

PRESIDENT'S MESSAGE



Dear ISWS Members,

Greetings and best wishes for 2015

This will be a special year for the ISWS as we are organizing 25th Asian-Pacific Weed Science Society Conference (APWSS 2015) at Hyderabad, India from 13-16 October, 2015 on the theme “**Weed Science for Sustainable Agriculture, Environment and Biodiversity**”. It is a matter of great pride and honour to all of us that India is hosting this mega event after a gap of over 34 years- the last one was held in Bengaluru in 1981. The program includes plenary and lead presentations by global experts in weed science, contributory papers and poster presentations. Over thirty world renowned weed scientists have consented to be at the conference. Five satellite symposia on subjects of topical interest have been planned during the conference. Being the Golden jubilee year of the APWSS, a special publication *Weed Science in Asian Pacific Region* will be released. Well known experts from as many as 20 countries are contributing to this unique publication which is being edited by a group of International Editors led by renowned author Dr V S Rao. I assure you that this event will not only a big one with respect to participation but will also be an academically enriching one. The conference will benefit the young scientists and the students the most. I therefore appeal to you all to come in large numbers and get the maximum advantage of this huge gathering of weed scientists ever assembled in the country. It is not all work. There will be pre- and post- conference tours and sight-seeing trips to explore the rich cultural heritage of Hyderabad and its surroundings.

Please visit our web site (<http://isws.org.in/apwss2015.aspx>) to gather more information. If you have any suggestion or observation to make, please feel free to write to me or to any our Executive members.

See you in Hyderabad!

NT Yaduraju
President, ISWS

Executive committee meeting of ISWS held

Another EC meeting of ISWS was held on 10 October, 2014 at Professor Jayashankar Telangana State Agricultural University (PJTSAU), Hyderabad to discuss progress of forthcoming APWSS Conference and ISWS functioning. The members were present: Dr N.T. Yaduraju, President, ISWS & APWSS; Dr T.V. Ramachandra Prasad, Vice president, Dr A.R. Sharma, Secretary, Dr C. Chinnusamy, Joint Secretary, Dr J.S. Mishra, Joint Secretary, Dr Shobha Sondhia, Treasurer, and Dr Sushil Kumar, Chief Editor, IJWS. Dr. D. Raji Reddy, Director of Research, Dr. T.V.K. Singh, Dean, COA, Dr M.D. Reddy, Ex-Director, WTC, Dr M. Yakadari, Professor (Agronomy), Dr D. Leela Rani, Professor and Dr M. Madhavi, Professor (Agronomy), PJTSAU, Hyderabad; Dr A.R.G. Ranganatha, DOR, Hyderabad, Dr A.N. Rao, Visiting Scientist, RRI / ICRISAT and Dr Bhumesh Kumar, Senior Scientist, DWSR, Jabalpur were present as special invitee. At the outset, Dr N.T. Yaduraju welcomed EC members and special invitees. He expressed his displeasure at the slow progress of some of the activities and urged to work hard and smartly for the successful organization of upcoming 25th APWSS Conference at PJTSAU, Hyderabad *w.e.f.* 13-16 October, 2015. Dr. A.R. Sharma, Secretary made a brief presentation on APWSS history and conferences organized in different countries. He presented the progress made so far and informed that article submission, registration, online payment etc. can now be done through the APWSS website. He also presented a tentative budget for the APWSS conference and suggested to make all out efforts to collect money from all available sources. It was informed that ISWS has become an affiliate member of APWSS by paying the required membership fee.

Dr. D. Raji Reddy, Director of Research, PJTSAU assured full support from the University for successful Organization of this event. He emphasized that quality of papers to be presented should not be compromised. Dr Sushil Kumar made a presentation on the APWSS website linked through ISWS. Several improvements in the website were suggested including information on historical places, paper submission, registration of the accompanying person etc. Dr. M. Madhavi was asked to supply information on tourist places at Hyderabad. Various Committees were tentatively constituted for organizing the APWSS Conference. It was decided to bring out a book on "Weed Science in Asian-Pacific Region". Dr. V.S. Rao was identified as the Chief Editor, and other members of the Editorial Team will be: Dr. Nimal Chandrasena, Dr. Gul Hassan, Dr. Baki Bakar, Dr. Do-soo Kim, and Dr. N.T. Yaduraju. About 10 potential contributors have already conveyed their consent so far. Dr. A.N. Rao was identified to contribute this article from India. It was also decided that the Conveners of different committees should contact the Chairman / Co-Chairman and other members of different committees to seek their consent. Details of these committees should be mentioned in the second circular. A letter for sponsorship of the Conference will be initially written by the

President, APWSS to different potential donors (FAO, DBT, DST, NABARD, CABI, seed and herbicide companies and others), after which, the financial committee will follow-up.

