

ABSTRACT

One of the businesses in agriculture is the cultivation of sweet corn. Sweet corn (*Zea mays Saccharata Sturt*) known as *sweet corn* is widely cultivated in Indonesia, the nutritional content contained in sweet corn is glucose, carbohydrates, proteins and fats. The purpose of this study aims to find out the best dose of bagasse compost and find out the best varieties to increase the growth and yield of sweet corn plants. The method used in this study is a randomized group design, the factorial tested consists of two factors. The first factor of bagasse compost (T) consists of T0: 0 kg / bed (conversion of 0 tons / ha), T1: 3 kg / bed (conversion of 20 tons / ha), T2: 6 kg / bed (conversion of 40 tons / ha), the second factor is the sweet corn variety factor (V) consists of V1: Bonanza F1, V2: Super Sweet, V3: Exsotic Pertiwi. The observed variables are plant height, stem diameter, number of leaves, length of cob without husk, cob weight, weight of cob without husk, diameter of cob without husk, number of rows per cob, and total dissolved solids. Bagasse compost increases the growth and yield of sweet corn plants The best dose is 6 kg / bed. The variety increases the growth and yield of sweet corn plants, the best variety treatment is Super Sweet. The interaction between the dose treatment of bagasse compost and several varieties was found in plant height, number of leaves, weight of cob, weight of cob without husk, the best interaction was found in the dose of T2 fertilizer 6kg/bed and Super Sweet variety.

Keywords: bagasse compost, sweet corn, bonanza f1, Super Sweet, exsotic pertiwi