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Effect of integrated nutrient management on nutrient uptake and yield of okra [Abelmoschus esculentus (L.) Moench] under islands conditions

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ABSTRACT: The experiment was carried out to find out the effect of integrated nutrient management on dry matter production, nutrient uptake and yield of okra var. Arka Anamika during 2015 and 2016 at Multipurpose Farm, Diglipur, North Andaman. There were 14 treatment combinations replicated thrice in RBD. The results indicated that the application of 75 per cent recommended dose of NPK + FYM @ 2.5 t ha⁻¹ + NC @ 0.5 t ha⁻¹ + VC @ 1.25 t ha⁻¹ recorded higher dry matter production of plant and pod which in turn resulted in higher total dry matter production (3054 and 2955 kg ha⁻¹), which was at par with 50 per cent of recommended dose of NPK + VC @ 5.0 t ha⁻¹, 50 per cent of recommended dose of NPK + FYM @ 3.75 t ha⁻¹ + VC @ 2.5 t ha⁻¹ + NC @ 1.25 t ha⁻¹ and 100 % recommended dose of NPK during both the years of study. Similarly, uptake of N, P and K was maximum with 75 per cent of recommended dose of NPK + FYM @ 2.5 t ha⁻¹ + VC @ 1.25 t ha⁻¹ + NC @ 0.5 t ha⁻¹) recorded higher pod yield (12.57 and 11.00 t ha⁻¹) and net return (Rs. 2,98,289 and Rs. 2,69,474), respectively. However, higher B: C was registered in T_6 (4.79 and 4.42) followed by T_2 . From the results of the experiments, it can be concluded that application of 75 per cent of recommended dose of NPK + FYM @ 2.5 t ha ¹+ VC @ 1.25 t ha⁻¹ +NC @ 0.5 t ha⁻¹ is highly profitable and economically viable for the cultivation of okra in Andaman and Nicobar Islands.

KEY WORDS: Okra, INM, Nutrient uptake, Yield, Island ecosystem

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