

CROP AND WEED SCIENCE NEWS

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Editors' Column

The International meet on "System Intensification towards Food & Environmental Security", aims to take stock of the state of the art of agricultural intensification and to chart the way forward for agricultural research for development in the Humid Tropics, through keynote presentations, oral and poster presentations, and strategic panel discussions. Papers for oral or poster presentation are invited for the eight conference themes:

- Biodiversity; Invasive plants; Seed production systems, GM/Biotech planting materials; Evaluation of cultivars better adapted to climate changes,
- Sustainable use of the natural resources for nutrients, Organic farming, Integrated nutrient management; Bio fertilizers
- iii) Strategies of Water resources in system
- iv) Invasive pests (Weed / Insect / Pathogens / other pests) threat and their environment safe management;
- Methodologies for producing high quality, hygienic and safe products;
- vi) ITK and farmers innovative methodologies in System Intensification;
- vii) Options for income generation through Diversification of Crops/ Value addition;
- viii) Socio-economic, policy and market implications, including Institutional/Corporate NGOs arrangements for livelihood security.

Papers received will present advances with farming system analysis and integration. Studies on system component interactions for different regions are particularly relevant. There are papers on understanding of drivers for adoption, including post-harvest processing for value addition, access to markets and information, management of available resources, appropriate policy, and social capital. Papers are expected to address the effectiveness of novel and participatory research and extension approaches, and tools to learn, monitor and evaluate.

There will be presentations on the climate and environmental changes, local observations and impacts being felt by different regions, and some outlines various adaptation and mitigation strategies that are currently being implemented by scientists and farming communities **under transient climatic regimes** – as they use their traditional knowledge and survival skills to trial adaptive responses to change.

The majority of these are based, in some way, on their existing ecological knowledge, whether they involve modifying existing practices or restructuring their relationships with the environment. Their strategies include application of traditional knowledge; shifting resource bases; altering land use and settlement patterns; blending of traditional knowledge and modern technologies; changes in crop diversification; management of ecosystem services; and policy, planning and strategy development.

The potential of this International Symposium lies in the combination of these current and past discoveries to maximize the usefulness of agricultural crops and intensification models; achieve more from less through the application of technology; and design agricultural plans and strategies to produce sustainable sources towards food security and arrive at valuable recommendations useful both for farming and industrial products.

Useful deliberations in this meet towards better agriculture of the tomorrow will pave success. - Editors

International Symposium cum Workshop on Acarology at BCKV - A Great Success



A 3-day workshop in taxonomic acarology was hosted at Bidhan Chandra Krishi Viswavidyalaya (BCKV), at Kalyani during 8-10 April 2010. It was organised in association with the Acarology Development Foundation (ADF), International Journal of Acarology (IJA), and various other organizations of India. The local hosts were Dr. K. Karmakar, Secretary, Organizing Committee, Senior Acarologist and Officer-in-Charge, All India Network Project on Agricultural Acarology, Directorate of Research at BCKV; Dr. S. K. Gupta, President, Organizing Committee, Retired Acarologist and Emeritus Scientist, Zoological Survey of India (ZSI), Ex-National Coordinator, Acarology Project of Indian Council of Agricultural Research (ICAR) and Principal Investigator, USERS Project, Department of Science and Technology; Prof. S.K. Sanyal, Chief Patron and Vice-Chancellor, BCKV; Dr. Vikram Prasad, Patron and Chief Advisor, Founder of IJA, ADF, India Publishing House and Fowlerville Family Practice Clinic, West Bloomfield, MI, USA; Dr. S.K. Dutta (Deputy Director General, Crop Science, ICAR); Dr. Ramakrishna (Director, ZSI, Kolkata) and Dr. S. Ghai (Former Head, Entomology Division, Indian Agricultural Research Institute, New Delhi), Advisors; Dr. T.P. Rajendran (Assistant Director General, Plant Protection, ICAR) and Dr. A.K. Somchoudhury (Professor and Former Dean Postgraduate Studies, BCKV), Vice-Presidents; and some other members of the Organizing Committee. It was attended by about 120 participants from Bangladesh, Iran, Saudi Arabia, Turkey, USA and many provinces of India.

