



February 2008 Newsletter

President's message

We are now in the final sprint to reach our goal of having a successful 5th International Weed Science Congress in Vancouver in June 2008.

The amount of work required to succeed is increasing but so it is the commitment of so many who are helping us. The Scientific Committee, the Local Arrangements Committee, the Finances Committee and the Main Topic Organizers are all doing an excellent job. Allen Marketing and Management has also been very cooperative and several individuals are contributing precious time and ideas to ensure the congress runs smoothly.



As you know, we decided to extend the abstract submission period as well as the early registration discount. We have received over 600 abstracts and are now in the process of organizing them into meaningful and coordinated sessions. Several of you are already registered and I would like to encourage you to do so at your earliest convenience. Please do not forget to use the most recent registration form and to make sure you select the tour of your choice. If you have any doubt about the process, do not hesitate to contact our excellent collaborators at Allen Press, Joyce Lancaster (jlancaster@allenpress.com) or Kate Counter (kcounter@allenpress.com).

We are also very pleased with the response we had from graduate students and young scientists regarding the Graduate Students and Young Scientists Award. There were several applicants, some contributing really outstanding papers. Per Kudsk (EWRS), Carol Mallory-Smith (WSSA), Dale Shaner (Scientific Committee) and Jonathan Gressel (IWSS) had the task of selecting the winners. Their final decision was made at the WSSA Annual Meeting in Chicago and those selected for the awards have already been notified, including the person selected for the IWSS Larry Burrill Graduate Student Travel Award that covers all the expenses to attend the Congress.

Election time is also coming. At the IWSC in Vancouver, Dr. Baruch Rubin, our current Vice-President will become your President. Dr. Albert Fischer, our current Secretary-Treasurer, will also complete his 4-year term. Therefore we need to elect a new Vice-President and a substitute for Dr. Fischer. I would like to invite you to submit nominations for both positions as soon as possible. Please see additional information regarding the election in the next section of this Newsletter.

I am looking forward to seeing you all at the IWSC in Vancouver.

Bernal E. Valverde
Costa Rica

Elections coming up!

Our President, Bernal Valverde will complete his term this year and pass the gavel to Dr. Baruch Rubin, our current Vice-President, during our General Assembly at the IWSC. Dr. Albert Fischer, who is serving as our Secretary-Treasurer, will also complete his term. We would like to invite you to nominate possible candidates for the posts of Vice-President and Secretary-Treasurer. Both posts are for a four-year term but the Vice-President we elect will become our next President in 2012. Please send names of possible candidates in writing to our Past President, Dr. Steve Duke (sduke@olemiss.edu) who will compile a submission list. According to our Constitution, the selection of candidates for Vice-President and Secretary-Treasurer shall be made by the Executive Committee from those nominated by members of the Society. The candidates shall not be from the same world region as the incumbent Vice-President.

Please take into account the following deadlines:
* Nominations will be received until 31 March 2008
* The election will be held electronically. Votes will be received from 15 April through 30 April 2008.

When nominating a candidate, please provide a brief curriculum (no more than one page) and a letter or e-mail indicating that your nominee would accept becoming a candidate if selected by the Executive Committee.

5th International Weed Science Congress

You will find all the information you need regarding the 5th International Weed Science Congress to be held in Vancouver 2008 on the IWSS website at <http://iws.ucdavis.edu/>. Information is also available at the WSSA site (www.wssa.net). Standard registration is now between 2 March and 15 April 2008 so you still can take advantage of a discount.

We look forward to welcoming you to Vancouver in 2008.

