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Resource Utilization of Biodigested Slurry on the Baby Corn Quality & Production

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ABSTRACT: Today farmers are facing problems due to increasing cost of nitrogenous fertilizers and increase in pest attacks when nitrogenous fertilizers are applied to crops. Biogas slurry is a good source of plant nutrients and replacing chemical fertilizers with biogas slurry can not only achieve resource utilization of slurry, but also reduce the amount of fertilizer. Baby corn is an attractive low calorie vegetable, high in fibre and without cholesterol and very rich source of phosphorus (197.89 mg/100 g) in comparison to 21-57 mg/100 g phosphorus content in other common vegetables. The present study examined the effectiveness of biogas slurry (liquor from anaerobic digestion process) as a nitrogen source for the production of baby corn (*Syngenta-5414*). The experiments were conducted in a randomized block design for the three successive times in a year, it was attempted to investigate the effects of slurry on yield and quality of baby corn, further more to come across the optimum rate of biogas slurry. The results indicated that biogas slurry application caused a marked increase in plant height, numbers of leaves, leaf area, numbers of cobs, cob's diameter and length, total biomass, protein content, total sugars and micronutrients. Based on these results, it has been concluded that application of 50% slurry and 50% recommended dose of fertilizer have given increase in yield by 10% over the control. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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