

## January 2005 Newsletter

## President's Message



I hope that this Newsletter finds you in excellent health and beginning a very successful year in your professional and personal endeavors. We closed 2004 with the satisfaction of having completed a successful 4<sup>th</sup> International Weed Science Congress in Durban, South Africa. The scientific quality was excellent as you remember from your participation and from comments received from colleagues if you did not have the opportunity to accompany us. In my message of July 2004, I forgot to mention that we presented Dr. Barakat Abu-Irmaileh of Jordan the Outstanding International Achievement Award.

While I Durban, the Board of Directors agreed to increase the annual fees from USD 10.00 to USD 15.00, but to hold the change until we were able to accept payments by credit card. The Board also approved to add a USD 2.00 convenience fee per credit card transaction to cover the increased cost in setting up and collecting payments by this means. Over the past few years, many of our members have requested this service, and I am sure it will be very welcome once it is established. Our Secretary-Treasurer, Dr. Albert Fischer, has almost finalized the arrangements, so very soon we will be able to pay via credit card by secure links over the Internet. We will advise you by e-mail and through our webpage once the service begins. Dr. Fischer is also working on improving our webpage and

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transferring it to the University of California. I would like to take the opportunity to thank our Past President, Dr. Steve Duke and the University of Mississippi for hosting our web page at no cost during his service as President. His co-workers, Bob Johnson and Kitty Kong, devoted a lot of time maintaining and improving our website. We heartily thank them for their contribution. We welcome your comments and suggestions to improve our webpage and the service it provides to members and visitors.

Last year our members approved a modification to our constitution. Article VI, Section 3 now reads "Terms of office. The Vice-President and Secretary-Treasurer will hold office for four (4) years. These terms of office shall begin at the conclusion of the International Weed Science Congress following the election. The Vice-President will assume the office of President at this time, also serving four (4) years. If the Vice-President chooses not to serve as President after a term as Vice President, this office will also be elected at the time of the regular election". This means that our current Vice-President, Dr. Baruch Rubin will serve as a member of the Board of Directors during eight years. This is quite a commitment from Dr. Rubin after spending so much time and effort in helping organize our recent congress. The Society is grateful for his dedication. As a follow

up of his activities related to the congress, Dr. Rubin is working together with Dr. Duke and Dr. Reinhardt on putting together a special issue of *Crop Protection* in which several invited and volunteer papers presented in Durban will be published in full. I strongly support this effort and ask those who submitted their drafts to help expedite publication by making sure that requested corrections or modifications are timely made.

I would like to encourage more participation from our members throughout the world. We have a group of Regional Representatives who have served for several years. I would like to renovate this group and will propose that we designate them during the next meeting of the Board of Directors to be held during the Weed Science Society of America annual meeting in Hawaii, in February of 2005. Please let me know if you would like to nominate a colleague or yourself to represent your region. Regions are Central America and the Caribbean, South America, Eastern Europe, Middle East and North Africa, West and Central Africa, East and Southern Africa, and Central Asia. According to our Constitution, Regional Representatives are part of the Executive Committee.

In trying to disseminate information about IWSS, Steve Duke and I wrote a short paper on our history and activities for *Outlooks on Pest Management* (formerly *Pesticide Outlook*). It was published in the October 2004 issue, 15 (5):231-232. Contents of this journal are available at <a href="https://www.pestoutlook.com">www.pestoutlook.com</a>.

Finally, we are now beginning to make arrangements for the organization of our next congress in Vancouver, Canada in 2008. Many of you probably have ideas on how to improve the congress and encourage participation. Please share your ideas with us. Your contribution could make a difference and your participation helps us serve you better.

