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Site Specific Fertiliser Requirement of Sugarcane and Intercrop (Onion) under Sugarcane Based Cropping System

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A field experiment was conducted intercropping sugarcane with onion at Rajshahi under High Ganges River Floodplain and Thakurgaon under Old Himalayan Piedmont plain of Bangladesh to determine the site-specific nutrient requirements of cane and intercrop, onion, and their economics under sugarcane based cropping system. Cane yield was enhanced when it was intercropped with onion because of the residual effect of fertiliser applied to the onion. Gross return and gross margin were greater in cane intercropped with onion over sole crop. The treatment T₅ that received fertilisers for sugarcane (N₁₅₀P₅₂K₉₀S₃₅Zn₃ and N₁₄₀P₃₇K₁₀₀S₂₅Zn₂ kg/ha) and onion (N₅₂P₂₁K₃₀S₁₅ and N₅₀P₃₀K₃₀S₁₅ kg/ha) as per Bangladesh Sugarcane Research Institute Recommendation'1998 at Rajshahi and Thakurgaon site, respectively showed higher gross margin and benefit cost ratio at both the locations under study.

Keywords: Site specific fertiliser, sugarcane, intercrop, cropping system