On Farm Evaluation of Mechanical Transplanting of Rice (Oryza sativa L) Against Traditional Method

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ABSTRACT

An on-farm trail was conducted in Krishna Western Delta of Guntur district in Andhra Pradesh during Kharif, 2009-10 to evaluate the performance of machine in reducing the manual labour for raising of nursery and transplanting of rice and the effect on crop growth and yield. A 50 per cent reduction in labour required for raising of nursery and transplanting was recorded in machine planting against manual planting. A 13 per cent increase in grain yield (7989 Kg/ha) and 22 per cent increase in straw yield (9167 kg/ha) was observed in machine planting than in manual planting, 7059 kg/ha and 7500 kg/ha respectively. The higher grain and straw yield in machine planting was due to increase in no. of hills, no. of effective tillers and total no.of tillers. The cost of cultivation was Rs.1250/ha less in machine planting. Due to increased grain and straw yield and decreased cost of cultivation, a higher cost benefit ratio of 1:2.47 was recorded in machine planting as against 1:2.11 in manual planting.

Key words : Machine planting, Rice.