Bernal E. Valverde President

## Honor Given to Dr. Barakat at IWSC

Dr. Barakat Eid Ahmad Abu-Irmaileh is the recipient of the 2004 IWSS Outstanding International Achievement Award. Dr. Barakat is a Palestinian born in Jerusalem and now lives in Jordan. Dr. Barakat earned his BS in agriculture at University of Alexandria, Egypt, his MS in farm crops at Oregon State University in 1971 and this Ph.D. in plant physiology at University of California-Riverside in 1977. Most of his career has been in association with his research and education activities at University of Jordan, where he is currently Professor at the Faculty of Agriculture. He also has served as a consultant in several countries and for FAO. Many students have graduated under his advisorship and are now helping agricultural development, especially in North Africa and the Near East. Currently, he is the chairman of the Near East Weed Science Society. His main areas of research interest are the biology and control of *Orobanche* and other parasitic weeds in vegetables, general weed management, and vegetation covers in arid zones. Dr. Barakat has coauthored several scientific publications, including books and book chapters.



Dr. Barakat (left) is the recipient of the IWSS Award, which was presented by Past-President Ricardo Labrada at the IWSC in Durban, South Africa.

## **News from Regional Societies**

## 20<sup>th</sup> Asian Pacific Society Meeting

The APWSS will celebrate 40 years of existence in what promises to be one of the major weed science events of 2005. The conference will be held in Ho Chi Min City on Nov. 7-11 with a theme of "Six decades of weed science from the discovery of 2,4-D." The officers note that it is timely to look back over the six-decade history of weed science and to take time to evaluate achievements as well as limitations we face. They recognize that the challenge for scientists and farmers in the Asian-Pacific region, as well as in the rest of the world, is to chart our path into the future. Full conference details are found at this web site: http://www.clrri.org/en/index-en.htm

#### **News from National Societies**

## New Zealand Plant Protection Society History and Status

The Society is now in its 57<sup>th</sup> year, began its life as the National Weeds Conference in 1948. It then metamorphosed through the phases of New Zealand Weed Society and New Zealand Weed and Pest Control Society before reaching its present form as the New Zealand Plant Protection Society. The highlight of the Society's year is its annual conference, held in August, at which scientists and others present the results of their latest endeavors.

The proceedings of that conference are published in the journal *New Zealand Plant Protection*. A year after publication of the hard copy journal, all the contents of each edition are posted on the Society's website at <a href="https://www.nzpps.org">www.nzpps.org</a>. We now have all journals dating back to 1994 there. Papers deal with entomology, pathology and other aspects of plant protection as well as weeds and their control.

The Society also publishes books on subjects related to plant protection. These are listed on the website. Recent publications relevant to the weed community include:

- Second edition of An Illustrated Guide to Common Weeds of New Zealand
- Reprint of A Guide to the Identification of New Zealand Common Weeds in Colour
- Managing Wilding Conifers in New Zealand: Present and Future
- Plant Protection Challenges in Organic Production
- Managing Urban Weeds and Pests

In addition, the website contains information on pesticide resistance in New Zealand, including ways of avoiding its development.

Although the Society's publications deal exclusively with New Zealand problems, we share many of our weeds, pests and diseases with other countries and agencies. Take a look at the website www.nzpps.org. You may be pleasantly surprised.