Karl Hurlé

Regional Representatives' Reports

West and Central Africa

Gualbert Gbèhounou

The social construction of weeds

Vissoh *et al.* (2007) have recently published an article entitled "*The social construction of weeds: different reactions to an emergent problem by farmers, officials and researchers*". This article is based on research done in the Republic of Benin and the authors discuss among other things emergence of weeds and farmers' reactions, farmers' perceptions of weeds, technology development by farmers, weeds as a component of the rural poverty circle, gender division of labor and the response of formal agricultural research to weed problems. The authors conclude that weeds have become a significant player in the vicious circle of poverty. They stress that efficient weed control methods should be a key concern for agricultural research that seeks to reduce poverty in West Africa. Because women perform the bulk of the weeding activities, they should be involved in the development of weed management strategies. The study revealed how little impact the perceptions of weeds and weeding practices by

small scale farmers influence the research and policy agenda of agricultural scientist and the government. They conclude that the key lesson from the study is that different conceptualizations of weeds determined different practices of weed management and that a conceptual convergence is essential for designing more efficient pathways of science in the future.

Read more from: Vissoh, P.V., Mongbo, R., Gbehounou, G., Hounkonnou, D., Ahanchédé, A., Röling, N. and Kuyper, T.W. 2007. The social construction of weeds: different reactions to an emergent problem by farmers, officials and researchers. *International Journal of Agricultural Sustainability* 5 (2&3): 161-175.

Gualbert Gbèhounou

Regional coordinator for West and Central Africa

Oceania

Anisur Rahman

REPORT FROM NEW ZEALAND

1. Developments with NZ Plant Protection Society (NZPPS)

The NZPPS is now a full member of the Council of Australasian Weed Societies (CAWS). This gives NZPPS members access to awards like the CAWS medal for leadership, the Annual Student Travel Award and the Annual Early Career Weed Scientist Travel Award. Another award that became available from NZPPS since joining CAWS is the "Most Weedwise Nursery" award. The inaugural 2007 award was presented recently to Kerikeri Plant Production Nursery who specialises in growing a range of native species and deliberately avoids including any invasive species in their collection.

In 2007 NZPPS also instituted a 'New Zealand Plant Protection Medal' for outstanding services to plant protection through research, education, implementation or leadership. The inaugural medal was presented to Dr. Howard Wearing for his years of IPM research on horticultural crops at the 60th Conference of the Society.

2. The 60th Annual Conference of NZPPS.

NZPPS celebrated its 60th Anniversary by holding its annual conference on the picturesque Marine Parade in Napier, preceded by a Symposium

entitled, 'Future Challenges in Plant Protection: Repositioning NZ's Primary Industries for the Future'. On this special occasion the society also released a commemorative CD containing a compilation of papers presented at its conferences from 1948 – 2007.

The 2008 Conference and the symposium will be held at the Copthorne Hotel, Paihia, in the Bay of Islands, from 11 – 14 August. The topic for the one day pre-conference symposium is 'Surveillance for Biosecurity'. Further details, when available, will be posted on the Society's website at www.nzpps.org

NZPPS is also planning to host the 17th Australasian Weed Conference in Christchurch from 26 – 30 September 2010 to bring the Australian and New Zealand weed scientists together for the first time in New Zealand.

3. A Brief report on the 21st APWSS Conference

The 21st Conference of the Asian-Pacific Weed Science Society (APWSS) was held in Colombo, Sri Lanka in October 2007. As a special event, the Society released a souvenir of its 40-year history. Dr. Aurora Baltazar prepared this commemorative publication which was received with much enthusiasm.

Nearly two hundred participants from 19 countries attended this conference which included 27 technical sessions, at which 107 oral presentations and 25 posters were discussed. Eight invited guest speakers covered areas of their expertise at three plenary sessions. The third day of the Conference was devoted to field excursions.

Award presentations included three Travel Awards to Young Deserving Scientists and three Best Paper Awards, named as "Excel Young Scientist Awards". The 22nd Conference will be held in Pakistan in 2009.

4. A new *Ludwigia* spp. found in Sydney.

Recently, a new *Ludwigia* species - *Ludwigia repens* (Creeping Primrose Willow) was found in a waterway within the Lane Cove National Park, in Sydney, Australia. *Ludwigia repens* is a popular aquarium plant in USA, it is possible that the species may have been imported to Australia and may have escaped from an aquarium.

