

Effect of Time of Tiller Separation on Grain Growth and Seed Yield of Transplant Aman Rice

ABSTRACT

An experiment was carried out to study the effect of time of tiller separation on grain growth and yield of transplant aman rice. The experiment consisted of 3 times of tiller separation viz. tiller separation at 25 (T1), 35 (T2) and 45 (T3) days after transplanting (DAT); and 5 levels of number of tillers kept hill⁻¹ viz. intact hills (K0), 1 tiller kept hill⁻¹ (K1), 2 tillers kept hill⁻¹ (K2), 3 tillers kept hill⁻¹ (K3) and 4 tillers kept hill⁻¹ (K4). The experiment was conducted in randomized complete block design with three replications. The unit plot size was 4 m 2.5 m. With a few exceptions, the highest grain growth parameters like number of panicles hill⁻¹, dry weight panicle⁻¹, number of grains panicle⁻¹, dry weight grain⁻¹ and grain growth rate were observed when tillers were separated at 25 DAT but the lowest values were found at 45 DAT. The grain growth rate decreased with the advance of time. The highest grain yield (5.25 t ha⁻¹) was obtained from tillers separated at 25 days after transplanting (DAT) but the lowest values (4.13 t ha⁻¹) were recorded when tillers were separated at 45 DAT. The maximum grain yield (5.88 t ha⁻¹) was found in intact hills, while the lowest values (2.64 t ha⁻¹) were obtained when 1 tiller kept hill⁻¹.