Ian Popay, President

### XI Venezuelan Weed Science Congress

The XI Venezuelan Weed Science Congress, organized by Universidad Nacional Experimental del Táchira and the Venezuelan Weed Science Society (SOVECOM), held on 2-5 November 2004 in San Cristobal, Táchira, Venezuela, was a great success. A group of 230 researchers, students, agricultural advisors and farmers from several Venezuelan regions attended the congress where 40 papers were presented, mostly from Venezuela but including some from Argentina, Colombia and Cuba. Of the 10 invited lectures, two were presented by IWSS officers. Dr. Bernal Valverde, President, lectured on weed resistance to herbicides and Dr. Albert Fischer, Secretary-Treasurer, on herbicide mode of action. Dr. Horacio Rivera from the Center for Research on Sustainable Agricultural Systems (CIPAV-Colombia) gave an interesting presentation on vegetation management for sustainable coffee production. Renowned local scientists addressed topics of great interest and relevance to Venezuelan agriculture. Local lecturers included Aída Ortiz, Castor Zambrano, Jose Vicente Lazo, Jocelyne Ascencio, and Elio Rodríguez Tineo from Universidad Central de Venezuela (UCV), Carlos Medrano from Universidad del Zulia (LUZ), Alfredo Padilla and Olga Arnaude from Universidad Nacional Experimental del Táchira (UNET), Simón Peraza from Centro de Control Gastrointestinal "Dr Luis Anderson", Freddy Sifontes from the Ministry of Environment, Federico Troconi from Instituto de Conservación del Lago de Maracaibo (ICLAM), and the industry representatives, José Alfredo Muñoz (Agroisleña) and Piedad Calles (Syngenta). Another highlight of the congress was a symposium on the integrated management of Lemna sp., a weed that has become a major problem at Maracaibo Lake.

#### **Invasive Weed Events**

#### Parthnium Event in India

Parthenium, an exotic weed has spread all over India with devastating effects agriculture and the environment and causing great health hazards to human beings and also to livestock. It has remarkable plasticity and adaptability to various agro-ecological systems. The weed spreads very fast due to its high reproductive capacity (5000-10000 seeds/plant), light seed weight, which are disseminated by wind and traffic, and lack of

seed dormancy resulting in 3-4 generations a year. The National Research Centre for Weed Science has developed various methods for its management like use of herbicides, insects and competitive plants. The Centre has also done considerable research on use of Mexican beetle (*Zygogramma bicolorata*) against this weed. Because *Parthenium* is a national problem, public awareness is needed to promote the feelings that their destiny is linked with keeping the environment free from natural pollutants like *Parthenium*. The impact of all the individual methods has not been impressive. Therefore, an integrated approach incorporating all the components in to a mission oriented community programme is essential to fight this menace.

To make people aware of the problem of *Parthenium* and how to manage this weed, a special programme was organized by the Centre on 4<sup>th</sup> September 2004 throughout the country through its 22 All India Coordinated Research Project on Weed Control Centres under the leadership of Dr. N.T. Yaduraju, Director. This one-day programme was enthusiastically attended by several NGOs, farmers, school children, officials from both Central and State Departments of Agriculture and members of residential associations. The activities included lectures by experts, demonstration of available technology for Parthenium management and weed utilization by making compost, release of publications related to Parthenium, etc. A token gift of Mexican beetles was given to participants for release in their areas.

## **Invasive Weed Event Coming**

A major international event on invasive plants will occur in 2007. The Weeds Society of Western Australia is organizing the 9th **International Conference on the Ecology and Management of Alien Plant Invasions**. The organizing committee is pleased to invite all those who are interested in invasive plants in natural areas.

The conference will cover topics such as: ecological, biological and biogeographical studies on invasive plants; the management of plant invasions; the development of multidisciplinary activities focused on prevention of new incursions and management of existing infestations; appropriate legislation, public education and information; and any other relevant aspects of plants that invade natural areas. See the Calendar of Events for venue details.

## **Other Happenings**

#### Weed Scientist Honored for Bioherbicide

Dr. Raj Prasad and his colleagues Dr. Ron Wall and Elaine Sela were honored by the Lt. Governor of British Columbia at an EcoStar Awards ceremony at Victoria, B.C., Canada for their contributions to the development of a bioherbicide formulation. This ecologically- safe product helps manage exotic-invasive weeds that threatens the fragile Garry oak (*Quercus garryana*) ecosystems in British Columbia.

The bioherbicide is based on the native fungus *Chondrostereum purpurem* and has been widely tested, patented and now registered for use in forest management and rights-of ways. The fungus inhibits respouting and regrowth in shrubs and woody trees such as alders and aspen. The product is registered and available for use in both western Canada and western USA.



