

EFFECT OF SUBMERGENCE STRESS ON THE MORPHO- PHYSIOLOGICAL ATTRIBUTES AND YIELD OF HYBRID RICE

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Extended Summary

Two screenings experiments were carried out in the earthen submergence tank at *Aman* season, 2010 and 2011, respectively. Thirty five hybrid rice varieties with check, RF13A (tolerant) and BRRI dhan5 (susceptible) were used in these experiments. Simultaneously, a pot experiment was conducted to evaluate the yield performance under submergence in *Aman* season, 2011. The objective of the study was to investigate the physiological basis of submergence tolerance and find out the submergence tolerant commercial hybrid rice varieties available in Bangladesh. Results reveal that higher dry matter content at seedling stage, slow growth at submergence and lower chlorophyll degradation were the indicators of submergence tolerance ability. Among the tested hybrid rice varieties, Heera2, Moyna and BRRI hybrid dhan2 were somewhat tolerant to submergence at vegetative stages as like as our local and modern check varieties (FR 13A).



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