

# Aerobic Rice Cultivation on Adoption of Water Saving Technologies During Summer Season Under Conservation Agriculture

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## Abstract

A field investigation entitled, “Studies on growth and yield of aerobic rice in summer season under various moisture regimes and planting techniques in upland condition” was carried out at Regional Research Station, Gayeshpur, Nadia, West Bengal of Bidhan Chandra Krishi Viswavidyalaya. The field experiment was laid out in a split plot design with three replications. The treatment consisted of three irrigation regimes in main plots *viz.*, IW/CPE = 1.0, IW/CPE = 1.5 and IW/CPE = 2.0 and four treatments on planting techniques in sub plots *viz.*, P<sub>1</sub>: Sprouted seeds, P<sub>2</sub>: Non-sprouted seed, P<sub>3</sub>: Soaking seeds overnight (12 hrs), P<sub>4</sub>: Soaking seeds overnight (12 hrs) followed by shade drying. Pooled data revealed that scheduling of irrigation at IW/CPE = 2.0 registered significantly maximum growth attributes in plant height (86.05 cm), tiller number (369.79 m<sup>-2</sup>), leaf area index (3.26), dry matter accumulation (522.28 g m<sup>-2</sup>), crop growth rate (8.22 g m<sup>-2</sup>d<sup>-1</sup>) whereas minimum was recorded when irrigation scheduling was done at IW/CPE=1.0. Root characters *viz.*, root length (24.00 cm), root volume (12.72 cc hill<sup>-1</sup>) and root weight (121.95 g m<sup>-2</sup>) also registered maximum when irrigation was scheduled at IW/CPE = 2.0 and recorded minimum in the treatment where irrigation was provided at IW/CPE = 1.0. The yield attributes panicle length (21.29 cm), filled grains