The current infestations are small and limited to the National Park, which is located in a highly urban environment in Sydney. Given that two other species, Primrose Willow (*L. peruviana*) and Long-leaf Willow Primrose (*L. longifolia*) are major aquatic weeds in the Sydney and Hunter regions of NSW, there is concern about the potential for spread of the new species.

5. Plant – SyNZ database is now live.

The Plant-SyNZ database links New Zealand plants with their insect and mite herbivores. The database can be searched by plant or by herbivore name and produces reports that list the herbivores associated with a plant or the plants on which they live. There are now 6863 host associations with 1517 plants and 2584 invertebrates. This information would be of importance to people with interests in biodiversity, biosecurity, ecology and education. The database can be accessed from <http://www.crop.cri.nz/home/plant-synz/index.jsp>

Anis Rahman

FAO Report

Ricardo Labrada

The FAO regional training workshop on weed risk assessment for Asia held in September 2007 in Annamalai, India was jointly organized by FAO and the Annamalai University, Tamilnadu, India. Specialists from China, India, Japan, Nepal, the Philippines, Thailand and Vietnam participated in the sessions which consisted of country reports during the first day and the explanation of FAO procedures on weed risk assessment and post-entry weed risk management the following days. Dr. Steve Johnson from Australia and the FAO weed officer were the main workshop facilitators.

The country reports revealed that in China the nine worst alien plants are: *Alternanthera philoxeroides*, *Ambrosia artemisiifolia*, *Eichhornia crassipes*, *Eupatorium adenophorum*, *Chromolaena odorata*, *Lolium temulentum*, *Mikania micrantha*, *Sorghum halepense* and *Spartina alterniflora*. *E. adenophorum*, *A. philoxeroides*, *E. crassipes* and *A. artemisiifolia* alone cause 57.4 billion Yuan in annual economic losses.

In India the main exotic invasive plants are *M. micrantha*, *Mimosa rubicaulis*, *Parthenium*

hysterophorus, *Prosopis juliflora*, *Lantana camara*, *C. odorata*, *Ageratum houstonianum*, *E. crassipes*, *A. philoxeroides* and *Salvinia molesta*. In that country *P. hysterophorus* has invaded 7 to 8 million ha of non-cropped area.

Japan is already applying WRA procedure, which has been found useful. The country started to face problems of exotic plants after the Meiji Revolution in 1886 when the authorities opened the "gates" for import of commodities from abroad. A total of 1553 plants have been introduced in Japan. *Ambrosia trifida* from North America, *Rottboellia cochinchinensis* from Southeast Asia, *A. philoxeroides*, *Pistia stratiotes*, *E. crassipes*, *Leucaena leucocephala*, *L. camara*, *S. molesta*, all from the tropical Americas, are among the main invaders in Japan.

In the Philippines, the main invasive plants are *L. camara*, *C. odorata*, *M. micrantha*, water weeds *E. crassipes*, *S. molesta*, *P. stratiotes* and *Limnocharis flava*.

In Thailand the main exotic invasive plants are aquatic *Typha angustifolia*, *S. molesta*, *E. crassipes*, *M. micrantha*, *Mimosa diplotricha*, *Mimosa pigra*, *Chromolaena odorata*, *Ageratina adenophora*, *Acrachne racemosa*, *L. camara*, *Bidens radiata*, *Leucaena leucocephala*, *Cynodon nlemfensi*, *Drymaria cordata* and *Ageratum conyzoides*.

In Vietnam the most problematic introduced plant is *M. pigra*, which invades crop and non crop industrial areas, and it is widely spread in the country.

Weedy rices, especially types with a red pericarp, are globally well known as a problem in the rice industry. The economic and environmental problems they pose include those related to rice crop production, rice milling for commerce, quarantine regulations and seed trade.

A book on weedy rice has been published in 2007 (FAO Plant Production and Protection Paper No. 188). The material prepared by a group of authors (J.C. Delouche, Nilda Burgos, D. R. Gealy, G. Zorrilla & R. Labrada) presents available information about the ecology, biology and control of weedy rice. This publication will interest a wide range of stakeholders - policy-makers, scientists, technicians and producers - including those interested in rice crop research, production, rice milling for commerce, quarantine regulations and seed trade. The authors attempt to define weedy,

wild and red rice so as to engender a common understanding of various aspects of these plants.

