

## **PHOSPHATE AVAILABILITY IN ALLUVIAL SOILS AS AFFECTED BY SULPHUR APPLICATION WITH PEA (*PISUM SATIVUM* L.) AS A TEST CROP**

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**ABSTRACT:** A field study was conducted in alluvial soil of the University Farm of SHIATS, Allahabad to find out the effect of phosphate (0, 60 and 90 kg/ha) and sulphur (0, 20 and 30 kg/ha) in the surface (0-15 cm) and sub-soil (15-30 cm) depth along with rhizobium. The effect of phosphate and sulphur were found effective in increasing the availability of P at higher doses ( $P_1 \times S_2 = 31.33$  kg/ha) in comparison to  $P_0$  and  $P_2$  level of P. The amount of P was found greater in the surface soil in comparison to sub-soil. This might be due to low mobility of P to lower depths of soil hence less availability.

**Key Words:** Rhizobium, surface, sub-soil, P availability mobility.