

# EFFECT OF LAND CONFIGURATIONS AND MULCHES ON GROWTH, YIELD AND SOIL MOISTURE CONSERVATION IN KHARIF SORGHUM [*SORGHUM BICOLOR* (L.) MOENCH]

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**Abstract :** A field experiment during *Kharif* season 2008-09 at College of Agriculture All India Coordinated Sorghum Improvement Project, College of Agriculture, Indore on medium black soil. A total of 15 treatment combinations consisted with three land configuration systems i.e. flat system, ridge and furrow system and flat system followed by earthing at 30 DAS and five treatments of mulches i.e. No mulch, wheat straw, FYM, green weed biomass and glyricidia leaves, replicated 3 times, were arranged in split plot design. Among land configuration systems, ridge and furrow system showed promising effect on growth parameters, yields, returns, B: C ratio and soil moisture conservation, followed by flat system earthing at 30 DAS over flat system. Among the mulches, application of glyricidia leaves followed by green weed biomass @ 6 t/ha applied at 35 DAS was significantly increased the growth, yields, returns, B:C ratio and soil moisture conservation.

**Keywords:** Mulches, Land configuration systems, Sorghum

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