



**RESEARCH ARTICLE :**

## Effect of raised bed, zero and conventional till system on performance of soybean crop in vertisol

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**SUMMARY :** The study was conducted to evaluate the performance of raised bed planter, zero till seed cum fertilizer drill and seed cum fertilizer drill systems for the sowing of soybean crop in vertisol. The experiment was conducted at J.N.K.V.V., Research Farm, Jabalpur, India. Randomized Block Design was used for conducting the experiments. It was found that the total time and cost required for making raised bed and sowing operations by the raised bed planter was 1.85 h/ha and Rs. 395.8/ha, which was 4.60% less than conventional (seed cum fertilizer drill) but it was 74.80% more time than zero till seed cum fertilizer drill. The average yield with the raised bed planter was obtained 31.37 q/ha, whereas, with seed cum fertilizer drill and zero till seed cum fertilizer drill it was 21.35 and 19.31 q/ha, respectively. The soil conditions were found to be better for raised bed planter.

**KEY WORDS :**

Bulk density, Biometrics, Tillage, Raised bed planter, Field capacity, Field efficiency, Zero till drill, Vertisol

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