Report on our activities on the SRI system during the past four rice seasons in Iraq (2018-2021)

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1) During four rice seasons (2018-2021), the Ministry of Agriculture included the SRI system in its annual scientific program at the Al-Mishkhab Rice Research Station. The Ministry also gave recognition to Distinguished Rice Farmers who practice SRI rice-growing in Iraqi provinces, producing high-grade rice seed. Use of SRI principles included transplanting seedlings in rows, which contributes to easier management of fields for weeding and for removal of off-type plants by hand. This, in turn, contributed to producing high purity of rice seeds, which reached nearly 100% in the trials. Due to the addition of natural fertilizer, rice plants had less need for water, and this contributed to more filled grains at maturity stage.











2) In the 2021 rice season, Sura Riyadh Hussein, a PhD student from the Al-Qasim Green University, through cooperation between its College of Agriculture and the Ministry of Higher Education and Scientific Research, conducted her experiments on SRI using different fertilizer combinations with wide spacing between seedlings, one seedling per hill, and use of organic manures with two rice varieties. Now her experiment is at the panicle-initiation stage. We hope for success in this mission with positive results.

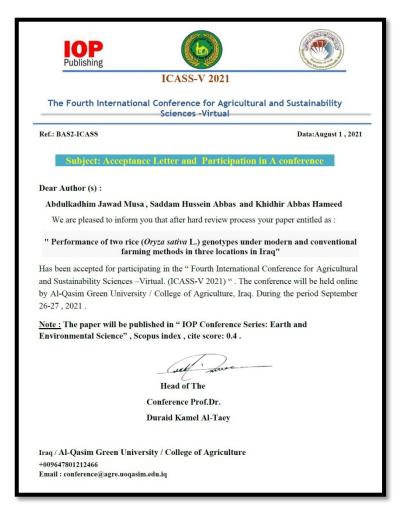








3. A paper entitled "Performance of two rice (*Oryza sativa* L.) genotypes under modern and conventional farming methods in three locations in Iraq" by Abdulkadhim Jawad Musa, Saddam Hussein Abbas, and Khidhir Abbas Hameed was accepted for presentation in the 4th Virtual International Conference for Agricultural and Sustainability Sciences. The conference was held online by Al-Qasim Green University's College of Agriculture in Iraq, on 26-27 September 2021.









4. During participation in the annual meeting at the Central and West Asia Rice Center (CWA-Rice), I suggested including System of Rice Intensification (SRI) in the scientific activities of all Center country-members due to the positive results seen in Iraq and abroad. The head of CWA-Rice welcomed the idea of sustainable rice cultivation, but the Covid-19 pandemic meant that this had to start with a virtual training course on Sustainable Rice Production. My opening lecture to launch the course was entitled "System of Rice Intensification." This training course was organized by CWA-Rice for rice researchers in all the member countries: Iraq, Iran, Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Turkey, Turkmenistan, Uzbekistan, and Tajikistan.

At the start of the 2021 rice season, the head of CWA-Rice Center decided to implement the SRI system with a unified experiment in three member-countries: Iraq, Turkey, and Azerbaijan. Three kinds of organic manure (cow, poultry, and sheep) were compared with no-fertilizer trials, using three rice varieties to determine which variety gave the highest yield when combined with which kind of organic manure, taking into account the soils of these countries. Based on the results, the Center will make recommendations to implement new methods in farmers' fields. The cultivation is done with SRI principles: one seedling per hill, wide spacing between seedlings, early transplanting, using interval irrigation (alternate wetting and drying), and removing weeds by hand or mechanically.