> The 3rd Biennial Conference and a Workshop on ITK



The 3rd Biennial Conference of the Crop and Weed Science Society (CWSS) and a Workshop on ITK were held on June, 11, 2010 at the Farmers' Training Centre (Lake Hall), Bidhan Chandra Krishi Viswavidyalaya, Kalyani, Nadia, West Bengal. Dr. T.P. Rajendran, ADG (Plant Protection), ICAR; Dr. B.K. Sinhamahapatra, Director, CRIJAF, ICAR ; Prof. G.G. Maity, Professor, University of Kalyani ; Mr. A. Hui, Joint Director (Plant Protection and Quality Control), Govt. of West Bengal; Prof. S.K. Mitra, Officiating Vice-Chancellor, BCKV; Prof. A.B. Ghosh, Dean, F/Ag., Prof. A. Bhattacharya, President, CWSS; Prof. G. Sounda, Secretary, CWSS and several other officials Scientists and delegates from different Research Institutes and Organizations were present on that occasion.

Release of 'Gobindabhog' rice at RKVY Review Workshop

West Bengal has precious wealth of genetic diversity in aromatic rice. Among them, Gobindabhog, a native aromatic landrace of Burdwan, Nadia, Murshidabad, Hooghly and North 24 Parganas districts, is very popular in domestic market for its quality features and much potentiality for International trade. Major characteristic

features of Gobindabhog are: goldenyellow coloured grain, kernel length 3.9 mm, L/B ratio 2.4, short bold kernel, elongation ratio >1.8, alkali spreading value 2.7, amylose 15.4%, protein 6.8% and strong aroma.

In view of its great potentiality and demand in high-value rice market, a multi-institutional research project on "Promotion of Bengal Aromatic Rice through Improved Production and Processing



System" was sanctioned by the Govt. of India via State Level Sanctioning Committee (SLSC) of West Bengal in 2008. In compliance with the implementation plan, group discussion, farmers-scientists interface and training programmes were organized to motivate the farmers for Gobindabhog rice cultivation in Nadia district. About 78 farmers of 6 blocks (viz. Chakdah, Ranaghat I, Ranaghat II, Hanskhali, Santipur and Haringhata) in Nadia district cultivated Gobindabhog rice in about 134 bighas of land during rainy season of 2009. The farmers of different cooperatives, trusts, self help groups, etc. came to the University with their produce and milled the paddy at Paddy Processing Centre, Faculty of Agricultural Engineering, Mohanpur, Nadia for packaging of quality rice.

The Rashtriya Krishi Vikash Yojona (RKVY) Review Workshop was organized at Farmers' Training Centre, Kalyani, Nadia on 27th May, 2010 for evaluation of on-going RKVY Projects at B.C.K.V. At the end of the programme, Dr. Sanjeeb Chopra, Principal Secretary, Department of Agriculture, Govt. of West Bengal and Mr. Giriraj Pati, Additional Secretary, Ministry of Agriculture, Department of Agriculture and Cooperation, Govt. of India, released 'Gobindabhog' rice packets produced by the farmers under technical supervision of the Scientists of B.C.K.V. The Hon'ble Vice Chancellor, the Deans, Directors and other dignitaries appreciated the concept and effort to develop a value-chain system for Gobindabhog rice.



Annual Workshop and National Seminar on AICRP Groundnut



The National Group Meet of groundnut workers was organized during 18-19 November, 2010 at Farmers Training Centre, Kalyani Bidhan Chandra Krishi Viswavidyalaya. The group meet was organized towards the objective of developing strategies and research programmes for the ensuing winter and summer seasons 2010-2011 for groundnut research of the entire country.

