



## Physico-chemical Properties of Soil Affected by Different Sources of Nutrients

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**Abstract:** The effect of different sources of nutrients on physico-chemical soil properties in sorghum sudan grass hybrid-oat cropping system was observed from *Kharif* 2017 to *Rabi* 2018-19. The soil pH remained on the acidic spectrum with application of FYM @10 t ha<sup>-1</sup>+ *Azotobacter* + PSB and 100 per cent of recommended fertilizer. Bulk density was not significantly influenced by FYM and biofertilizers and fertilizers application. An increase in soil organic carbon, biomass carbon and available NPK was observed with the application of FYM @10 t ha<sup>-1</sup>+*Azotobacter* + PSB and 100 per cent recommended fertilizer over the initial status. Combined application of FYM @10 t ha<sup>-1</sup>and *Azotobacter* + PSB while remaining at par with FYM @10 t ha<sup>-1</sup>registered significantly higher available NPK content of soil than *Azotobacter* + PSB. Application of 100 per cent of recommended fertilizer had significantly higher available NPK content than control *i.e.* no fertilizer.

**Keywords:** FYM and biofertilizers, Fertilizer levels, Sorghum sudan grass hybrid-oat

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