



August 2006 Newsletter

President's Message

We are pleased to timely distribute our second newsletter for this year thanks to the efforts of our editor, Dr. Jerry Doll. We hope that the information that you find here is useful. Several people contributed to make it possible and we all thank them for their support.



Our main task continues to be the preparation of our 2008 Congress in Vancouver. At the end of this Newsletter is the First Circular prepared by the Scientific Program and Local Organizing committees. You will find important basic information related to the Congress and its structure. We will have 21 main topics, each under the leadership of an organizer (MTO). Most of the MTOs have already been selected and invited to help us in this task. In the next Circular, their names will appear after we have confirmation they have accepted the invitation. The Scientific Committee is making sure that we will have renowned scientists in charge of these topics and the sessions associated with them. We have also received requests to organize specific topic courses and workshops in conjunction with the Congress. We welcome such offers and hope that more of you will become involved in organizing them.

I am also pleased to announce that several papers presented in our 2004 Congress have been accepted for publication in a special issue of

In this issue you will find

- President's message
- 2008 IWS Congress Information
- News from Regional Representatives
- News from National Societies
- Recent Events and Publications
- Coming Events
- and more.....

Crop Protection. We expect this special issue later this year or at the beginning of 2007. We are grateful to our Vice-president Baruch Rubin for making this possible.

Remember that we are here to serve you. Please give us suggestions and become involved in our activities, especially in preparation for our Congress in 2008.

Regards,
Bernal E. Valverde, Costa Rica

2008 IWS Congress

The first Circular for the International Weed Science Congress to be held in Vancouver, Canada is attached at the end of this Newsletter.

Regional Representatives' Reports

Oceania Anisur Rahman

59th Annual NZ Plant Protection Conference

Some 200 plant protection researchers from Government institutions, universities and the agricultural industry attended the 59th Annual NZ Plant Protection Conference in Blenheim, 8-10 August 2006. The 60 oral presentations and 35 poster presentations covered agricultural and environmental weeds, pest and diseases and biosecurity related issues. The 2006-07 officers are Dr. Phillip Stevens (President), Dr Ian Popay (Immediate Past President), Trevor James (Vice President), Sonja Reid (Secretary), Dr Anis Rahman (Treasurer) and six committee members. The Society has published a number of books on weeds; full list and prices are available at: <http://www.nzpps.org>

Australian and NZ Weed Scientists Join Hands

The Council of *Australasian* Weeds Societies (CAWS) has just come into being after several years of efforts and discussions between Australian and New Zealand weed scientists. A constitution has been drawn up for this new entity and the first official meeting of CAWS Executive Committee will be held at the 15th Australian Weeds Conference which is being attended by a large contingent of New Zealand scientists on Sept. 24-28 2006. Planning is already underway to soon host a conference of CAWS in New Zealand, probably in 2010. For more information visit <http://home.vicnet.net.au/~weedss/>.

News From the Weed Societies in Australia

The Weed Society of New South Wales celebrated its 40th Anniversary on 6 April 2006. It was gratifying to see a dozen past presidents of the Society participate in the 40th Anniversary Dinner in Sydney. The 40th Anniversary of the Weed Society of Victoria was celebrated more recently on 19 July 2006 in Melbourne.

Lord of the Weeds Competition

'Lord of the Weeds' was developed and is run by the CRC (Cooperative Research Centres) for

Australia Weed Management and is an excellent way to develop greater awareness of weeds by starting with the younger generation in schools today. In 2006, various state Weed Societies in Australia are working with the CRC to support the competition by offering additional prize money to schools whose students submit outstanding reports.

An initiative of the Sydney Weeds committees, the Asthma Weed Project is gaining momentum. Asthma weed, *Parietaria judaica*, has been spreading rapidly in most major cities in Australia. The project aims to encourage a regionally strategic and coordinated approach between private and public landowners to limit the spread of this weed. The year-long project will deliver information and incentives to identify asthma weed, raise awareness of its health and environmental impacts and address control measures.

Timely Application of IWM Tactics

Sections of the draft IWM manual have been placed on the Weeds CRC website. The IWM manual is a 350+ page technical reference document. It provides data on the impact of weed management tactics on the weed seed bank, as well as how tactics can be used in a crop system. This document is available at http://www.weeds.crc.org.au/documents/iwm_manual_section2_tactics-020506.pdf. In conjunction a series of two day IWM training workshops for professional advisers will be conducted in most growing regions later this year.

