

Effects of Bioextract on Yield and Nutrients of Guinea grass

(Panicum maximum. TD58)

Abstract

The effects of bioextracts on growth and nutrients of guinea grass grown under the substrate culture system had been studied during October, 2003 and August, 2004. The guinea grass was planted in a 1:1 mixture of coconut coir : sand and watered with nutrients solution and bioextract made from fishmeal, chinese green mustard and banana blossom at the ratio of 1 : 250, 1 : 500 and 1 : 1000. The experiments were arranged in Completely Randomized Design (CRD) with 10 treatments and 4 replications and conducted at the experimental greenhouse of Department of Agricultural Technology, Thammasat University, Rangsit Campus.

The result showed that fresh weight, plant height and number of stalks per tiller of the guinea grass treated with nutrient solution were significantly higher than those of the grass treated with other treatments. However, the guinea grass treated with bioextract solution from fish meal at the ratio of 1:500 had the highest dry weight. The study on proximate analysis of indicated that the grass treated with nutrient solution had the highest crude protein, moisture and fiber. Bioextract solutions from fish meal at all ratios gave the highest yield and nutrient when compared to bioextract solutions from other sources.