The Lt. Governor of British Columbia, Her Honor, Iona Campanola at awards event with Dr Raj Prasad.

#### **IWM Rice Course in Venezuela**

On 9-10 November 2004, 120 people participated in a course on *Advances in Integrated Weed Management in Rice* at the University campus in Maracay, Aragua, Venezuela. The course, coordinated by Aída Ortiz, is part of an FAO project that includes Colombia, Costa Rica, Cuba, Nicaragua, Panama and Venezuela and was supported and organized by the Department of Agronomy at the Universidad Central de Venezuela (FAGRO-UCV), FAO and the local industry. Instructors included rice specialists, Dr. Albert Fischer. Secretary-Treasurer of IWSS, Dr. Bernal Valverde, President of IWSS, and the local rice experts, Dr. José

Vicente Lazo, Cástor Zambrano, Humberto Moratinos and Aída Ortiz. The course participants included field and technical advisors, advanced farmers and students from Venzuela and representatives from Costa Rica and Nicaragua on IWM in rice. The program covered basic knowledge of herbicides (including absorption, translocation, and metabolism), herbicide resistance evolution in weeds and its management in rice; and weedy/red rice biology and ecology as the basis for its management with emphasis on soil seed bank dynamics.

## Loss of Prof. LeRoy Holm

Prof. LeRoy "Whitey" Holm, died Nov, 14, 2004 in Madison, Wisconsin, USA. In a life spanning 87 years, he would say that he was guided and inspired by gracious souls and divine hands. He earned a Ph.D. from the University in Madison in botany and biochemistry and joined the School of Agriculture at the University as an instructor and researcher in horticulture and botany. As he began his research, it was the confluence of two ideas which brought the path he was to take into focus. One was a desire to pursue methods and means by which people might better feed themselves in areas where hunger and malnutrition are constant companions; the other was the emergence of a relatively new discipline of "weed science."

Over the next five decades, he would ask and answer some of the basic questions of this new discipline and help define its scope. Through 15 years of travel around the world and discussion with other weed scientist, he familiar and ubiquitous, cause more losses in crops than all other causes combined. Even more striking was the possibility that humanity may expend more time and effort weeding crops than any other single task. He set out alone, on a 30-year odyssey, to identify and describe the biology and distribution of those weeds responsible for most of the damage and to catalogue the rest. With several co-authors and hundreds of supporters around the world, he wrote a three-volume work describing the "world's worst weeds." The titles of these tomes are: The World's Worst Weeds, A Geographical Atlas of World Weeds, and World Weeds: Natural Histories and Distribution.

Prof. Holm served as the first Weed Officer of FAO from 1965 to 1970 and was a charter member of the IWSS. His life inspired and influenced many and his students and books will serve as a perpetual legacy to his life.

#### **Editor's Comments**

My first comment is in regard to Professor Holm. I am one of those who benefited greatly by knowing him. It is a rare privilege to know one of the pioneers of international weed science. Whitey was not one to dominate but was very influential in making things happen. What made him special was his love of people, biology in the broad sense and his commitment to help others through his profession. He will be missed.

When asked by President Bernal to continue as editor of the Newsletter, I hesitated but obviously said yes. Part of my hesitation was that after four years, my ideas are not as fresh as before simply because I now have a routine for preparing the newsletter. Thus, I sincerely invite your constructive comments on how to make this means of communication more valuable to you. My own answer to that would be more articles from around the world. Hopefully the rejuvenated network of regional contacts for the IWSS will take us there. J. Doll, Editor

#### **New Publication**

# Weeds and Weed Management on Arable Land: An Ecological Approach. By Dr.

Sigurd Håkansson, Professor (emeritus), Department of Ecology and Crop Production Science, Swedish Univ. of Agricultural Sciences

This book is intended to provide fundamental principles to both discuss immediate field applications and to plan research and development work. Being primarily focused on principles, it will be of interest for readers in very different geographical areas and for many years to come.