A Sub-regional expert consultation on Prosopis management was held 15-19 October in Awash, Ethiopia. The meeting was part of a project funded by the European Commission to share information and experience on *Prosopis* control and utilization. *P. juliflora*, among other species of the same genus, has become a problem of a regional dimension and there is an urgent need to contain its further spread in several parts of East and Southern Africa. In regions of Ethiopia as Afar of Dire Dawa the plant occupies an estimated 600 000 ha land which, until fairly recently, provided open grazing. In Kenya and Sudan, *Prosopis* has invaded more than 500 000 ha and 230 000 ha, respectively.

Action should be taken to prevent *Prosopis* spread and encroachment to more land. Exploitation of the products of this tree may assist with control and provide valuable income to affected farmers and pastoralists, but this will not happen without technical guidance and training. The expert consultation in Awash provided the group of scientists, extension workers and other experts with a useful starting point for "what to do next". In addition, the meeting served to compile all experiences available in Ethiopia, Kenya and Sudan, and to prepare an appropriate 4-year project, which should cover various aspects of control and utilization of removed mass of this invasive plant.

Items of Interest

Ricardo Labada Receives WSSA Award

Our very active past president of the IWSS, Ricardo Labrada, received the Honorary Member Award during the 2008 Weed Science Society of America meetings in Chicago. Dr. Labrada is currently the FAO Weed Officer and his professional efforts have impacted weed scientists and weed management programs around the world. Congratulations, Ricardo, on this well deserved recognition and honor.

‘Advance Instrumental Training for the Analysis of Pollutants in the Food Commodity and Water’ held in Jabalpur, India

It is well known that pollutants such as heavy metals and various groups of pesticides have toxicological significance which pose potential risk when present in soil, water, foodstuff and other environment areas. The analysis of pollutants requires sophisticated equipments and trained personnel because residues are invariably present in micro-quantities and are generally estimated at ppm or ppb levels. The identification of the residues must be confirmed beyond any doubt since a mistaken identity can lead to wrong interpretations and overall credibility of results.

Therefore, National Research Centre for Weed Science, Jabalpur organized national training program on ‘Advance Instrumental Training for the Analysis of Pollutants in the Food Commodity and Water’ held from 20-26 November 2007. The training program has received an overwhelming response from the 42 researchers, students, scientists and technical officers from the country that were trained. Basic information and knowledge on herbicide chemistry; current advances in herbicide application and use; risk of environmental pollution due to pesticides and heavy metals, phyto-remediation techniques, herbicide residue management, analysis of heavy metals; herbicide residues in soil, food commodity and water by using various advance instruments was presented. Trainees received complete analytical protocols to analyze herbicide residues, heavy metals, phyto-remediation and to test the biochemical parameters of water, including Good Laboratory Practices (GLP) and European guidelines for these procedures.

Consultation on Herbicide Tolerant GM Crops in India

A “Consultation on Herbicide Tolerant GM Crops” was held in New Delhi on 10-11 December 2007 to discuss the relevance and need of herbicide tolerant (HT) crops in India. Co-organizers included the National Research Centre for Weed Science, Jabalpur and Biotech Consortium India Limited (BCIL). The 60 participants included scientists from research institutions, agriculture universities, industry, policy makers and farmers.

Dr. Mangala Rai, Secretary, Department of Agricultural Research and Education and Director General, Indian Council of Agricultural Research (ICAR), New Delhi, in his inaugural address stressed that new technologies like transgenic crops are the need of the hour to meet the challenges in Indian agriculture. Dr. Jay G. Varshney, Director, National Research Centre for Weed Science, Jabalpur, opined that NRCWS could play a lead role in collaboration with both public and private sector organizations in evaluating the impact of HT crops. Presentations on different aspects of HT-GM crops viz., their global status, impact, safety concerns, biosafety assessment procedures and socio-economic considerations were made by various experts.