The Inaugural session was chaired by Prof. Sisir Kumar Mitra, Dean Post graduate studies, BCKV and the Chief Guest was Sri Narendranath De, Minister-in-Charge, Dept. of Agriculture, Govt. of West Bengal. Sri De reminded the house of the immense potentialities of oilseed in cropping system, especially in West Bengal and called for advanced research for alien gene incorporation to fight heat stress and global warming.

Dr. J. B. Mishra, Director, Directorate of Groundnut Research, ICAR Junagadh discussed on the potentialities and possibilities of groundnut and potato-groundnut sequences. He stressed not only upon the fact that" countries like China etc have helped productivity jump in aroundnut resorting to spring / summer sowing crop but also emphasized upon that the scientists must do something to attend the heat stress problem in India. Dr. V. D. Patil, Additional Director General, ICAR, on Oilseeds &. Pulses talked about possibilities of winter and summer groundnut in erasing the deficit of oilseed production and making the country self sustaining in edible oils and the organizational role of universities and the ICAR to make themselves more receptive to groundnut research and funds thereof. Dr. V. Muralidharan, former Director, Groundnut Research, ICAR and Prof Mitra also expressed optimism in Groundnut and its possibilities in West Bengal, Bihar and Eastern India. Notable scientist Dr. S.N. Nigam,⁵ ICRISAT was also present in the group meet.

The workshop was organized in working group mode and the discussion was confined not only in the domain of Crop Improvement, Crop production and Crop protection but also in the issue of holding the varietal Identification Meetings and achievements of Front line Demonstrations.

26" Annual Workshop on Jute & Allied Fibres

Bidhan Chandra Krishi Viswavidyalaya organised hosting of this prestigious occasion during 5-6 February, 2011. The Inauguration was graced by Prof. Saroj K. Sanyal, Hon'ble Vice Chancellor, BCKV and Prof. Asit. K.Das, Hon'ble Vice Chancellor, UBKV. The Chief Gust for the occasion was Prof. Swapon K. Dutta Hon'ble DDG (CS) ICAR. Dr. B.S. Mahapatra, Director CRIJAF and Dr. K.C. Jain, Ex-ADG (CC) ICAR also provided valuable inputs and guidance. Dr. S.K. Biswas, Director, DOJD ,GOI and Dr. K.K. Sathpati, Director NIRJAFT, ICAR were also present on the occasion.

Prof. S.K. Datta, Hon'ble DDG (Crop Science), ICAR emphasized the need for seed production in West Bengal as only 1% of the required seed is produced in this state. The advent of biotechnology and molecular biology need to be utilized to address the issues like drought and photosensitivity of jute. The works on photo-insensitivity by conventional breeding should also continue. Hon'ble DDG emphasized the need for expanding the area under jute and allied fibres in non-traditional areas. Prof. S.K. Sanyal, Vice-Chancellor, BCKV emphasized the importance of jute farming in the context of carbon trading and study of the organic residues of the crop in all stages of its development. He invited holistic views and approach of biological systems and variations with the underlying factors towards beneficial exploitations. Prof. Sanyal stressed the need for recommendations for seed production and striking linkages with the seed industry. The vice chancellor ended his note expressing pleasure in the CRIJAF extending all possible support and gesture with the coordinated units.

noise to Climate Change with its 示-調multifarious activities beside the people of Sundarban

The BCKV, in March 2010, with the financial assistance from the Rashtriya Krishi Vikas Yojana (RKVY) under National Agricultural Development Programme (NADP), Govt. of India has successfully started a project entitled "Agricultural Research Station on Environment and Climate change and its impact on Crop production" for improving livelihood in rural West Bengal particularly the Sundarban areas. The researchers under this project are sincerely doing their assignments related with the following peripheries at Gosaba, Basanti, Mothurapur, Kakdwip, Rangabelia, Kalyani and Patharpratima :

- Studying the effect of climate change on different components of agro ecosystem like Crop production, Animal Husbandry, Fishery, Forestry, Soil and Water quality and on biodiversity (crop/ fish/animal/microbes) as a whole;
- Estimation of major Green House Gases(GHG) like



