Developing the System of Rice Intensification (SRI) in Egypt under normal and saline soils

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SRI started recently in Egypt with some experiments carried out under both normal and saline soils during the last three rice seasons. They were conducted at Sakha research station (normal soil) and El-Sirw research station (saline soil) to develop this new rice system in Egypt. The goal was to reduce the inputs needed for rice cultivation, such as lower seed rates, water, fertilizers, pesticides, and herbicides.

From our screening field tests, we found that the amount of irrigation water applied can be reduced by using this system to 35% compared with conventional method of continuous flooding. The rate of seeds can reduced to 50 kg/ha for the inbred rice and 15 kg/ha for the hybrid rice.

The results showed that grain yield with the new methods was more than 12 ton/ha for the inbred rice and 15 ton/ha for the hybrid rice. Meanwhile, we found that young seedlings less than 15 days were suitable for salt conditions, with spacing of 20x20 cm between hills, and bed planting methods to save more water.

Further, under normal soils, the System of Rice Intensification gave very promising results in terms of rice grain yield and water saving. Egypt has the highest record for rice grain yield/ha worldwide. Many experiments have to be conducted to become more satisfied and to transfer this experiment on the national level, i.e., its dissemination through technology transfer program.

The greatest constraints for increasing rice production with SRI in Egypt are:
- Scarcity of well-trained expertise in this technique
- Lack of possibilities in the field and lab.

Note: