

Rice-Wheat Information Sheet

No. 25

News

New Project on Mechanization of Tillage Operations

R K Gupta (National R-W Coordinator, India) informs that the Indian Council of Agricultural Research (ICAR) has initiated a Project titled 'Increasing the productivity of Rice-Wheat cropping system by mechanizing the operations of Tillage and Crop Establishment (TCE)' and have committed US\$ 0.37 million for a period of three years. The detailed technical program for the sites will be developed considering the specific situations at each of the 7 centers in India with the Central Institute for Agricultural Engineering (CIAE), Bhopal as the lead center. This Project would complement the Consortium's regional program on TCE being operated with assistance from the Overseas Development Administration (ODA).

Seed Priming to accelerate germination

We have received a note titled "On-farm seed priming to accelerate germination in rainfed, dry-seeded rice and in wheat" by D. Harris and A. Joshi. According to the authors recent work on improving the establishment of small-grained cereals, including rice in India, under semi-arid conditions suggests that a simple practice such as soaking seed in water prior to sowing ("on-farm seed priming") is very effective in improving crop establishment. They tested 11 contrasting rice varieties for their response to soaking in water for 24 hours at 30°C. After soaking, the seeds were surface-dried with a cloth and then "sown" on moistened filter paper and kept at 30°C. All lines responded positively to priming for 24 hours. The mean time for 50% germination of non-primed seed was 46 hours which was reduced to 32 hours by priming. Preliminary *in vitro* work with a range of varieties of Indian wheat suggests that this should benefit from this simple intervention in the same way as rice. As a rule-of-thumb, late sowing of wheat results in a potential yield loss of 100 kg ha⁻¹ for every day's delay after mid-November, Participatory data from rice-wheat areas in Rupandehi district in Nepal, identify late and poor crop establishment as serious constraints in *rabi* wheat.

If you are interested in testing this technology, please contact Dr. Harris at:

Dr. D. Harris

Centre for Arid Zone Studies

University of Wales

Bangor, Gwynedd, LL57 2UW

United Kingdom

Email : D.Harris@Bangor.ac.uk

Fax : +44-1248-371533

Tel : +44-1248-382922

Changes

Rezaul Karim, an Entomologist by profession, will be the new Rice-Wheat Coordinator for Bangladesh as well as Director (Research) in Bangladesh Rice Research Institute (BRRI). He has been appointed in place of M A Bakr who has since been appointed as Member (Crops) in the Bangladesh Agricultural Research Council (BARC).

S A Prathapar, Research Coordinator of the International Irrigation Management (IIMI) in Pakistan would represent IIMI in all the Consortium activities from now on. We welcome Prathapar to the fold. He can be contacted at:

IIMI, 12 km, Multan Road,

Chowk Thokar Niaz Baig,

Lahore 53700, Pakistan.

E-mail: prathap@iimisap.edunet.sdnpc.undp.org

Happenings

Brain storming session: Potatoes in Rice-Wheat Cropping Systems

A 2-days session was organized by the Central Potato Research Institute (CPRI), Shimla during 21-22 May 97. The meeting was co-sponsored by ICAR, CIP, and the FU. A few ideas from the session: More than 70% of India's potato is grown in the Indo-Gangetic Plains in valley spatial and temporal sequence together with the dominant sequence of rice-wheat system. Since potato can be harvested over a period of time allowing adjustment in planting of subsequent crops, it offers tremendous opportunities for cropping system intensification in the region. However, its inclusion in the system has several ramifications too, which must be addressed and would call for increasing adoption of systems approach in developing suitable intensification strategies. The sessions were attended by about 35 scientists from ICAR, CIP, CPRI. Sarath Ilanganthilake at the CIP Regional Office in New Delhi can provide more details about the session and future plans. He can be contacted at:

*International Potato Center
South & West Asia Regional Office
IARI Campus
New Delhi 110012, India
Tel 91-11-574-8055, 573-1481
E-mail: cip-delhi@cgnet.com*

Consortium sponsors scientists exchange visit

Facilitation Unit and Cornell University (Soil Management CRSP) co-sponsored an exchange visit by a group of 16 scientists in the region to study current farming practices and research efforts. The team including scientists from Bangladesh (4), India (6) and Nepal (4) and the visit was coordinated by Peter Hobbs and Craig Meisner (both CIMMYT) in Nepal and Bangladesh respectively. During the visit lasting 10 days, 6-16 Mar 97) the scientists visited several on-station and on-farm activities in Nepal and Bangladesh. Some observations made by the participants include :

- Surface seeding technique for sowing wheat in specific situations :
- Farmers have shown keen interest in using Chinese seeder (Seed drill) which, according to them, could result in a saving of about Rs.200/- per ha over the convention method involving bullocks. Almost all participants felt that this was a promising machine and should be inducted in the region first for large scale experimentation.
- On station trials to evaluate dual purpose Triticale materials for forage and for grains in Bangladesh
- Results of long-term soil fertility experiments in Nepal has generated valuable information that should be translated into improved strategies for 'on-farm' nutrient.

Few copies of the compiled reports (by the scientists) are available with the Facilitation Unit. Please write to us if you need a copy.

Planning Ahead

NTCC Meetings

The National Technical Coordination Committee Meeting of Bangladesh will be held at the BRRI Campus, Gazipur on 19 Jun 97. The meeting is expected to prioritize the national issues as relevant to rice-wheat cropping systems and the outputs of the meeting would provide the impetus for the RTCC meeting of the Consortium.

The National Technical Coordination Committee Meeting of Nepal will be held NARC Head Quarters in Khumaltar on 23 Jun 97.

RTCC Meeting

The fifth meeting RTCC would be held in Lumle Agricultural Research Center (LARC), Lumle during 25-26 Jun 97. Lumle is about 45 minutes drive from Pokhara - the summer destination spot in Nepal!

All the members have confirmed their participation in the meetings. As advised by the RSC, in its Dhaka meeting, one or two NARS scientists would be making presentations on specific themes during the meeting to highlight the ongoing activities.

Publications

Bibliography on *Phalaris minor*

Dr. Robin Bellinder of the Cornell University has compiled a bibliography on *Phalaris Minor* listing some 60 research papers on the subject. A copy each of the papers and the list are available with Dr. R.K. Malik, Professor (Weed Science), Department of Agronomy, CCS Haryana Agricultural University, Hisar - 125 004, Haryana, India.

Food for thought

Any one can complain, criticize and condemn. Only a few can find a way forward. - Anonymous