

## EFFECT OF DIFFERENT LEVELS OF PHOSPHORUS THROUGH VARYING SOURCES ON PRODUCTIVITY AND OIL CONTENT OF MUSTARD

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**Abstract:** A field experiment was conducted to study the impact of different levels and sources of P application on performance of mustard under pearl millet-mustard cropping system at Research farm, Soil Science, CCS HAU, Hisar. The experiment was laid out in randomized block design with three replications, consisting of eleven treatments. The results showed that among the different treatments, seed and stover yield of mustard varied between 15.37 to 23.16 and 65.70 to 85.82 q ha<sup>-1</sup>, respectively. Application of 20 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> through SSP led higher seed and stover yield as compared to P application through DAP or RP. Application of half of recommended dose of P through chemical fertilizers along with FYM showed lower seed and stover yield of mustard as compared to application of recommended dose of P via chemical fertilizers. However, the plots receiving P via RP in combination with FYM showed accrual in seed yield of mustard over sole application of RP. The oil content in seed samples of mustard varied between 38.70 to 39.30 % under the different treatments, however, effect of various sources of P on oil content in mustard seed was found non-significant.

**Keywords:** Indian mustard, Phosphorus, FYM, Rock phosphate, Seed, Stover, Oil content

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