



**RESEARCH ARTICLE :**

# Split application of nitrogen, phosphorus and potassium for enhancing yield of soybean on inceptisol

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**SUMMARY :** The field experiment on soybean grown on Inceptisol was laid out in a Randomized Block Design with the nine treatments and three replications at Central Research Farm of Post Graduate Institute, Mahatma Phule Krishi Vidyapeeth, Rahuri – 413 722 Dist – Ahmednagar during *Kharif* 2012. The results revealed that, the growth parameters *viz.*, root nodule counts (19) were observed in treatment T<sub>6</sub> (application of 50:75:25 kg ha<sup>-1</sup> in two splits-50% N,P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at sowing and 30 DAS) which was at par with treatment T<sub>7</sub>. The treatment T<sub>7</sub> (application of 50:75:50 kg ha<sup>-1</sup> in two splits-50% N,P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at sowing and 30 DAS) were recorded the highest number of pods per plants (51.73), grain yield (34.53 q ha<sup>-1</sup>) and stover yield (44.04 q ha<sup>-1</sup>) which was at par with treatment T<sub>6</sub>. The total uptake of NPK by soybean and available of nutrient in soil were significantly influenced by the split application of NPK and maximum total uptake and available of NPK in soil at harvest was observed in the treatment T<sub>7</sub> and it was at par with treatment T<sub>6</sub>. Thus, application of 50:75:25 kg NPK ha<sup>-1</sup> in two splits - 50% NPK at sowing and 50% NPK at 30 DAS was proved to be profitable for soybean cultivation on Inceptisol.

**KEY WORDS :**

Inceptisol, Split application of NPK, Soybean yield

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