The deliberations during the consultation brought out the following recommendations:

1. Participants generally agreed that HT crops would offer simplified and efficient control of weeds. The need of HT crops in India was particularly felt in wheat, rice, maize, cotton and pulses.
2. Evaluate and develop herbicide tolerant technologies in Indian conditions.
3. Find appropriate models for viable public-private partnerships to leverage the strength of each other for the evaluation of such technologies.
4. Collaborative research through public-private partnerships should be expedited in order to bring products into the country, in addition to the initiatives of the private sector.
5. The biosafety aspects of HT crops should be addressed by following established science based national and internationally accepted regulations and guidelines to address health and environmental safety concerns.
6. Efforts should be made to evolve/develop integrated weed management strategies involving herbicide tolerant GM crops for different situations. NRCWS while coordinating with other SAUs and non govt. organizations will execute the pivotal/nodal role in this endeavor.

7. Suitable environmental safety assessment should be carried out as part of pre commercialization studies, to address various concerns such as development of 'super weeds' due to the introduction of HT crops in the country,
8. Regarding socioeconomic concerns, it was agreed that labor availability has become a major issue in addition to the high labor cost. This becomes more pertinent for weeding operations during critical time of weed control. Therefore the need for HT crops has become more relevant in the present context.
9. There is an urgent need to create public awareness about HT crops among various stakeholders and therefore concerted efforts by agricultural societies, research institutions, industry and their associations, NGOs and media should be initiated particularly for providing science based information to allay the apprehensions.



Dr. Mangala Rai, DG, ICAR & Secretary, DARE, New Delhi delivering inaugural address

Future Meetings of Interest

European Weed Research Society Workshop on Physical and Cultural Weed Control

This comprehensive session will occur from 9-11 March 2009 in Zaragoza, Spain on the Campus of Aula Dei. The meeting format will combine plenary scientific sessions with oral and poster presentations, concurrent round-table discussions, and a final plenary session. Topics under consideration include:

- Weed management in organic farming systems
- Integrated weed management (arable and vegetable crops, orchards, tree nurseries)
- Physical weed control in non-agricultural settings (urban areas, railroad tracks, etc.)
- Preventive and cultural weed control (crop rotation, tillage system, false seedbed technique, seeding rate, fertilisation, etc.)
- Cover crops, mulches and intercropping
- Mechanical weed control, inter- and intra-row (harrowing, hoeing, brushing, etc.)
- Thermal weed control (flame-weeding, steaming, soil solarization, lasers, etc.)
- Precision guidance, weeding robots etc.
- New developments and technical innovations in physical weed control
- Factors influencing the outcome of physical and cultural weed control
- Weed population dynamics in physical and cultural weed management systems
- Environmental impact of physical and cultural weed management
- Research methodology in physical and cultural weed management
- Exchange and transfer of information, and international cooperation (glossary, use of Internet resources, etc.)

Important dates to remember are these:
15th May 2008

- **Expression of interest in the workshop** by registration on the web site (available starting the first week of March at <http://www.ewrs.org/pwc/>).
- **Suggestion concerning the scientific programme:** sessions, topics, keynote themes, round-tables, chairperson volunteers, etc. to Bo Melander (bo.melander@agrsci.dk).

15th September 2008

- Deadline for pre-registration and provisional abstracts submission (on-line only, through the web site)

5th World Congress on Allelopathy



The International Allelopathy Society will hold its triennial congress on Sept. 21-25, 2008 in Saratoga Springs, NY. This meeting will bring together an international community that works on all aspects of allelopathy. Sessions include these allelopathy topics:

- allelopathic interactions with microbes
- fate of allelochemicals in soil
- allelochemical identification

- allelopathy in forest ecosystems
- allelopathy in agricultural settings
- physiology and biochemistry of allelopathy
- invasion ecology and allelopathy
- allelopathy methodologies
- allelopathy in aquatic ecosystems.

