## EFFECT OF LAND LAYOUT AND IRRIGATION METHODS ON THE ECONOMICALLY IMPORTANT TRAITS OF SAFFLOWER (CARTHAMUS TINCTORIUS L.)

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**Abstract:** Among land layout  $L_1$ -Ridges and furrow method at 60 cm x15 cm recorded plant height was found significant at all growth stages. At 30 days, ridges and furrow land layout recorded highest plant height (15.96 cm), which was significantly superior over other land layout. Similar trends were observed at 45, 60, 75, 90, 105 days and at harvest. The significant effect of Ridges and furrow land layout recorded highest test weight (45.91 gram) than other land layouts. It was followed by skip row furrow method of safflower was significantly more due to 60 mm irrigation depth (46.66) then 50 (43.83) and (40 mm 42.08). The interaction effect of land layout and depth of irrigation on 1000 seed weight was found to be non-significant. Ridges and furrow land layout recorded highest seed yield kg/ ha (1579 kg) than other land layouts. It was followed by skip row furrow Method (1430 kg/ha). Ridges and furrow method of land layout produced highest oil (28.3%) over other land layout. Irrigation depth at 60 mm recorded higher oil % (28.5 %) to be significantly over 50 mm and 40 mm. The interaction effect of land layout and depth of irrigation on – significant.

Keywords: Safflower, seed yield, seeds weight, oil % and irrigation method

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