



## RESEARCH PAPER

# Effect of surface soil removal and organic amendment on yield of sesame (*Sesamum indicum* L.)

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**Abstract :** An experiment was conducted to study the effect of surface soil removal and organic amendment on sesame (*Sesamum indicum* L.) during *Kharif* 2018 in the experimental field of Soil and Water Conservation department, School of Agricultural Sciences and Rural Development, Nagaland University, Medziphema campus. A split plot with three replications was designed. Surface soil removal of 0, 5 and 10 cm designated as  $D_0$ ,  $D_1$  and  $D_2$  were carried out, respectively. The addition of different organic amendments was adopted *viz.*,  $O_0$ - control,  $O_1$ - vermicompost @ 3 tonnes  $ha^{-1}$ ,  $O_2$ - poultry litter @ 3 tonnes  $ha^{-1}$  and  $O_3$ - pig manure @ 3 tonnes  $ha^{-1}$ . Seed yield was found to be significantly higher under  $D_0$  (0.414 t  $ha^{-1}$ ) whereas,  $D_2$  recorded the lowest yield (0.380 t  $ha^{-1}$ ). Application of poultry manure as amendment gave significantly high seed yield (0.431 t  $ha^{-1}$ ) and lowest yield was reported in  $O_0$  (0.356 t  $ha^{-1}$ ). The interaction between surface soil removal and organic amendment showed the highest yield with  $D_0O_2$  (0.44 t  $ha^{-1}$ ) and lowest with  $D_2O_0$  (0.34 t  $ha^{-1}$ ). Hence, application of organic amendments in areas where surface soil removal was done helped to improve the growth and yield of sesame.

**Key Words :** Sesame, Surface soil removal, Organic amendments

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