

Effect of S and K Carriers on Yield, Quality and Nutrient Uptake by Mustard

Arvind Kumar

Dept of Botany

S.M.P Govt. Girls P.G. College Meerut

arvindkm031@gmail.com

Abstract: A field experiment was conducted on medium black calcareous soil (Typic Ustochrepts) for studying the response of mustard (*Brassica juncea* L.) (Cv. Varuna) to different carriers of S (applied @30 kg S ha⁻¹) and K (@75 kg K₂O ha⁻¹) along with FYM (@25t ha⁻¹). The results revealed that significantly maximum grain yield (1102 kg ha⁻¹) was noted along with N₅₀P₅₀ FYM (1084 kg ha) and KCl (1073 kg ha⁻¹) as source of K and were found at par with each other, but significantly superior to SSP and control treatment. Of course, gypsum and elemental S also found superior to control. The stover yield also increased significantly with NP, NPS and K additions. The availability of P, K and S in soil after harvest of the crop increased significantly with all the treatments, whereas organic carbon content increased significantly with FYM only. The S content in grain and stover increased significantly with different treatments. Significantly the highest total uptake of P, K and S was noticed with K₂SO₄ only

Keywords: S Carriers, K Carriers, Mustard Yield, Nutrient Uptake, Nutrient Availability).