Water- and Energy-saving Rice Irrigation Practices in Mississippi

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Abstract

A brief overview of rice irrigation practices used in the mid-south will be presented. Emphasis will be placed on multiple-inlet rice irrigation. First developed in Arkansas in the early 1990's, multiple-inlet rice irrigation (MIRI) uses plastic tubing to simultaneously distribute irrigation to all the rice paddies of a field. Use of MIRI allows an even, shallow flood to be quickly established across a field, reducing the potential for nitrogen volatilization losses and providing the farmer with improved control of the flood. Water savings of up to 50% relative to conventional levee-gate irrigation systems may be obtained, depending on field situation and the farmer's management style. This presentation will discuss MIRI "best practices" developed over the past 20 years. Educational resources available to farmers and case studies where MIRI has been adapted to South American rice field conditions will also be presented.

Keywords: irrigation surface, rice, plastic tubing, irrigation management