



RESEARCH PAPER

Study of sulphur and phosphorus application on physical characteristics of groundnut (*Arachis hypogaea* L.) for sustainable oil seed production in Indo-Gangetic Plains of Eastern Uttar Pradesh

Mamta Pandey and A.C. Pandey*
R.B. (P.G.) College, Agra (U.P.) India

Abstract : The present experiment was conducted at N.D.U.A. and T., Kumarganj, Faizabad with the objective of, to study the impact of sulphur and phosphorus application on oil content of groundnut (*Arachis hypogaea* L.) for sustainable oil seed production in the Indo-Gangetic Plains of Eastern Uttar Pradesh. Biochemical analysis was carried out in the departmental laboratory as well as of biochemistry department and C.D.R.I. Lucknow. The experiment was laid out in Factorial Randomized Block Design having sixteen treatment combinations of sulphur and phosphorus levels (0, 20, 30, 40 S/ha and 0, 30, 40, 50 (P₂O₅/ha). Phosphorus dose @ 50kg/ha was found more effective. Similarly, highest dose of sulphur gave best response. Yield and yield contributing characters *i.e.* number of pods/plant, test weight (g), pod yield (q/ha) was affected by various levels of both fertilizers. Sulphur levels affect the oil and oil quality of groundnut.

Key Words : Groundnut, Sulphur, Phosphorus, Physical characteristics

View Point Article : Pandey, Mamta and Pandey, A.C. (2019). Study of sulphur and phosphorus application on physical characteristics of groundnut (*Arachis hypogaea* L.) for sustainable oil seed production in Indo-Gangetic Plains of Eastern Uttar Pradesh. *Internat. J. agric. Sci.*, 15 (1) : 25-31, DOI:10.15740/HAS/IJAS/15.1/25-31. Copyright@2019: Hind Agri-Horticultural Society.

Article History : Received : 05.06.2018; Revised : 17.11.2018; Accepted : 23.11.2018

* **Author for correspondence:**

Directorate of Extension Education, Birsa Agricultural University, Ranchi (Jharkhand) India (Email: acpandey10@hotmail.com)