

ABSTRACT

Sweet corn is a food crop that is popular because it has a relatively high sugar content compared to ordinary corn and a low fat content. The growth and quality of sweet corn yields are influenced by environmental factors and soil fertility. Efforts to increase corn production in Indonesia include using ameliorant and liquid organic fertilizer (LOF) from coffee skin waste. The aim of this research was to determine the effect of giving ameliorant and LOF coffee skin waste on the growth and production of sweet corn. This research was conducted in January to March 2024 at Faculty of Agriculture, Universitas Malikussaleh. This research used a Factorial Randomized Block Design with three replications. The first factor is ameliorant consists of 3 levels. The second factor is the LOF coffee skin waste consists of 3 levels. The results of the research showed that the use of ameliorant had a significant effect on the variables of plant height, number of leaves, stem diameter, days of male flowering, days of female flowering, weight of cobs with cornhusk, weight of cobs without cornhusk, cornhusk cobs diameter, diameter cobs without cornhusks, length of cobs with cornhusks, length of cobs without cornhusks, number of rows per cob, production tons/ha, and sweetness level. The LOF coffee husk waste treatment had a significant effect on plant height at 14, 21, 28 and 35 DAP, number of leaves, stem diameter, days of male flowering, days of female flowering, weight of cobs with cornhusk, weight of cobs without cornhusk, cornhusk cobs diameter, diameter cobs without cornhusks, length of cobs with cornhusks, length of cobs without cornhusks, production tons/ha, and sweetness level. There is no interaction between ameliorant and LOF coffee skin waste on the growth and production of sweet corn plants.

Key words : Cow Manure, Liquid Organic Fertilizer, Sweet Corn