

## EFFECT OF NITROGEN (N) AND SULPHUR (S) ON THE GROWTH AND YIELD OF MUSTARD

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**Abstract:** An experiment was conducted in the experimental field of SAGE University, Indore, Madhya Pradesh during the period from 2019-2020 to “Effect of Nitrogen and Sulphur on Growth and Yield of Mustard at Institute of Agriculture Sciences, SAGE University, Indore (M.P.) nutrient content and their uptake by mustard plants. The experiment consisted of two factors. Factor A: Nitrogen (4 levels) i.e. 0 kg N ha<sup>-1</sup> (N<sub>0</sub>), 40 kg N ha<sup>-1</sup> (N<sub>1</sub>), 80 kg N ha<sup>-1</sup> (N<sub>2</sub>) and 120 kg N ha<sup>-1</sup> (N<sub>3</sub>); Factor B: Sulphur (4 levels) i.e. 0 kg S ha<sup>-1</sup> (S<sub>0</sub>), 8 kg S ha<sup>-1</sup> (S<sub>1</sub>), 16 kg S ha<sup>-1</sup> (S<sub>2</sub>), 24 kg S ha<sup>-1</sup> (S<sub>3</sub>) On indian Hybrid Mustard NRCHB-101 is mustard (*Brassica juncea* L. Czern & Coss) There were 16 treatments combinations. The experiment was laid out in the two factors Randomized Complete Block Design (RCBD) with three replications. After emergence of mustard seedlings, various intercultural operations were accomplished for better growth. Data were collected in respect of the plant growth characters and content and uptake by seed, stover, plant and available nutrients in soil for different levels of nitrogen and sulphur. The yield attributes like no. of siliqua per plant, No. of seed per plant, test weight of seed, and as well as stover yield significantly increased with the application of 120 kg Nitrogen ha<sup>-1</sup> and 24 kg Sulphur ha<sup>-1</sup>. The interaction effects of nitrogen and Sulphur (N<sub>2</sub>S<sub>3</sub>) gave the best results. For application of nitrogen 120 kg N ha<sup>-1</sup> and Sulphur 24 kg S ha<sup>-1</sup> gave the best result showed is most effective combination in respect on Growth and Yield of mustard.

**Keywords:** Nitrogen, Sulphur, Nutrient content, Yield, Oil content

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