise awareness about this issue, and to pressure governments to devote adequate resources to tackling the threats. The atmosphere at the launch was wonderful, with more than 80 enthusiastic people present (including weed professionals), most of them signing up as members. We are now inviting people from elsewhere in Australia to join. If you believe that invasive species warrant a higher profile in Australia, and that more funding should go to weed and pest agencies, please support us by joining. Membership details are below.

To become a member of the Invasive Species Council simply send your name, address, phone (H)/(W), email, work position (if relevant) along with a cheque to the Invasive Species Council, RMB 1207, Chiltern 3683. Membership rates: (all prices are GST inclusive) Regular $22, Concession $11 and Group $55. Donations are also welcome.

MAJOR NEW WEED BOOK COMING SOON

A Global Compendium of Weeds

by R.P. (Rod) Randall, 'Plant Profiler', Weed Risk Assessor
Department of Agriculture, Western Australia

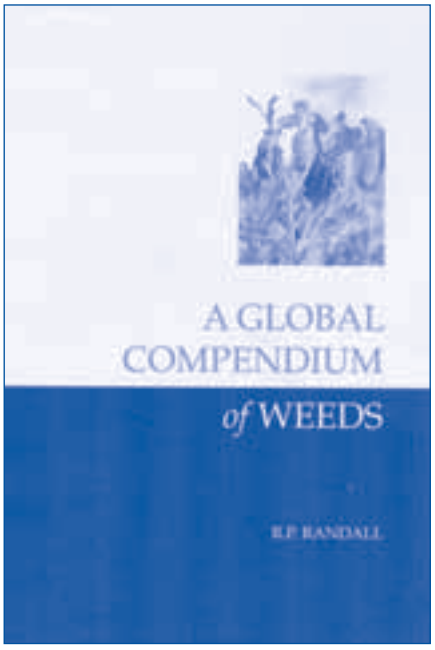
Predicting which plants will become weeds is difficult. The information presented in this compendium is specifically designed to give a weed risk assessor, or anyone interested in the weed potential of a plant, a condensed report of the status of a species with, most importantly, further avenues for finding more information through the extensive reference listing. The single most important indicator of a species' weed potential, over all other attributes, is a documented weedy history and this is indicated in the status line of each record.

Until now, the most comprehensive coverage of the world's weed flora was produced in 1979 by Holm *et al.* (A Geographic Atlas of World Weeds) and listed 6400 species. In this compendium, Rod Randall has compiled a list of almost 21,000 entries comprising over 18,000 weedy taxa and 2500 alternate name records.

Each record comprises:

- Genus, Species, Author
- Family
- Alternate names
- Common names: including French, German, Finnish, Italian, Japanese, Portuguese, Spanish
- Status: Weed, Sleeper, Quarantine Weed, Noxious Weed, Naturalized, Native Weed, Introduced, Garden Escape, Environmental Weed, Cultivation Escape, Casual Alien
- Source codes: references cited
- Life Form
- Arid/Aqua – a basic measure of a plant's ability to survive
- Cultivated or promoted
- Herbal
- Toxic
- Origin

This compendium represents a huge increase in the number of documented weed species globally but by no means covers the entire weed flora of the world. While people continue to move plants around the world with little regard for the consequences of their actions, new weeds will continue to appear. The compendium commences with an introduction on how best to use it, and has a comprehensive index contains more than 15,000 alternate scientific names and 27,000 common names in numerous languages. The book will be hard cover, 944 pages.



The production of this book has been generously supported by the CRC for Australian Weed Management, Western Australian Department of Agriculture, the United States Geological Survey, the Missouri Botanic Gardens Press and the North Carolina Botanical Garden, Chapel Hill.

Available from R.G. and F.J. Richardson, PO Box 42, Meredith 3333, phone/fax 03 5286 1533, email richardson@weedinfo.com.au. Price $165 per copy plus $10 postage within Australia.

Making Maize Witchweed Proof

Applying a low-dose herbicide coat to seeds of herbicide-resistant maize varieties successfully controls a devastating parasitic weed endemic to numerous crops across sub-Saharan Africa. The extensively tested technique, developed by the International Maize and Wheat Improvement Center (CIMMYT) and the Weizmann Institute of Science, was officially presented at a recent meeting in Kenya.