It was decided to reserve accommodation in various guest houses at Rajendranagar. Dr. A.R. Sharma will write a letter to all concerned and Dr. M. Madhavi will follow-up. No hard copy of proceedings / extended summaries will be brought out and soft copies of proceedings / extended summaries will be supplied to the delegates. Only limited copies (100-200) of such publications for libraries may be published. However, hard copy of souvenir may be published. Registration fee to Indian students / SRFs should be reduced to Rs. 3000/- to ensure their maximum participation. There will be in all 6-9 keynote / plenary speakers, and 18-20 lead speakers, who should be identified by the Technical programme Committee. Up to 3 technical sessions can be organized concurrently. Themes of the technical sessions may be organized accordingly. A publication on 'Weed Management in India' is being brought out by the Indian Society of Agronomy. It was proposed that this can be a joint publication with ISWS. Dr. A.R. Sharma was requested to take up this proposal with Secretary, ISA. As per earlier decision, only II Tier AC train fare will be permissible to the EC members for attending meetings. It was unanimously decided to again request Dr. Dev Raj Arya to act as Retuning Officer for conducting elections of the Executive Committee of ISWS for the biennium 2015-16. If he declines, Dr. M.D. Reddy will be requested to take up this responsibility. In the end, Dr. N.T. Yaduraju asked all EC and committee members to work smartly.

RESEARCH NOTES

Herbicidal weed control in barnyard millet

A preliminary investigation was made to find out the influence of pre-emergence application of oxyflourfen on weed control of barnyard millet (*Echinochloa frumentacea* L.). Results revealed that pre-emergence application of oxyflurfen at 250g. a.i/ ha on 3rd day after sowing gave broad-spectrum weed control with 92% reduction in weed density and 87% reduction in weed dry weight, without impairing the germination and seedling growth of barnyard millet. (**P. Masilamani, C. Chinnusamy and T. Ponmani**, Agricultural College and Research Institute, TNAU, Madurai, Tamil Nadu- 625 104 ; E-mail: masil_mahesh@yahoo.com)



Weedy check



Oxyflurfen at 250g/ ha at 3DAS

Potential robotic weeder tested in rice

The research was conducted to develop a robot that can navigate a paddy in between rows or hills which were transplanted by the machine transplanter with equal distance. An initial prototype robotic battery-type weeder was manufactured and tested to navigate and control weeds in rice paddy fields, but a speed was so slow, and thus second engine-type prototype was developed. A working acreage for weed control has been attained at and up to 0.8 ha/day. Small and young weed seedlings were uprooted and destroyed by passive devices in between rows as well as hills. This robot was smoothly navigated in between rows on behalf of the guidance under camera and sensor systems and control weeds with mechanical by the use of implements such as passive rotary weeders and then weeds would be cut and buried into the soils. Also muddy water was generated during operation which was none penetrated by light for weed germination to occur. The authors concluded that the robotic was an effective alternative implement to control weeds in lowland rice paddy as long as this tool was systematically introduced into the rice fields at three time intervals, viz. 15-20 days, 25-30days, and 35-40 days after transplanting of rice seedlings. [Kwang Ho Park, Soo Hyun Kim, Young Kuk Kim, Han Jong Joo, Yoon Shik Hong, Jee Hyong Kim & Keun Mo Koo (2014). A Potential Weed Control-Using Robotic Implement. *Journal of Life Sciences*, 8(5), 473-480]