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Indian and South and Southeast Asia R.K. Malik

Proceedings of National Symposium on herbicide resistance management in the rice-wheat cropping systems

The Indian Society of Weed Science organized a National Symposium on 'Herbicide resistance in the rice-wheat cropping system' on 15th June 2006 at CCS Haryana Agricultural University, Hisar. Participants included herbicide industry representatives and scientists from Haryana, Punjab, Delhi and Uttar Pradesh where *Phalaris*

minor is a major problem in the rice-wheat rotation. The current status of herbicide resistance was discussed and deliberations resulted in recommendations to combat the menace of herbicide resistance.

Presentations made from Haryana and Punjab indicated that fenoxaprop-P and sulfosulfuron are showing the signs of decreased efficiency. There are only few reports of decreased efficiency of clodinafop. Survey reports indicate that decreased efficiency is in the order of fenoxaprop, sulfosulfuron and clodinafop. The confirmation of resistance against these herbicides should be taken up on priority basis.

Many farmers are still using lower than recommended rates of herbicides and water volume, with improper nozzles and poor spraying techniques. Pesticides manufacturers were requested to deliver 50,000 booms to each state (resistance affected) through State Agriculture Universities (SAU's) regional trainings/workshops to farmers for proper use of herbicides. Other recommendations included:

1. Encourage farmers to adopt integrated weed management (IWM) using non-chemical approaches like early sowing of wheat, zero tillage, and selection of competitive varieties, herbicide and crop rotations, and use of clean seed.
2. SAU's scientists will conduct epidemiological survey to assess the resistance situation of new herbicides (clodinafop-propargyl, sulfosulfuron and fenoxaprop-P-ethyl).
3. Pesticide Industry is encouraged to have more molecules for evaluation against resistant *Phalaris minor*.
4. Regular monitoring of problem sites by industry and university.
5. Create a slogan on herbicide packing and literature as part of awareness and management strategies for containing the evolution of resistance against alternate herbicides.
6. Strengthening local Herbicide Resistance Action Committees (HRAC's) with the support of local formulators and outside (international) agencies.

7. Avoid duplicity in formulated brands and registration of new formulations by the national registration authority only on the recommendation of SAU's. The Indian Society of Weed Science will approach the national registration authority for necessary guidelines for evaluation of herbicide formulations to SAU's where herbicide resistance is a major issue.

Early sowings using zero tillage technology is one of the best tools to delay resistance and exhaust the seed bank of *Phalaris minor* in the long run.

West and Central Africa **Gilbert Gbèhounou**

***Rhamphicarpa fistulosa* and *Striga hermonthica*: two parasitic threats to rice in West Africa**

The genus *Rhamphicarpa* belongs to the Scrophulariaceae family. So does the genus *Striga* which encompasses several parasitic weed species affecting food crops in the tropics. *Rhamphicarpa fistulosa*, a facultative hemiparasitic weed adapted to lowland areas, thrives on cereal crops. In lowlands, its preferred habitat, *R. fistulosa* replaces *Striga hermonthica* a species which parasitizes rainfed rice on upland sites and hardly occurs in lowlands subjected to periodical flooding.

In Bénin, the government has reclaimed some inland valleys where farmers mainly grow rice. A few years after continuous rice production, they complained in 1996 about destruction of the crop by *R. fistulosa*. A survey revealed that *R. fistulosa* became a primary weed pest on rice in 1993. It inflicts 40 to 100% yield loss and has spread to several lowlands. Recent reports from Burkina-Faso, Guinea and Mali insisted on important damage to rice by *R. fistulosa* in lowlands and various authors started to investigate the biology and the ecology of the parasite.

R. fistulosa belongs to the natural vegetation in Africa. In the Republic of Bénin, the species *R.*

fistulosa was reported in 1986 in the natural vegetation on the edge of a temporary pond. In addition, *Dopatrium longidens*, (a related species also in the Orobanchaceae family) has recently been discovered taking refuge on hill tops in the same region where *R. fistulosa* was first discovered. It is feasible that *R. fistulosa* is a species occurring in the natural vegetation on the hills. From such a natural habitat, the seeds are easily washed down hill to the inland valleys where they have encountered and parasitized rice, a favorable host.

The shift from *S. hermonthica* infestations to *R. fistulosa* on rice from upland to lowland areas seriously constrains production of this important food crop. In this context, the NERICA (New Rice for Africa) project in West Africa (Bénin, Gambie, Ghana, Guinée, Mali, Nigéria, Sierra-Leone are involved) which intends to promote rice production in Africa, should pay attention and devote specific research funding for the development of appropriate management technologies for *R. fistulosa* and *S. hermonthica*."

