

RiceMAPP FLASH

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Double Cropping Trial is on-going in collaboration with MIS & IWUA

Double Cropping Trial (DCT) is being conducted by RiceMAPP together with the key stakeholders in MIS namely; Kirinyaga County, MIS, MIAD and IWUA. This started in January 2016 and is being implemented in the three units of M5, M6 and M9. Double cropping, if successfully done, can enable farmers to increase their yields and profits drastically. The system is jointly being implemented by the project and stakeholders because it has not been officially approved as a practice in MIS. The project is simultaneously disseminating WSRC in all the three targeted units aiming to save water not only in individual farms, but also in a wide area. In order to ensure success, Water management and Extension sections of the project, have been coordinating the trial, and have distributed the required materials for WSRC such as wooden levelers, guide ropes, pipe gauges, push weeders and fertilizers to the farmers. On-farm-demos have also been carried out four (4) times in each unit so to enable farmers precisely practice the recommended practice of nursery preparation, line planting and intermittent irrigation. The project continues to support farmers' practice, while collecting data on the amount of irrigation water used will be continuously taken in order to evaluate the amount of water saved by practicing WSRC in the selected units.



WSRC & IRaP Guidelines were made

WSRC & IRaP Guidelines were made by Rice Cultivation section of the project. These were based on the research results obtained from the MIAD field and the issues observed in farmers' plots during the last one year. The contents are simplified for ease of technology dissemination to the farmers. The guidelines will soon be distributed to the key stakeholders and the farmers in MIS.



Several research activities (on-going) in MIAD, to positively improve farmers' practice

Several researches, by Rice Cultivation section, are on-going in MIAD field. Their results are expected to positively improve the farmers' practice. Details are as follows;

1. Evaluation of grain yield and growth period of ratoon of several rice varieties.

Ratoon cropping is officially incorporated in the typical cropping system in MIS. Consequently, technology sharing on Ratoon cropping among the farmers is on the increase. For these reasons, RiceMAPP has been carrying out trials to evaluate the ratoon productivity of different rice varieties such as the commercial variety called Basmati-370, the variety for self-consumption called BW-196 and Arize-Tej of Bayer which is new in the market. The results of the experimentation would be provided to the farmers.

2. Evaluation of the efficiency of Potassium application on ratoon production.

The trial started in 2015 and is in its second season. Initial results have indicated that potassium (K) application makes grain yield much higher than the conventional way. In Mwea, farmers conventionally, apply only Nitrogen (N) for ratoon production. However, through literature review and farmers survey, it has been found that Potassium (K) application can be effective for ratoon production. Consequently, Potassium application had already been introduced to the Core Farmers in 2015 SR season. The picture (1), shows ratoon at harvesting stage (left; N and K application, right; N only).

3. To establish the best combination, timing and the amounts of fertilizers for ratoon production.

Eight (8) related experiments are currently on-going (since 2015 SR ratoon). It is expected that the appropriate fertilization for ratoon production is established.

4. To evaluate the effect to trace elements such as Zn and Cu on plant growth and grain yield of rice.

Soils in Mwea were noted to be having Zinc (Zn) deficiency. For this reason, the experimentation is being done.

5. To evaluate the effect on grain yield and lodging by top dressing at 53 DAT when internode elongation stops.

Although the timing of top dressing which has been known as 45 DAT corresponds with the panicle initiation stage, lodging has been a problem, due to expansion of the lower part of internode at panicle initiation stage. For these reasons, RiceMAPP has been carrying out this trial.

6. To evaluate the effect of different seedling age and spacing on growth and yield of rice.

As part of the key technologies of WSRC, RiceMAPP has been recommending the farmers to transplant 3 weeks old seedlings with a spacing of 30 x 15 cm. Nevertheless, there are many farmers who transplant 5 weeks old seedlings since it is relatively easy to transplant. For the 5 weeks old seedlings, it is considered that transplanting with narrow spacing is effective to secure the percentage of fruitful culms (effective tiller numbers). For these reasons, RiceMAPP has been conducting experimentations to see whether the grain yield depends on the combination of different seedling age (3weeks and 5 weeks) and different spacing (30 x 30 cm, 30 x 15 cm, 15 x 15cm). It is also expected to be clarified if the spacing of 30 x 15 cm for 3 weeks old seedling is the most appropriate or not.

7. To evaluate the Intermittent Irrigation on the efficiency of water saving and grain yield.

Since the Intermittent Irrigation is one of the key technologies of WSRC, RiceMAPP has been carrying out the pot experimentation in order to evaluate the efficiency of water saving and grain yield by following the technology. By the experimentation, it is expected that the amount of water evaporation for both conventional irrigation and intermittent irrigation, and the results can help water saving technology to be established and to be shared to the farmers.



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7.

RiceMAPP organized Educational tour to Western Kenya with IWUA

RiceMAPP took Irrigation Water Users Association (IWUA) unit leaders' for an educational tour to Western Kenya Irrigation schemes. The tour was conducted between 6th – 10th March 2016. A total of 82 participants' (79 men and 3 ladies) including NIB and MIAD staff attended. The objective of the educational tour was for the participants to see, learn share experiences on the field of water resource management, development, protection and farm mechanization. During the tour, Dominion Farms, Ahero Irrigation Scheme and Oluch Kimira were the schemes visited. Also visited was the Kibos KALRO station. A lot of interactions and consultations took place. Participants are now empowered to make action plans and proposals for provision of timely and adequate supply of water of acceptable quality in the scheme.

