

ABSTRACT

Sweet corn is a commodity that is much popular with the public because of its delicious and sweet taste. This study aims to determine the effect of some sweet corn varieties and the application of solid biofertilizers on the growth and yield of sweet corn. This research was conducted in Sangkelan Village, Banda Baro District, North Aceh Regency, from December 2023 to March 2024. Using a Randomized Block Design (RBD) experiment with two factors and three replications. The first factor is the variety consisting of (V₁) Bonanza F1, (V₂) Paragon F1, (V₃) Excotic Pertiwi F1, and (V₄) RS-8. The second factor is solid biofertilizer consisting of 3 levels, namely (P₀) 0 kg/ha, (P₁) 60 kg/ha, and (P₂) 120 kg/ha. Parameters observed were plant height, number of leaves, stem diameter, 50% male flowering age, cob length, cob length without cob, cob weight per plant, cob weight without cob per plant, cob weight per plot and production. The results showed that the treatment of varieties had a very significant effect on the variables of stem diameter and weight of unhusked cob per plant, significantly influenced the variables of length of unhusked cob, weight of weighed cob per plant, weight of weighed cob per plot and production. The best variety is (V₃) Excotic Pertiwi F1 variety. The application of solid biofertilizer has a very significant effect on the variables of plant height, stem diameter and 50% male flowering age, has a significant effect on the variables of stem diameter, weight of weighed cob per plant, weight of weighed cob per plot and production. The best solid biofertilizer is (P₁) 60 kg/ha. There was no interaction between sweet corn varieties and solid biofertilizer on the growth and yield of sweet corn.

Keywords: Biofertilizer, fertilizer dosage mikroorganims and Petrobio.