Effect of liquid formulation of Symbion – N (Azospirillum) and Symbion - P (Phosphobacter) on the growth and yield of okra

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ABSTRACT

A field experiment was conducted to evaluate the effect of liquid biofertilizer Symbion N (Azospirillum) and Symbion P (Phosphobacter) on the growth and yield of okra. The experiment was laid out in Annamalai University experimental farm in clay loam soil during summer 2006. The treatments studied were $T_1$ – Symbion N (foliar), $T_2$ – Symbion P (soil), $T_3$ – Symbion – N (foliar) + Symbion P (soil), $T_4$ – Symbion N + Symbion P (soil) and $T_5$ – control. All the treatments were replicated three times in RBD. A fertilizer schedule of 40:50:30 kg N : P$_2$O$_5$:K$_2$O / ha was applied to all the treatments. The foliar application of Symbion N was followed @ 250 ml / ha and sprayed at 10 days after sowing and another at flowering. The soil application of liquid formulations was carried out @ 250 ml / ha applied one at 10 days after sowing and another at flowering. Okra variety Parbani Kranti was sown as test crop. The results of the study indicated that application of liquid bio-fertilizer both Symbion N and Symbion P significantly increased the growth character, yield character and yield of okra. Among various treatments, Symbion N and Symbion P both applied in soil was significantly superior in increasing the growth and yield of okra. This treatment recorded the highest okra yield of 6280 Kg ha$^{-1}$.

Key words: Liquid biofertilizer, Foliar and Soil application, Okra.