EVENTS

Weed awareness programme organized

One day **Weed Awareness Programme** for the farmers of District Bandipora was organized on 29th of December, 2014 in collaboration with State Extension functionaries of Department of Agriculture, J&K in the meeting hall of Directorate of Extension Education, SKUAST-K. Rice



growing farmers complained that application of Butachlor was not showing good results for control of sedges and some other weeds and also hand-weeding was not cost effective for controlling weeds and demanded for an effective weed control methods. The farmers were advised to incorporate the brown sarson straw if available or spray the extracts of brown sarson straw after soaking it for 36 hr by adding 1 kg straw in 5 lt. of water and apply between 3 to 5 days after transplanting. But farmers pressed hard for some chemical recommendations. Weed management for rice grown under waterlogged conditions was also raised by the some farmers as *Potamogeton distinctus* is severe problem. Farmers from Horticulture side also demanded some recommendations for control of weeds in orchards in place of glyphosate so that some crops for fodder or pulses may be grown, similarly the vegetable growers also demanded some post emergences control measures as hand weeding is very costly. Suitable recommendations were given on spot and feed back for future research was collected. On 30th Dec. 2014 the **Weed Quiz** competition was held at SKUAST-K Shalimar Main campus for UG and PG students of various disciplines. Thirty five students appeared for the competition. Mr. Noor-ul-Islam Wani, student of M. Sc. (Agri. Extension and Communication) secured the 1st position in the weed Quiz-2014. Prof (Dr.) Badrul Hassan, Director Education, SKUAST-K distributed certificates among students.

Thesis competition organized

A competition for the 'Best M.Sc (Ag.) Thesis in weed science was organized at College of Horticulture, Kerala Agricultural University campus on 14th November 2014. Of the six nominations received, five were short listed for oral presentation in the event. Dr. T. V.



Ramachandra Prasad, Vice-President, Dr. C. Chinnusamy Joint Secretary, ISWS and Dr. N.K Sasidharan, Professor of Agron. (Rtd), KAU were the judges for the presentation. Ms. Brinda. K. from TNAU, Coimbatore won the first prize for her work on “New domain approach to manage the world’s worst weed the *Cyperus rotundus* with engineered nano particles, herbicides and hydrolytic enzymes.’ The first prize carried an amount of Rs.3000 with a memento and certificate. The second prize was awarded to Ms. M. Dhananivetha from AC and RI, Madurai for her work on ‘Bioefficacy and phytotoxicity evaluation of Quizalofop ethyl (5%EC) for management of weeds in onion’. The second prize carried Rs.1000, a memento and certificate. The Director of Research, KAU distributed the prizes to the winners.

Workshop organized

One day workshop on “Recent Trends in weed Science” was also organized at College of Horticulture, Kerala Agricultural University campus on 14th November 2014. In addition to the ISWS representatives mentioned above, Dr. C T Abraham, PI AICRP on Weed Control Thrissur Centre, Dr. T. R. Gopalakrishnan, Director of Research KAU, Dr. P. V. Balachandran, Registrar KAU, Dean College of Horticulture, graced the occasion. A total of 60 participants including scientists, students, progressive farmers and representatives from the herbicide industry attended the programme. The Workshop was inaugurated by the Registrar, Kerala Agricultural University.

Dr. T. V. Ramachandra Prasad delivered a talk on “Biological Invasion of Alien Weeds-Effect on Biodiversity and steps for containment” and Dr. C. Chinnusamy delivered a lecture on ‘Integrated weed management in cropping systems’. This was followed by a key note address by Dr. C. T. Abraham on “The future line of research for the budding weed scientist of the state”. The meeting ended with a felicitation to Dr. Abraham by his former students and associates in the university, colleagues from AICRP and the industry.



RECOGNITIONS and AWARDS

Dr. C. Chinnusamy, Dean Agricultural College and Research Institute, TNAU, Madurai was conferred with three National Awards for his outstanding contributions in the field of weed science research and teaching. The first one was the **Crystal National Agri. Scientist Award 2014** by Krishi Anusandhan & Kisan Vikas Foundation, New Delhi. The second honour conferred on him was **CWSS Gold Medal Award 2014** from Crop Weed Science Society, BCKV, Kalyani and the third and prestigious honour was **ISA Gold Medal 2012** from Indian Society of Agronomy, New Delhi.



