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Production Potential of Soybean Based Cropping Sequence under Resource Conservation Technologies

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Abstract: The field investigation was undertaken during *kharif* and *rabi* season of 2014-15 and 2015-16 at VNMKV, Parbhani to study effect of tillage and nutrient levels on soybean based cropping sequence. Treatment consists of twelve treatment combinations comprising two tillage practices (minimum tillage, conventional tillage) and two cropping systems (soybean-*rabi* sorghum, soybean-wheat) in main plot, three levels of nutrients (75, 100 and 125 per cent RDF) in sub plot for soybean in *kharif* and after that for *rabi* sorghum and wheat in *rabi* season were assigned in a split-split plot design. Practice of conventional tillage with 125 RDF applications to soybean, *rabi* sorghum and wheat improved the yields, soybean equivalent yield, production efficiency of soybean based cropping system while land use efficiency was higher in soybean-*rabi* sorghum cropping systems.

Keywords: Conventional tillage, Minimum tillage, Nutrient levels, Rabi sorghum, Soybean, Wheat