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## Effect of phosphorus and potassium on growth and yield characters of bitter gourd (*Momordica charantia* L.) ecotype 'Mithipagal'

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**ABSTRACT :** An experiment on effect of phosphorus and potassium on growth and yield characters of bitter gourd ecotype 'Mithipagal' was carried out with the four levels of phosphorus (0, 30, 60 and 90 kg ha<sup>-1</sup>) and three levels of potassium (0, 40 and 80 kg ha<sup>-1</sup>) comprised of twelve treatment combinations under Factorial Randomized Block Design with three replications. Nitrogen @90 kg ha<sup>-1</sup> was applied in all treatments as constant dose except the control. Among the graded levels, P<sub>3</sub>K<sub>2</sub> (Phosphorus 90 kg ha<sup>-1</sup>+ Potassium 80 kg ha<sup>-1</sup>) registered the maximum values in growth parameters viz., vine length, number of branches plant<sup>-1</sup>, number of leaves plant<sup>-1</sup>. However, it was closely followed by P<sub>2</sub>K<sub>2</sub>. The maximum values of physiological characters were found with the treatment combination of P<sub>3</sub>K<sub>2</sub>, which registered the maximum leaf area index, total chlorophyll content, photosynthetic rate and dry matter production.

**KEY WORDS :** Bitter gourd, *Momordica charantia*, Growth, Yield

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