

Research Article

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# Effect of phosphorus, sulphur and biofertilizer on productivity and soil fertility after harvest of moongbean grown on light textured soil of Kachchh

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**Summary**

A field experiment consisted of 24 treatment combinations of three levels of phosphorus (0, 20, 40 kg ha<sup>-1</sup>) and three levels of sulphur (0, 20, 40 kg ha<sup>-1</sup>) and two level of biofertilizer in form of *Rhizobium* inoculation (inoculated and uninoculated) was conducted with four consecutive years from 2007-08 to 2010-11 were tested with three replications effect of under factorial Randomized Block Design at Bhachau-Kachchh to study the effect of P, S and *Rhizobium* on productivity and fertility of soil after harvest of moongbean. The soil of the experiment field was sand loamy with alkaline in reaction, low in nitrogen, sulphur and zinc, medium in phosphorus and potassium. Application of 40 kg P ha<sup>-1</sup> and 40 kg S ha<sup>-1</sup> along with *Rhizobium* inoculation significantly increased the productivity of moongbean and improved the nutrient availability of soil at harvest of crop over the control. Maximum economic benefits of gross realization, net realization along with highest BCR of 6.73:1 under the treatment combination P<sub>2</sub>S<sub>2</sub>R<sub>1</sub>.

**Key words :** Moongbean, Phosphorus, Sulphur, *Rhizobium*, Yield, Uptake, Availability of nutrient, Fertility of soil, Economics, Biofertilizer

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