CO₂, N₂O,CH₄ emitted from the transplanted paddy fields and taking measures for mitigating the effects of such GHGs on climate change;

Documentation, evaluation and refinement of indigenous technological know-hows (ITKs) and good agricultural practices (GAPs) adopted by local farmers;

 Implementing and linking of identified and proven technologies (ITKs and GAPs) by optimum utilization of local resources to establish sustainable

- production system;
- Evaluating, developing and refining of sustainable and integrated farming systems for the economic progress of the poor and unskilled rural community;
- Greation of effective network for post harvest processing, storage and marketing at the grass root level and thus generation of employment avenues for the rural poor.
- Disaster Risk Management (DRM) and contingent crop planning; and
- Developing climate change awareness among the general people, school children, farmers and extension workers.

Past events

- Prof. R.K. Ghosh, Department of Agronomy, BCKV delivered Key-note address on "Invasive Weeds Threats and Strategies for Tackling in Gangetic Inceptisol of India" in the 2nd International Workshop on "Invasive Alien Plants in Mediterranean Type Regions of the World" organized by the European And Mediterranean Plant Protection Organization (EPPO), Trabzon, Turkey, 02/06-08-2010
- Awareness programme on "Weed management in SRI" was held on 19th February, 2010 at Milan Sangha Ground, Uttar Chandamari, Nadia, organized by the Department of Agronomy, Faculty of Agriculture, Bidhan Chandra Krishi Viswavidyalaya (BCKV), Mohanpur in collaboration with Chandamari Sannidhya Rural Welfare Society (CSRWS), Nadia. Around 50 farmer participants were

present in this Programme.

- Awareness programme on, "Weed management in SRI and Weed utilization in System of Intensification" was held on 21st September, 2010 at G.D. Vidyamandit, Nadia organized by the Department of Agronomy, Faculty of Agriculture, Bidhan Chandra Krishi Viswavidyalaya (BCKV), Mohanpur in collaboration with Chandamari Sannidhya Rural Welfare Society (CSRWS), Nadia. More than 100 farmers and Students of G.D. Vidyamandir were present in this Programme.
- Awareness programme on, "Weed management in SRI and Weed utilization in System of Intensification" was held on 25th September, 2010 at Ganganagar, Fulkalmi, Nadia organized by the Department of Agronomy, Faculty of Agriculture, Bidhan Chandra Krishi Viswavidyalaya (BCKV), Mohanpur in collaboration with Chandamari Sannidhya Rural Welfare Society (CSRWS), Nadia. More than 100 farmer participants were present in this Programme.

Forthcoming Events

- The 23rd Asian-Pacific Weed Science Society Conference (APWSS 2011) on "Weed Management in a Changing World" will be held at the Sebel Cairns, in North Queensland, Australia from 25-30 September 2011. For details please visit www.apwss2011.com
- The 6th International Weed Science Congress will be held at Hangzhou, China on 17-22 June, 2012. For details please visit http://www.iwss.info/
- 9th workshop of the EWRS working group: physical and cultural weed control, Samsun, Turkey 28-30 March 2011 For details please visit http://www.ewrs.org/pwc/

Study Reveals Major Decline in Bumble Bees

The first in-depth national study of wild bees in the U.S. has uncovered major losses in the relative abundance of several bumble bee species and declines in their geographic range since record-keeping began in the late 1800s. The new study appears this week in the Proceedings of the National Academy of Sciences. "We have 50 species of bumble bees in North America. We've studied eight of them and four of these are significantly in trouble," said University of Illinois entomology professor Sydney Cameron, who led the study. The national analysis found that the relative abundances of four of the eight species analyzed have declined by as much as 96 percent and that their surveyed geographic ranges have shrunk by 23 to 87 % Related ATTRA publication: Alternative Pollinators: Native Bees. Source: http://attra.ncat.org/

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