## YIELD ATTRIBUTING CHARACTERS AND YIELD OF SAFFLOWER UNDER RICE BASED CROPPING SYSTEM

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Received-06.02.2015, Revised-04.03.2015

**Abstract :** A field experiment was conducted during 2013 at Indira Gandhi Krishi Vishwavidyalaya, Raipur under *Alfisol* soil. Three tillage practices, zero tillage  $(T_1)$ , minimum tillage  $(T_2)$  and conventional tillage  $(T_3)$  in main plot along with six irrigation and mulching treatments, no irrigation  $(I_1)$ , no irrigation + mulch  $(I_2)$ , irrigation at critical growth stage (branching + flowering) ( $I_3$ ), irrigation at critical growth stage (branching + flowering) + mulch  $(I_4)$ , two irrigation at 30 days interval  $(I_5)$  and two irrigation at 30 days interval + mulch  $(I_6)$  in sub-plot were used. Maximum yield attributing characters and yield was obtained under conventional tillage  $(T_3)$  as compared to minimum tillage  $(T_2)$  and zero tillage  $(T_1)$ . The irrigation at critical growth stage (branching + flowering) + mulch  $(I_4)$  treatment was found to be the best with 1670 kg ha<sup>-1</sup> and 1756 kg ha<sup>-1</sup> seed yield and stover yield followed by irrigation at critical growth stage (branching and flowering)  $(I_3)$  and two irrigation at 30 days interval + mulch (rice straw)  $(I_6)$ . The mulching treatments gave higher yields as compared to non-mulch treatments.

Keywords: Economics, Productivity, Yield, Safflower

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