## Response of phosphorus and sulphur on forage yield and quality of berseem (Trifolium alexandrinum)

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ABSTRACT: A field experiment was conducted during Rabi 2008-09 and 2009-10 at Instructional farm of Krishi Vigyan Kendra, Post Graduate College, Ghazipur using Wardan variety of berseem as test crop. The experiment was laid out in randomized block design with four replication. There were twelve (12) treatment combinations consists of three phosphorus levels (60,80 and 100 kg/ha) and four levels of sulphur (0, 20, 40, 60 kg S/ha). The crop was fertilized with a common dose of 25 kg nitrogen/ha along with phosphorus and sulphur as per treatments. Urea, single super phosphate and gypsum. All the growth characters along forage yield were markedly influenced with the increasing levels of phosphorus application up to 100 kg P<sub>2</sub>O<sub>5</sub>/ha however, the differences between 100 kg and 80 kg P<sub>2</sub>O<sub>5</sub>/ha were statistically at par. Growth character and forage yield were also increased with increasing levels of sulphur up to 40 kg/ha. The nutritional uptake and quality of forage were also significantly improved with increasing levels of phosphorus up to 80 kg P<sub>2</sub>O<sub>5</sub>/ha and sulphur up to 40 kg/ha. Research studies have indicated positive response of sulphur fertilization on oat.

Key Words: Berseem (Trifolium alexandrinum), phosphorus, sulphur, growth characters and yield attributes.