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Effect of Biomethanated Distillery Spentwash and Pressmud Biocompost on Growth, Yield and Quality of Sugarcane

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Abstract: A field experiment was conducted to study the effect of biomethanated distillery spentwash and pressmud biocompost in various proportions with inorganic fertilizers on growth, yield and quality of sugarcane at Research and Development Farm of M/s. Bhavani Distilleries and Chemicals Ltd., T.Pudur, Thimiri, Tamil Nadu. Crop growth, yield and quality of sugarcane were improved by the application of biomethanated distillery spentwash and pressmud biocompost compared to recommended NPK as chemical fertilizers. Even though there was an insignificant reduction in the quality of cane juice recorded with split application of biomethanated distillery spentwash @ 112.5 m^3 ha^{-1} along with balance NP through inorganic fertilizer as compared to other doses of biomethanated distillery spentwash, the highest yield was recorded as 140.80 t ha^{-1} with an increase of 25.80 t ha^{-1} over recommended NPK as chemical fertilizers with an additional income of Rs. 43,040 ha^{-1}. The findings were also indicative of saving in entire quantity of inorganic potassium fertilizer requirement by the split application of biomethanated distillery spentwash @ 112.5 m^3 ha^{-1} along with balance NP through inorganic fertilizer.

Keywords: *Biomethanated distillery spentwash, pressmud biocompost, growth, yield, quality.*

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