

Rice-Wheat Information Sheet

News

Changes

J C Gautam, Executive Director (ED), Nepal Agricultural Research Council has been appointed as Special Secretary in the Ministry of Agriculture, Nepal and RP Sapkota will be the Acting ED.

Zafar Altaf has taken over as Chairman of the Pakistan Agricultural Research Council and he succeeds M Akbar, who has moved as Director General of National Agricultural Research Centre, Pakistan.

Views

Mechanization of Rice Transplanting

Following note was send by M Ashraf, Rice Co-ordinator, National Agricultural Research Centre (NARC), Pakistan:

In Pakistan, rice crop is transplanted manually which is quite labour intensive. Industrialisation of the rice belt has caused severe man power shortage and the consequent effect is increased establishment cost and lower yields due to delayed planting.

At the instance of NARC, a group of rice breeders, agronomists, and engineers was constituted to examine the possibility of mechanisation of rice transplanting. A Chinese Transplanter (2ZT-9350), which is self propelled by 2 HP diesel engine and is relatively cheap, was acquired. In order to adapt the transplanter to the local conditions, the following changes were made:

- Hill spacing was increased from 10x10 cm to 23x18 cm by adding a gear box mounting between the main transmission and the transplanting transmission
- Float was redesigned to stop slurry flow along with machine that buries side rows.
- Four transplanting units were added to increase efficiency (from 8 to 12).

The other main obstacle was the need to simplify the mat type nursery raising techniques as to make it acceptable by the rice farmers. The original technology involved use of perforated plastic trays for training nursery, which is somewhat sophisticated for adoption by the farmers. For this reason, we used plastic films instead of trays. Nursery was raised on the plastic film using a 2.5 cm high metal frame measuring 4.2 x 1.1 m. The frame helped in ensuring uniform thickness of the nursery bed. The cost of the metal frame was only US\$10. Nursery raising and management techniques were standardised and field evaluated on a large scale in Sheikpura area in Punjab during 1996 crop season. Results showed that machine transplanted paddy yielded 43% more in comparison with the traditional planting method and this was due to the optimum plant density achieved through mechanisation. Besides, the machine transplanted paddy matured uniformly, had better grain filling, and less panicle sterility. It is planned to demonstrate and evaluate the technology on a large scale in 1997 for the benefit of farmers, extension staff, and policy makers.

Happenings

RTCC Meeting

The fifth meeting of the RTCC was held in Pokhra during 25-26 Jun 97. The meeting was well represented from the partner institutions. The recommendations of the RTCC and the detailed meeting proceedings will be available shortly.

Training Program on Diagnostic Survey for R-W Cropping Systems

A one-week training program was organised at Modipuram, UP, India on Diagnostic Survey for identifying constraints in Rice-Wheat Cropping Systems in collaboration with ICAR institutions during 23-28 Jun 97. The target group was scientists from various State Agricultural Universities and ICAR institutions. The program was structured to include lectures, field surveys, group discussions, constraint analysis, and case studies. A questionnaire was also developed by the participants for collecting information from the farmers, which is proposed to be used for conducting a diagnostic survey commissioned by ICAR.

Planning Ahead

Training Workshop on Nematode Pests in Rice-Wheat-Legume (R-W-L) System

A training workshop on the subject is planned to be organised at Haryana Agricultural University, Hisar, India during 1-5 Sep 97. About 15 scientists from the partner countries will be attending the training and resource persons will be from ICRISAT, ICAR, and Cornell University. The objectives of the training would be:

- To impart training in newer techniques for nematode diagnosis and management.
- To sensitise the participants to the cropping systems-based approach to nematode IPM.
- To develop a network of nematologists working on R-W-L systems in the Indo-Gangetic Plains.

Visitors

Scientists from Institute of Arable Crops Research (IACR), Rothamstead, UK visit Indian Institutions

David Powelson, Head, Department of Soils and John Gaunt, Senior Scientific Officer, Department of Soils spent several days during July interacting with scientists at the Indian Institute of Soil Sciences (IISS), Bhopal, Indian Agricultural Research Institute (IARI), New Delhi, Haryana Agricultural University (HAU), Hisar, and the Indian Council of Agricultural Research (ICAR), New Delhi.

The objective of their visit was to identify mutual areas of interest in which collaborative programs could be developed for seeking donor funding. IACR has a strong research group with interests in nutrient dynamics, crop residue management, heavy metals, soil pollution, trace gas emission, modelling soil processes, etc. Rice-Wheat Cropping Systems has been identified as a priority area to develop collaborative projects. During their visit, a project on "evaluation of soil functions and nutrient cycles of soil use systems under semi-arid climate at different input levels" was finalised with participation of institutions in Germany, UK, and India (HAU and IISS).

Food for thought

Doing easily what others find difficult is talent; doing what is impossible for talent is genius. - Henri-Frederic Amiel