



## RESEARCH PAPER

# Effect of organic manure and bio-fertilizer on growth and yield of yellow mustard (*Sinapis alba* L.)

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**Abstract :** A field experiment was conducted during *Rabi* 2021 at Crop Research Farm, Department of Agronomy, SHUATS, Prayagraj (U.P). The soil of experimental plot was sandy loam in texture, nearly neutral in soil reaction (pH 7.1), low in organic carbon (0.36 %), available N (171.48 kg/ha), available P (15.2 kg/ha) and available K (232.5 kg/ha). The experiment was laid out in Randomized Block Design with nine treatments each replicated thrice on the basis of one year experimentation. It was consisting of combination of three level of biofertilizer VAM, *Azotobacter*, *Azospirillum* 10ml/kg seed each and used organic manure FYM 5.0t/ha, Vermicompost and Neem cake 1.0t/ha each. The results showed that application of Vermicompost 1.0 t/ha + *Azospirillum* 10ml/kg seed was recorded significantly higher plant height (97.37 cm), No. of branches/plant (12.62), plant dry weight (18.41 g/plant), siliquae/plant (159.32), seeds/siliquae (40.57), days to maturity (88.95), test weight (3.14 g), seed yield (1.71 t/ha) and oil content (42.38 %) as compared to other treatments.

**Key Words :** FYM, *Neem* cake, Vermicompost, VAM, *Azospirillum*, *Azotobacter*

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