

Dry matter partitioning and yield of machine-transplanted rice (*Oryza sativa* L.) as influenced by age and number of seedlings

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ABSTRACT : Field experiment on was conducted at Agricultural Research Station, Gangavathi, University of Agricultural Sciences, Raichur, Karnataka during *kharif*, 2012 and 2013 in clay soil. Pooled mean of two years indicated that, planting of twenty five days old seedlings recorded significantly higher dry matter production at harvest in leaves (14.17 g/plant), stem (27.38 g/plant), panicle (38.95 g/plant) and total dry matter production at harvest (80.10 g/plant), grain and straw yield (5101 and 6335 kg/ha, respectively), gross and net returns (Rs. 91,141 and 45,178/ha, respectively), and benefit cost ratio of 2.01. Similarly among the number of seedlings/hill, planting of three to four seedling/hill recorded significantly higher dry matter production at harvest in leaves (14.62 g/plant), stem (29.59 g/plant), panicle (41.35 g/plant) and total dry matter production at harvest (85.55 g/plant), grain and straw yield (5330 and 6585 kg/ha, respectively), gross and net returns (Rs. 95,190 and 49,165/ha, respectively) and benefit cost ratio 2.10.

Key Words: Age and number of seedlings per hill, dry matter partitioning, machine transplanting, gross returns and net returns.