No reports from:

South America, Dionisio Gazziero
Central Asia, Chaoxian Zhang
North and Eastern Asia, Kil-Ung Kim
Eastern Europe, Kazimierz Adamczewski
Middle East and North Africa: Vacant
East and Southern Africa: Vacant

Recent Weed Meetings

XVII Biennial Weed Control Workshop in India

The Biennial Workshop of the All India Coordinated Research Project on Weed Control was held June 1 to 3, 2006 at the Acharya N.G. Ranga Agricultural University, Hyderabad, India under the leadership of Dr. Jay G. Varshney, Director, and National Research Centre for Weed Science, Jabalpur and National Project

Coordinator. Nearly 150 scientists from different state agricultural universities presented weed management results on weed survey and surveillance; weed biology and ecology; weed seed bank, integrated weed management in specific crops and cropping systems; herbicide residues in soil, water and the food chain; management of parasitic weeds; and weed utilization. Dr. S. Raghuvardhan Reddy, Vice-Chancellor, Acharya N.G. Ranga Agricultural University, inaugurated the workshop and eminent Indian weed scientists Dr. G.B. Singh, former Deputy Director General (Natural Resource Management), Indian Council of Agricultural Research, New Delhi; Dr. S.K. Mukhopadhyay, former Vice Chancellor, Visva Bharati, Sriniketan; Dr. L.S. Brar, Punjab Agricultural University, Ludhiana; and Dr. A. K. Gogoi, Assistant Director General (Agronomy), ICAR, New Delhi actively participated in the workshop and made valuable suggestions for future research projects. Complete details on the workshop please log on to <http://www.nrcws.org/>.

Recent Publications

Forestry Vegetation Management Session at 2004 Congress now Published

Three of the synthesis papers and one concept paper from this Session of the IWSC in Durban, South Africa have been published in the journal *Forestry* as a mini-special issue. <http://forestry.oxfordjournals.org/current.dtl>. Much credit goes to the lead authors and their expert teams that crafted these expansive and current views encompassing the many developments in FVM science. Without Dr. Catherine Collet, Special Issues Editor for *Forestry*, the timely publication would not have been possible and to her we owe a great deal of thanks. Much appreciation is again extended to the Congress's leaders for providing us with this forum and a superb program.

James H. Miller, Res. Ecologist and Team Leader Forest Vegetation Management and Longleaf Pine Research; USDA Forest Service, Southern Research Station; 520 Devall Drive, Auburn, AL 36849; 334-826-8700 ext. 36 email: jmiller01@fs.fed.us <http://www.srs.fs.fed.us/4105>

Handbook of Sustainable Weed Management

The comprehensive 800-page book presents the full range of strategies for controlling weeds while minimizing the risk of chemicals endangering the ecosystem or human lives. This compendium focuses on designing future weed management strategies that reduce herbicidal usage, restore ecological balance, and increase food production. The 25 chapters in the book provide new insights and approaches for weed scientists, agronomists, agriculturists, horticulturists, farmers, extensionists, teachers and students. Experts from Asia, Europe, North America, and Australia organize in one resource the scattered information related to weeds and their management from different ecosystems around the world. The tome, edited by Drs. Harminder Pal Singh, Daizy R. Batish and Ravinder K. Kohli of Punjab University, India, captures the multifaceted impacts of and approaches to managing weeds from field, farm, landscape, regional, and global perspectives. Ordering information is found at: www.HaworthPress.com.

People in the News

Passing of Prof. Juan José Pacheco Guerra

In May 2006, Professor Juan José Pacheco Guerra passed away in Táchira, Venezuela. Professor Pacheco founded the National Experimental University of Táchira (UNET) and he was also one of the founding fathers of the Weed Control course and the Herbarium of UNET. In 1989, he also published the first weed book in Venezuela; it covered weeds from the botanical and ecological perspectives as well as how to manage the important weed species. Professor Pacheco published many research articles but his work on *Pteridium aquilinum* stand out. His valuable support will be greatly missed in the Venezuelan Weed Management Society (SOVECOM) where he made great scientific and technological contributions.

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Dr. Jay G. Varshney Assumes New Post

In May 2006, Dr. Jay G. Varshney became the Director of the National Research Centre for Weed Science and National Project Coordinator of All India Coordinated Research Project on Weed Control, Jabalpur, India.

Dr. Varshney has a rich experience in research, management and teaching during his 30-year career. He served as National Project Coordinator of the All India Coordinated Research Project (AICRP) on improvement of prominent grain legume crops (mung bean, urdbean, lentil, lathyrus, french beans and field peas); Head, Division of Crop Production at Indian Institute of Pulses Research, Kanpur; Founder Head, Regional Center of Directorate of Pulses Research, Gwalior and Editor, Indian Journal of Pulses Research, Kanpur.

