

## Research Note

# Effect of bio-fertilizers and FYM on phosphorus uptake by soybean [*Glycine max* (L.) Merrill] and residual N and P content in soil

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### Summary

Soybean [*Glycine max* (L.) Merrill] is a famous oil seed as well as pulse crop which contains 40-44 % protein, 20 % oil and many other nutrients. A field experiment was conducted to know the effect of bio-fertilizers and FYM on phosphorus uptake by soybean and residual N and P content in soil during *Kharif* season. Among treatments, *Aspergillus awamori* and *Bacillus polymixa* were used as seed treatment (@ 20 g/kg seed) and two phosphorus levels through SSP (50 and 25 % P<sub>2</sub>O<sub>5</sub>) and two levels of FYM (5 and 2.5 t/ha) were applied into the soil. Maximum phosphorus uptake (3.91 kg/ha) and higher residual N (226.4 kg/ha) and P (11.19 kg/ha) was estimated with *A. awamori*. Incorporation of 5t FYM/ha had significantly higher 227.25 kg N and 11.34 kg P/ha.

**Key words** : P uptake, Residual N and P, *Aspergillus awamori*, *Bacillus polymixa*, FYM, Soybean

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