

Rice-Wheat Information Sheet

No. 28

News

Changes

Dhruv Joshy has taken over as the new Executive Director of Nepal Agricultural Research Council. He can be contacted at narc@ed.mos.com.np

Cornell University - SM-CRSP Project

Bangladesh scientists finalise research proposals

Research proposals submitted by teams of Bangladesh scientists were reviewed by both national and international scientific peers and approved for funding starting October 1, 1997. In all 15 proposals were presented and of these 13 were approved for partial or full funding. The research proposals centred around the identified Consortium themes aim at answering some of the pressing questions relating to productivity enhancement and sustainability of Rice-Wheat systems. Following are some of the research areas which the approved proposals will address :

- Legumes in Rice-Wheat systems
- Micro-nutrient enhancement of seeds effects on germination.
- Solarisation effects
- Demonstration of Chinese seed drill / video production
- Direct seeded rice and its effect on wheat production
- Screening lines for best use as dry seeded rice
- Screening for phosphorus efficiency
- Participatory rapid appraisal surveys
- Long-term rice-wheat fertility studies
- Diagnostic fertility trial
- Nematode, pests and rodent surveys

The approved proposals include a component of enhancing facilities like availability of computers to scientists, upgrading of GIS equipment and software. Formulation and funding of the proposals, we believe is a significant step in developing a research thrust to solve rice-wheat problems.

Nepal signs Memorandum of Understanding (MoU)

Nepal Agricultural Research Council has signed an MoU with Cornell University for facilitating the implementation of the SM-CRSP Project components in the country.

Views

Excerpts from the observations of a participant in the training course on Nematode Pests in Rice Wheat Legume Cropping Systems, held at HAU during 1-5 September, 1997

“I would like to place on record my sincere thanks to Consortium for training cum workshop at Hisar and proposed publication. After having attended a number of workshops, training and symposia, I feel that the training cum workshop at Hisar was one of the best managed, where participants utilised every minute fruitfully. The latest information and literature was provided in both formal and informal ways. Staying of majority of resource persons with the participants from morning till evening throughout the period proved very beneficial. Dr. S B Sharma, Course Co-ordinator deserves kudos for the success of the same.

P.K. Sakhuja, Senior Plant Pathologist, Department of Plant Pathology, Punjab Agricultural University, Ludhiana - 141 004, Punjab, India.

Happenings

Video film on “Managing ear Cockle disease of wheat” prepared

In a recently concluded Training Workshop on Nematode Pests in Rice-Wheat Legume cropping systems organised by the Consortium a task force was set up to develop approaches for eradicating the ear cockle nematode. Amongst others the task force included Dr. S K Midda, Project Co-ordinator of the All India Co-ordinated research project on nematodes and Dr. S B Sharma, Senior Nematologists with ICRISAT. Based on the recommendations of this task force, the Indian Council of Agricultural Research has decided to bring out a short video titled ‘Ear Cockle diseases of wheat and its management’ for wider dissemination of technique for control of the disease. The video, which will be ready in next few days, is proposed to be shown on national TV network to help farmers adopt technologies this season. FU will be providing financial support for the production of the video film.

PAU Scientists evaluate Role of Legumes, Green Manure in Rice-Wheat System.

With increasing pressure for producing more food and due to creation of irrigation facilities, many porous soils in Punjab are now used to raise wheat and rice. These soils are more prone to losses of applied N through leaching and consequently could cause ground water contamination due to their high permeability.

PAU scientists team led by Dr. M S Aulakh, collaborating with US scientist Dr. Doran carried out field studies over a 4 year period to understand the behaviour of applied N fertilisers in relation to inclusion of a summer green manure crop. Their studies revealed substantial movement of nitrate N to lower soil depths during rice crop which has a shallow rooting system. However, substantial amount of nitrates was absorbed by succeeding wheat crop which has deep and extensive root system. At the end of 4 year cropping with recommended fertilisation rates, soil profile was enriched by 28 kg NO₃-N ha⁻¹ and nearly 83 percent of these were present in 90 to 150 cms. soil depth. If a green manure crop was included, NO₃ losses increased, but if rice was grown with reduced level of fertiliser N after legume green manure the losses were minimal and nearly 100 percent yield of rice achieved with greatly reduced levels of applied N. These findings suggest that the use of legume green manure without fertiliser N in rice field and inclusion of deep rooted wheat crop in rotation with shallow rooted rice are agronomically feasible, environmentally sound and promising strategies to minimise leaching of nitrate beyond rooting zone in irrigated soils.

Planning ahead

ICAR/NATP Project Interaction Workshops

The Project Interaction Workshops for finalizing the project proposals under the National Agricultural Technology Project (NATP) of ICAR will be held during 3-15 Nov 97 at Punjab Agricultural University, Ludhiana, Punjab, India. More than 40 Principal Investigators (PIs) and Co-PIs will participate in the workshop to refine the projects. Resource persons from CIMMYT, ICRISAT, IRRI, Cornell University, and Michigan State University will assist the participants to develop the programs.

RTCC Meeting

The next meeting of the RTCC is scheduled to be held during **17-18 Dec 97 at Dhaka**. Details to follow soon.

The next RSC meeting is scheduled on **11-12 January, 1998 in Nepal**

Publication

Consortium Paper Series

The first issue under the Consortium Paper Series has been published.

Abrol, I.P., Bronson, K.F., Duxbury, J.M., and Gupta, R.K. (eds.) 1997. Long term soil fertility experiments in rice-wheat cropping systems: proceedings of a Workshop, 15-18 Oct 1996, Surajkund, Haryana, India. New Delhi, India: Rice-Wheat Consortium for the Indo-Gangetic Plains
For copies, please write to the Facilitation Unit.

Others

Sakhuja, P.K., Singh, I., and Chhabra, H.K. 1997. Two decades of Nematology in Punjab. Department of Plant Pathology, Punjab Agricultural University, Ludhiana - 141004.
If you need a copy please write to Dr Sakhuja at the above address.

Food for thought

An expert is one who knows more and more about less and less. - *Nicholas Murray Butler*