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RESEARCH ARTICLE :

Different methods of transplanting and irrigation management practices on water use studies on summer rice

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SUMMARY : Field experiment was conducted at wetland farm, Agriculture College and Research Institute, Coimbatore during summer season 2016 to assess the water production parameters and yield of rice under different methods of transplanting and irrigation management practices. The experiment was laid out in strip plot design with replicated thrice. The treatments comprised of four different method of transplanting *viz*., machine transplanting with 30 cm x 14 cm, 30 cm x 18 cm, SRI transplanting (25 cm x 25 cm) and conventional transplanting (20 cm x 10 cm), respectively in main plots and four method of irrigation management practices in sub plots *viz.*, continuous submergence of 5 cm, cyclic irrigation management, SRI irrigation management and Field water tube irrigation management. It was found that SRI transplanting registered lower consumption of water with less number of irrigation, higher water use efficiency and water productivity. At the same time, field water tube with intermittent irrigation reduced the total consumption with lesser number of irrigation. This method of irrigation also increased the water use efficiency and water productivity of rice. Machine transplanting (30 cm x 14 cm) and SRI method of irrigation practice had a profound influence on the grain and straw yield of rice.

KEY WORDS :
Field water tube, Machine transplanting, SRI irrigation, Water productivity, Water use efficiency

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