For further information, go to www.iascongress5.org. Please note that abstracts are due on April 1, 2008. If you have any questions, please contact Steve Duke (suke@olemiss.edu) or Prasanta Bhowmik (pbhowmik@pssci.umass.edu).

Coming Events

2008

- May 5-8 **XVIII Congress Latin America Weed Science Society (ALAM) and the XXVI Congress of the Brazilian Weed Science Society** (join meeting). Ouro Preto, MG, Brasil; 2nd circular at: http://www.sbcpcd.org/2%C2%AA%20Circular%20XXVI%20CBCPD_%20XVIII%20ALAM.pdf. For more information, email: 26cbcpd@cnpms.embrapa.br
- May 18-22 **16th Australian Weeds Conference**. "Weed Management 2008: Hot Topics in the Tropics" **Cairns Convention Centre, Queensland**. 16th Australian Weeds Conference Secretariat: PO Box 5718, WEST END QLD 4101, Phone: 07 3846 5858. For all program queries contact 16awc@eventcorp.com.au Web site: www.16awc.com.au/
- June 23-27 **International Weed Science Congress** Vancouver, Canada. Full information at: <http://iws.ucdavis.edu/5intlweedcong.htm>
- Aug. 11-14 **New Zealand Plant Protection Society Conference**
Copthorne Hotel, Paihia, in the Bay of Islands. Conference details are found at: www.nzpps.org
- Sept. 10-13 **First International Ragweed Conference**. Budapest, Hungary. Conference details are found at: <http://www.nki.hu/ragweed/index.html>
- Sept. 21-25 **5th World Congress on Allelopathy**. The International Allelopathy Society will hold its triannual congress in Saratoga Springs, NY. There will be sessions on all aspects of allelopathy, including allelopathy in agriculture and the role of allelopathy in invasive species success. For further information go to the website (www.iascongress5.org)

2009

- Mar. 9-11 **European Weed Research Society Workshop: Physical And Cultural Weed Control**. Zaragoza, Spain on the Campus of Aula Dei. Full information at: <http://www.ewrs.org/pwc/>

IWSS officers

Dr. Bernal Valverde, President

Faculty of Life Sciences
The University of Copenhagen
Hojebakkegaard Allé 13
Taastrup, DK-2630
Denmark
E-mail: bev@life.ku.dk
In Costa Rica: ideatrop@ice.co.cr
Tel: (+506) 433 9274
Fax: (+506) 433-4019
Skype: ideatropical

Dr. Baruch Rubin, Vice President

Faculty of Agricultural, Food and
Environmental Sciences,
Hebrew University of Jerusalem
Rehovot, 76100, Israel
Tel: 972 8 948-9248
Fax: 972 8 936-2083
E-mail: rubin@agri.huji.ac.il

Dr. Albert Fischer, Secretary/Treasurer

Department of Plant Sciences
University of California-Davis
One Shields Ave.; Mail Stop 4
Davis, CA 95616
Tel: 530 752-7386
Fax: 530 752-4604
ajfischer@ucdavis.edu

Dr. Steve Duke, Past-President

USDA, ARS, USA
PO Box 8048
University, MS 38677
Tel: (662) 915-1036
Fax: (662) 915-1035
E-mail: sduke@olemiss.edu

The IWSS Newsletter is available on the
Internet at: <http://iws.ucdavis.edu>.

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.

Thanks to these contributors to the Feb. 2008 issue: Bernal Valverde, Karl Hurler, Gualbert Gbèhounou, Ricardo Labrada, M.B.B. Prasad Babu, Alicia Cirujeda, Anis Rahman, Steve Duke and Jerry Doll.

Deadline for items for the next Newsletter is 15 July 2008

Editor: Jerry Doll, Univ. of Wisconsin,
1575 Linden Dr., Madison, WI 53706
USA. FAX: 608-262-5217; email:
jddoll@wisc.edu

To join the IWSS

Complete the following information and send your dues to Dr. Albert Fischer, the IWSS Secretary-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://iws.ucdavis.edu/membership.htm>