Performance of distillery industry by-products on nutrient aspects and enhanced yield of guinea grass

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SUMMARY: Distillery spentwash is a nutrient rich liquid organic waste obtained from molasses based distillery industries after biomethanation process and it is the carrier of huge amounts of nutrients and organic matter. A field investigation was carried out during 2009 to 2010, at Research and Development Farm M/s. Bannari Amman Sugars Distillery Division Ltd, Ealur, Sathyamangalam, Erode to assess the performance of guinea grass by utilizing distillery industry byproducts viz., distillery spentwash, biocompost and spentwash ash. Treatments involved were distillery spentwash @ 37.5 and 50 kilo litre per ha at full and split dose, biocompost @ 5.0 tonnes per ha and spentwash ash @ 400 kg per ha with recommended dose of fertilizers and the parameters were assessed at 12th, 26th, 39th and 52nd weeks after planting. Results of the field experiment revealed that the application of spentwash @ 50 kilo litre per ha at full dose with recommend dose of nitrogen and phosphorus increased the quality and nutrient parameters and green fodder yield over recommended dose of fertilizer.


**EXPERIMENTAL METHODOLOGY**

Collection and characterization of distillery industry by-products:

The BDS was collected from the distillery unit of M/s. Bannari Amman Sugars Ltd., Periyapuliyyur, Erode district, Tamil Nadu and analyzed for its physico-chemical properties by standard procedures (APHA, 1998). Biocompost is being prepared and marketed by M/s. Bannari Amman Sugars Ltd., Ealur and analyzed for its physico-chemical properties. Spentwash ash is being produced by M/s. Bannari Amman Sugars.