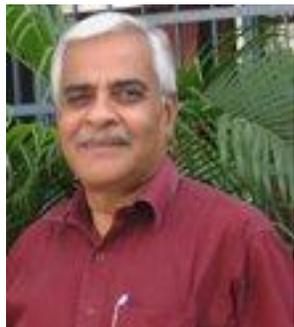
Dr. Sushilkumar, Principal Scientist and Editor-in-Chief, Indian Journal of Weed Science DWSR, Jabalpur received the Crystal National Agri. Scientist Award 2014 by Krishi Anusandhan & Kisan Vikas Foundation, New Delhi under the research scientist category for his outstanding work on Parthenium management on 27 August, 2014.



Dr. Anil Dixit, Principal Scientist, National Institute for Biotic Stress Management, Raipur, was awarded with ISA Fellow 2012 from Indian Society of Agronomy, New Delhi.



NEW POSITIONS



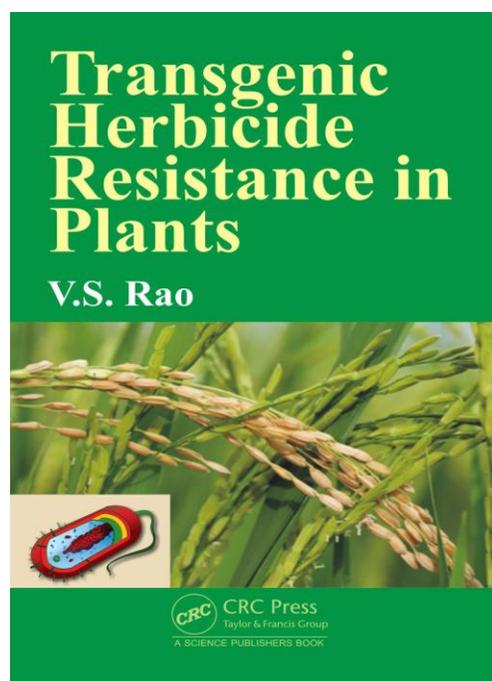
Dr. J.S. Mishra, Principal Scientist (Agronomy), Directorate of Sorghum Research, Hyderabad joined the post of Head, Division of Crop Research, ICAR Research Complex for Eastern Region, Patna (Bihar).



Dr. Rajveer Sharma Principal Scientist (Agronomy), Indian Agricultural Research Institute New Delhi, joined the post of Head, Makhana Research Centre, Darbhanga (Bihar).

NEW PUBLICATION

Transgenic Herbicide Resistance in Plants by **Dr. V.S. Rao**, Elk Grove, California, USA, E-mail: dr_vs_rao@yahoo.com



The book was published by CRC Press, Boca Raton, FL, USA, a subsidiary of Taylor & Francis. It is a Science Publisher publication. The book is available on-line from many sources. This 478-page book contains 9 chapters, inclusive of herbicide resistance, transgenic engineering, transgenes in herbicide resistance, herbicide resistant transgenic crops, transgenic phytoremediation, adoption and regulation of transgenic crops, and benefits, risks and issues associated with transgenic crops and foods.

Ph. D. THESIS

Bikash Chandra Sarkar: "Utilization of Parthenium (Parthenium hysterophorus L.) as vermicompost for integrated nutrient management of potato-sesame cropping system in lateritic soils". Ph.D. (Agronomy) Thesis. 2014. Institute of Agriculture Visva-Bharati, Sriniketan.

Principal Supervisor: Dr. B. Duary

COMING EVENTS

18th International Plant Protection Congress, "Mission Possible: Food for All through Adequate Plant Protection"

24 – 27 August 2015,

Venue: Berlin, Germany

Go to <http://www.ippc2015.de> for more details.

13th World Congress on Parasitic Plants,

5-10 July, 2015

Venue: Kunming, Yunnan Province, Southwest China

Details can be found at the conference website

<http://wcpp13.csp.escience.cn/dct/page/65540>.

25th Asian Pacific Weed Science Society Conference

13-16 October 2015

Venue: Hyderabad, India

Details can be found at the conference website

<http://isws.org.in/apwss2015.aspx>

Send Newsletter material to:

Dr. J.S. Mishra

Principal Scientist and Head,

Division of Crop Research

ICAR Research Complex for Eastern Region

Patna 800 014, India

Cell: 08409899897; 09494240904

Email: jsmishra31@gmail.com