He has published more than 100 research papers. While his earlier research focused on weed dynamics and sustainability in pulse-based cropping systems, management of *Cyperus rotundus*, biology and ecology of prominent weeds and their management in different crops and role of adjuvants, his recent activities have expanded to providing leadership to the national weed research programme, coordinating the research network of state agricultural universities, collaborating with national and international agencies, and consulting on matters related to weed science. Dr. Varshney can be reached at: jgvarshney@rediffmail.com.

Coming Events

2006

- Oct. 15-21 **Novel and Sustainable Weed Management in Arid and Semi-Arid Agro-Ecosystems.** Hebrew University of Jerusalem, Faculty of Agricultural, Food and Environmental Quality Sciences, Rehovot, ISRAEL. This special International Conference will emphasize weeds and weed management issues prevailing in the Mediterranean region and other arid and semi-arid climate countries. The aim of the conference is to gather a forum for weed scientists involved in research on all special aspects of weed management in arid and semi-arid agriculture, especially in the Mediterranean region. Contact wgaid@agri.huji.ac.il or visit: <http://www.agri.huji.ac.il/aridconference>
- Sept. 18-19 **Novel Biotechnologies for Biocontrol Agent Enhancement and Management.** Sponsored by the NATO Advanced Study Institute. Venue: Gualdo Tadino, Perugia, Italy. This is short course to give students a concentrated overview of the rapidly developing advanced biotechnological knowledge and tools to enhance and manage biological control agents in modern agriculture. Complete information at: <http://www.ispa.cnr.it/NATO-ASI/>
- Sept. 24-28 **The 15th Australian Weeds Conference**, organized by the Council of Australasian Weed Societies, will be held at the Adelaide Convention Centre in Adelaide, South Australia. The theme of the Conference will be "Managing Weeds in a Changing Climate." More information: <http://www.plevin.com.au/15AWC2006/>
- ~~Oct. 15-18~~ **Novel and Sustainable Weed Management in Arid and Semi-Arid Agro-Ecosystems** and The Inauguration of the EWRS new Working Groups "Weed Management in Arid and Semi-Arid Agro-Ecosystems" and "Parasitic Weeds," will be hosted by The Weed Science Society of Israel at the Hebrew University of Jerusalem Faculty of Agriculture, Food and Environmental Quality Sciences, Rehovot, Israel. Current information at: <http://www.agri.huji.ac.il/aridconference/>

Due to the current security situation in the Middle East, the above conference has been postponed to a later date. The new dates will be announced in the near future.

- Oct. 23-25 **BCPC 2006 Crop Science and Technology Conference.** SECC, Glasgow, UK. "Global Aspects of Crop Production, Crop Protection and Food Supply." Scottish Exhibition and Conference Centre, Glasgow, UK. Email: becky.dyer@bcpc.org. Web site: www.bcpc.org/Conference2006/
- Nov. 22-24 XXVII Congress of the Mexican Weed Science Association (SOMECIMA); a pre-congress course will take place on Nov. 21 in Ensenada, Baja California, Mexico. The Congress venue is the Hotel Corona. Registration and Congress information is found at: http://www.geocities.com/lain_kro/index.html; germadz@hotmail.com

2007

- Feb. 5-10 **Weed Science Society of America.** Annual meeting. Marriott Riverwalk, San Antonio, Texas, USA. Contact Joyce Lancaster: jlancaster@allenpress.com
- April 16-18 **Resistance 2007.** The fifth of an ongoing series of international conferences will review the latest research on the origins, nature, development and prevention of resistance to pesticides. Themes will include: current status of pesticide resistance, resistance mechanisms, population biology and modeling, genomics applications, risk assessment and management, and transgenic crops. Full details at: <http://www.rothamsted.ac.uk/Research/Resistance2007.html>

2007 (continued)

- June 18-21 **XIV European Weed Research Society Symposium** will take place in Hamar, Norway. 15 September 2006 is the date for preliminary registration and the deadline for submitting a title and short summary of contribution (250 words). Check the web site <http://www.EWRS-Symposium2007.com/> to submit a short summary of your intended contribution or to preregister.
- Aug. 14-16 **60th New Zealand Plant Protection Conference** will be held in Napier, preceded by a one-day symposium. For details visit: <http://www.nzpps.org>.
- Sept. 17-21 **9th International Conference on the Ecology and Management of Alien Plant Invasions**. Hyatt Regency Perth, Western Australia. Further information at: <http://www.congresswest.com.au/emapi9/>
- Oct. 2-7 **21st Asian Pacific Weed Science Conference**, Colombo, Sri Lanka. The conference celebrates the 40th anniversary in 2007. The biennial conference will be hosted by the Plant Protection Association of Sri Lanka (PPSL) in collaboration with the National Plant Protection Committee of the Council for Agricultural Research Policy (CARP) of the Government of Sri Lanka, and University of Peradeniya, Sri Lanka. Abstract deadline: 15 Dec. 2006. Complete information at: <http://www.apwss21.lk/>
- Oct. 15 – 18 **XVI International Plant Protection Congress**, in association with the BCPC International Congress - Crop Science & Technology 2007. SECC, Glasgow, UK. Email: md@bcpc.org. Web site: <http://www.plantprotection.org/>