The book is addressed to readers reasonably familiar with biological and ecological fundamentals. It deals with traits, occurrence and management of weeds in different crops and cropping systems. It will hopefully be of interest to teachers, postgraduate students and researchers in weed science and prove useful also to undergraduate students who specialize in this area and related subjects, such as general agronomy, crop protection and plant ecology.

I have had the opportunity to follow the development in weed science and crop production ecology as a researcher and teacher in these subjects during almost five decades. In this period, weed research gradually shifted from a strong focus on chemical weed control in the 1950s and 1960s to an increasing accent on integrated weed management during the 1980s and 1990s.

Studies with a broader biological and ecological approach to weed management received proportionally small economic support from the 1950s up to the late 1970s. Although such investigations were awarded relatively more money in Sweden than in many other countries, this also applies to Sweden.

When I became an academic teacher in the 1960s, the period of early, almost unreserved enthusiasm over the new herbicides was not passed. Discussions on weed management were widely the same as discussions on chemical control. In spite of this, it was possible for me to start courses with a wider, ecological approach in the 1960s. Although the proportions between different subject parts have varied over time, the overall structure of my weed courses have been kept rather unchanged for more than thirty years. This structure is largely reflected in the present book.

The strong focus on chemical control in weed research and weed management for three decades that resulted in overusing herbicides must not become a dogmatic rejection of chemical weed control. The judicious use of herbicides will certainly do well even in cropping systems intentionally structured to minimize negative environmental impacts. For example, by facilitating the reduction of erosive soil tillage, certain herbicides have positive effects in vegetation control, including the tropics and dry, windy areas and sloping ground in any climate.

One-sided focusing of weed management on direct plant control, either by chemicals or by mechanical means, should be avoided. Instead, different direct control and preventive measures should be combined into systems of integrated weed management. In planning such systems, unwanted side-effects of measures used in the field should be considered as well as the intended effects on weeds and crops. I hope that the present book will contribute to a balanced development of such systems.

Chapters of the book:

- Introduction
- Classification of plants on traits of ecological significance
- Annual and perennial crops
- Weed communities looked upon as early stages in secondary vegetation succession
- Weeds with diverse life forms in various types of crop
- Germination, emergence and establishment of crop and weed plants
- Competition in plant stands of short duration
- Weed flora and weed plant adaptation to environment and competitive conditions
- Measurements of competition and competitiveness in plant stands of short duration
- Soil tillage effects on weeds
- Chemical weed control as an element in the cropping system
- Special management measures
- Important points for understanding the occurrence and rational management of weeds
- References

## 2008 IWSS Congress

The IWSS Board of Directors will meet during the Weed Science Society of America annual meeting in Hawaii next February. This meeting is open to all members of the IWSS. We will begin formal discussions about the scientific program and format for the next International Weed Science Congress to be held in Vancouver, Canada, in 2008. The Board would like to receive your suggestions and to know if you would like to volunteer time in organizing sessions or symposia. Please contact President Bernal Valverde (bev@kvl.dk or ideatrop@racsa.co.cr) or any other IWSS officer and be part of this major effort.

## **Coming Events**

#### 2005

Feb. 7-10 Weed Science Society of America Annual Meeting, Honolulu, HI, USA.

Contact: Joyce Lancaster, Exec. Sec. WSSA, P.O. Box 7050 Lawrence, KS 66044 USA Web: <a href="http://www.wssa.net">http://www.wssa.net</a>. Email: <a href="mailto:jlancaster@allenpress.com">jlancaster@allenpress.com</a>