The parasitic weed, *Striga* spp. (witchweed), decimates maize and other crops across the region by literally sucking nutrients out of plants that provide food for African families. In order to be effective, control methods must act before (or during) attachment of the *Striga* to crop roots to prevent, or at least limit, yield loss. A low dose coating of imazapyr (a systemic ALS-inhibiting herbicide), when applied to seed of imazapyr-resistant maize varieties, is said to leave a field virtually clear of emerging *Striga* blooms all season long. Herbicide delivered in this way thwarts the phytotoxic effect of *Striga* on maize plants, which usually occurs even before *Striga* emerges from the soil.

An additional advantage is that any imazapyr not immediately absorbed by *Striga* or maize seedlings diffuses into the surrounding soil and kills ungerminated *Striga* seeds. By the time the crop ripens, the herbicide, applied at less than one-tenth the normal rate, has disappeared leaving the food product unaffected.

Scientists developing the technology believe it has enormous potential for small-scale farms in Africa as it is economical and will not affect intercrops planted 10 cm or more from maize hills. Since the maize seed is treated, need for and cost of spraying equipment and material is eliminated, and the amount of imazapyr involved is approximately 5% of the recommended over-the-top applications.

D. Friesen and F. Kanampiu, CIMMYT, PO Box 25171, Nairobi

Proceedings available Stipoid Workshop

This WSV workshop, examining the impacts and control of exotic stipoid grasses to Australia, was a major success with almost 150 people attending. Grass weeds pose a major threat to rural industries and bushland alike. Of the grasses, the most invasive and the most difficult to control are the stipoid grasses. Serrated tussock, *Nassella trichotoma*, has invaded many hundreds of thousands of hectares and has the potential to invade many more. It is highly unpalatable and its seeds can be spread by wind up to 20 km per day.

Chilean needlegrass, *N. neesiana*, is among the most serious of environmental weeds of grassland and grassy-woodland communities in southeast Australia. Texas needlegrass, *N. leucotricha*, and especially cane needlegrass, *N. hyalina*, are serious environmental weeds of grassland communities, particularly on the Victorian Volcanic Plains.

Copies of the proceedings, which appeared in Plant Protection Quarterly 17(3), are available from R.G. and F.J. Richardson, PO Box 42, Meredith, 3333, phone/fax 03 5286 1533, email richardson@weedinfo.com.au. Price $15 per copy including postage and GST. The table of contents of this issue of Plant Protection Quarterly is available at www.weedinfo.com.au.

Witchweed addendum

Test plantings of leguminous trees in Africa for nitrogen replenishment revealed an unanticipated benefit. Secretions from the trees' roots stimulated germination of *Striga* seeds well before a crop was planted, effectively denying the *Striga* seedlings anything to feed on, thus clearing them from the area near the tree. The work was part of the research conducted by P. Sanchez [PSanchez@nature.berkeley.edu] (and colleagues) that won him the World Food Prize.

from IPMNET NEWS

Position available Weed Scientist

The International Rice Research Institute (IRRI) is seeking a highly motivated and innovative weed scientist to join its research staff at its headquarters in Los Baños, Philippines. IRRI, supported by the Consultative Group on International Agricultural Research (CGIAR), is a nonprofit, autonomous organization engaged in rice research and development to enhance sustainable agriculture and reduce poverty.

The weed scientist will lead IRRI's research to develop sustainable weed management strategies for integrated weed management. Specific focus will be on studying rainfed and water-limited irrigated rice-based cropping systems, supporting the development of weed competitive germplasm, providing training in weed management, and collaborating with scientists from national agricultural research and extension systems in developing countries and advanced institutions.

Candidates should have a PhD in weed science, weed ecology, or a related discipline. A proven publication record on weed ecology and management with more than 5 years of experience is essential. Candidates must have good knowledge of ecological principles for crop and weed management and farmers' practices and the ability to discover and integrate science into innovative weed management practices for adoption by farmers. Experience with rice-based cropping systems is desirable.

IRRI provides a gender-sensitive work environment and particularly welcomes women applicants. Salary and perquisites are internationally competitive. Send curriculum vitae and details of three references. Applications will be accepted until 15 November 2002 or until a suitable applicant is identified.

Dr. K.L. Heong, Search Committee, IRRI, DAPO 7777, Metro Manila, Philippines. k.heong@cgiar.org

from IPMNET NEWS

WSSV HOME PAGE: http://www.vicnet.net.au/~weedsoc/

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