

POTENTIAL APPLICATION OF WATER-SAVING IRRIGATION IN RICE CULTIVATION ON LARGE AREAS IN HAU GIANG PROVINCE

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Summary

This study was carried out to investigate the potential of applying water-saving irrigation on the growth and yield of rice grown on alluvial soil with no sediment deposit in Chau Thanh A district and on slight salinity-affected soil in Long My district, Hau Giang province. This aims to recommend applying this method on large areas so as to adapt to drought and salinity intrusion in dry season and to save water pumping cost in rice cultivation. The trials were set-up on large scales of 1,000 square meters per each trial, consisting of two trials: water-saving irrigation and permanent submerging irrigation as farmer's practice. There were two consecutive rice crops during the dry season and early wet season. In each district, the trials were established in two communes with three adjacent farms in each commune. The parameters monitored include rice plant height, number of effective tillers at the critical stages of rice growth. At the harvest, rice yields and yield components were recorded. The results showed that water-saving irrigation could be applied on alluvial soil in Chau Thanh A district in both cropping seasons. As for slight salinity-affected soil in Long My district, water-saving irrigation could be applied in the winter spring crop (in dry season). This technique helps save water in irrigation, while maintaining rice yield.

Keywords: *Alluvial soil with no sediment deposit, salinity-affected soil, rice yield, water-saving irrigation.*