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- June 20-23 13<sup>th</sup> Symposium of the European Weed Res. Soc. Villa Romanazzi Carducci Hotel, Bari, Italy. Contact Paolo Barberi: Email: <a href="mailto:barberi@sssup.it">barberi@sssup.it</a>; Tel: +39-050-883.449; Fax: +39-050-883.215; web site: <a href="https://www.erwr-symposium.com">www.erwr-symposium.com</a>
- July 10-13 45<sup>th</sup> Annual Meeting of the Aquatic Plant Management Society. Hyatt Regency Hotel, San Antonio, Texas USA. Contact Jeff Schardt: email jeff.schardt@dep.state.fl.us; web site: www.apms.org.
- **July 17-23 17**<sup>th</sup> **International Botanical Congress.** Vienna, Austria. Information at: http://www.ibc2005.ac.at/ibc/progress.htm
- Aug. 21-26 4<sup>th</sup> World Congress on Allelopathy. Charles Sturt University, Wagga Wagga, Australia. Contact Andrew Hennell, Allelopathy Secretary, C/o Rural Events, P.O. Box 6010, Wagga Wagga NSW 2650, Australia. Email: <a href="mailto:allelopathy@ruralevents.com.au">allelopathy@ruralevents.com.au</a>; web site: <a href="http://www.csu.edu.au/special/allelopathycongress/">http://www.csu.edu.au/special/allelopathycongress/</a>.
- Sept. 21-24 4<sup>th</sup> International Symposium of Pesticides in Food and the Environment in Mediterranean Countries. Organized by Bornova Plant Protection Research Institute, Izmir, Ege University, Izmir; and the Mediterranean Group of Pesticide Research. Venue: Pine Bay Holiday Resort, Kusadasi, Aydin, Turkey. Further information at: <a href="http://www.mgpr2005.com">http://www.mgpr2005.com</a>
- Oct. 31-Nov. 2 BCPC International Congress Crop Science & Technology. SECC, Glasgow, UK Email: <a href="mailto:lizzy.white@bcpc.org">lizzy.white@bcpc.org</a>
- Nov. 8-11 17<sup>th</sup> Latin America Weed Association (ALAM), 4<sup>th</sup> National Weed Congress of Cuba and the 1<sup>st</sup> Iberoamerican Weed Science Congress. Centro de Convenciones, Plaza America, Varadero, Matanzas, Cuba. Contact Dr. Juan Carlos Diaz, President of the Organizing Committee; Email: <a href="mailto:icdiaz@inica.edu.cu">icdiaz@inica.edu.cu</a> Web: <a href="http://gcrec.ifas.ufl.edu/Weed%20Science/Alam/Web%20page/ALAM01.htm">http://gcrec.ifas.ufl.edu/Weed%20Science/Alam/Web%20page/ALAM01.htm</a>
- Nov. 7-11 20th APWSS Conference Rex Hotel, Ho Chi Minh City, Vietnam. Dr. Duong Van Chin, Chair, Organizing Com. 20th APWSS Conf., Dept. of Weed Science & Farming System, Cuulong Delta Rice Research Institute, Omon Cantho, VIETNAM. E-mail: <a href="mailto:duongvanchin@hcm.vnn.vn">duongvanchin@hcm.vnn.vn</a>. Full details at: <a href="http://www.clrri.org/en/index-en.htm">http://www.clrri.org/en/index-en.htm</a>

#### 2007

Sept. 17-21 **9th International Conference on the Ecology and Management of Alien Plant Invasions.** Hyatt Regency Perth, Western Australia. Further information at: <a href="http://www.congresswest.com.au/emapi9/">http://www.congresswest.com.au/emapi9/</a>

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## The IWSS Newsletter is available on the Internet at:

www.olemiss.edu/orgs/iws/DEFAULT.HTM

The **IWSS** Newsletter is published in January and July 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 January 2005 issue: Bernal Valverde, Ivan Popay, Sigurd Håkansson, Sandy Lloyd, Ricardo Labrada, Olga Arnaude, Aida Ortiz, Raj Prasad and Jerry Doll.

#### Deadline for items for the next Newsletter is 15 June 2005

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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:	
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 Email:	_	

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