2008

- First part of the year **XVIII Congress Latin America Weed Science Society (ALAM)**. Brazil.
- June 23-26 **International Weed Science Congress** Vancouver, Canada.

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The IWSS Newsletter is available on the
Internet at:

<http://www.plantsciences.ucdavis.edu/iws/>

The **IWSS Newsletter** is published in
February and August to foster
communication among and give
information to our members and others
around the globe interested in Weed
Science.

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2006 issue: Bernal Valverde, Karl Hurle,
Pedro Aleman, M.B.B. Prasad Babu,
Buddhi Marambe, Anis Rahman, R.K.
Malik, Gilbert Gbèhounou, Harminder
Singh, Paolo Bàrberi, Aida Ortiz, James
Miller, Joseph Hershenhorn and Jerry
Doll.

Deadline for items for the next Newsletter is 15 January 2007

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To join the IWSS

Complete the following information and send your dues to
Dr. Albert Fischer, the IWSS treasurer.

Name: _____
Affiliation: _____
Address: _____
City: _____ State: _____
Zip/Postal Code: _____ Country: _____
Email: _____

Checks, bank drafts, or money orders in US\$ should be made
payable to: International Weed Science Society.

For ease of payment, dues can now be paid by credit card at
our webpage following the link:
<http://www.plantsciences.ucdavis.edu/iws/membership.htm>

First Circular

September 2006

5th International Weed Science Congress
Vancouver, Canada
23 - 26 June 2008



International Weed Science Society (IWSS)



Canadian Weed Science Society
Société canadienne de malherbologie



5th International Weed Science Congress
23 - 26 June 2008 in Vancouver, Canada

The 5th International Weed Science Congress is jointly organized by the International Weed Science Society (IWSS), the Canadian Weed Science Society (CWSS) and the Weed Science Society of America (WSSA).

The congress will focus on new developments, modern, forward-oriented research, innovative technologies and solutions in weed management. The congress will give weed scientists from all over the world the opportunity to present and discuss their newest research results. The scientific program will include 21 main topics, which will be organized by distinguished international scientists.

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|---|--|
| Main topics | |
| 1. Biology, dynamics and ecology of weeds | 13. Management of parasitic weeds |
| 2. Integrated weed management | 14. Spread and management of invasive species |
| 3. Modeling problems and solutions | 15. Aquatic weed management |
| 4. Natural products | 16. Education and technology transfer in weed science |
| 5. Formulation and adjuvants | 17. Environmental aspects of weed management |
| 6. Regulatory, economic and social aspects | 18. Weed management in field crops and forestry |
| 7. Herbicide resistance in crops and weeds | 19. Weed management in horticultural, plantation and minor crops |
| 8. Biocontrol | 20. Spotlights on global weeds |
| 9. Molecular and biotechnological approaches | 21. Synthetic herbicides – mode/mechanism of action and safeners |
| 10. Site specific weed management | |
| 11. Weed management in turf, parks recreation areas and right-of-ways | |
| 12. Weed management in organic farming | |

Three out of the four congress days will be for presentations and one for a field trip.

There will be also room for pre- and post-congress workshops, symposia and other academic activities in conjunction with this congress.

Language

The official language of the congress will be English.

Location of Conference

Westin Bayshore Hotel, Vancouver, Canada

Further information

Information on registration fees, accommodation, submission of abstracts, deadlines, etc. will be provided with the 2nd circular and call for papers in January 2007.

Contact

Keep yourself informed and visit the IWSS web site to check on Congress developments and news:

<http://www.plantsciences.ucdavis.edu/iws/>

Congress committees

Scientific program committee

Karl Hurler, Germany; Dale Shaner, USA; Christopher Hall, Canada

All correspondence to the scientific program committee should be sent to khurle@t-online.de

Local organizing committee

Robert Blackshaw, Canada

All correspondence to the local organizing committee should be sent to blackshaw@agr.gc.ca