

ABSTRACT

Sweet Corn (*Zea mays* Saccharata) is an annual crop in Indonesia which is also a staple food substitute for rice, has adequate nutritional content and crude fiber. The problem faced in developing sweet corn is its low productivity caused by low soil fertility and a lack of nutrients in the soil. This research aims to determine the effect of the interaction of urea fertilizer doses and mycorrhiza on the growth and yield of sweet corn plants. Carried out in Pulo Rangkom Village from August to November 2023. Using a two-factor Randomized Block Design (RBD). The first factor is urea fertilizer U0 (control), U1 (3g/plant), U2 (6g/plant) and the second factor is mycorrhizal fertilizer M0 (without treatment), M1 (10g/plant), M2 (20g/plant) with 3 repetitions. The results showed that the U1 urea dose (3 grams/plant) had a very significant effect on plant height at 6 WAP, U2 urea dose (6 grams/plant) chlorophyll content 6, and 8 WAP, urea dose (3 grams/plant) stem diameter respectively 2, 4, 6.8 WAP, cob weight without husks/plant and root weight, had a significant effect on the U1 urea dose (3 grams/plant) on the number of leaves aged 4 WAP and the U2 urea dose (6 grams/plant).) on the chlorophyll content of 4 MST. The mycorrhizal fertilizer dose treatment had a very significant effect with the M₂ mycorrhizal dose (20 grams/plant) on the height of plants aged 6 WAP, the M₂ mycorrhizal dose (20 grams/plant) on the number of leaves 4 WAP, and the M₂ dose (20 grams/plant) on the content leaf chlorophyll at 2, 4 and 6 WAP, had a significant effect on M₂ mycorrhizal dose (20 grams/plant) on plant height aged 2 and 4 WAP, M₂ mycorrhizal dose (20 grams/plant) on number of leaves 6 WAP, M₂ mycorrhizal dose (20 grams/plant) on chlorophyll content 8 MST, and root weight. There was an interaction between the dose of urea fertilizer and the dose of mycorrhizal fertilizer on root weight.

Keywords: Food Plants, Nutrition, Fertilizer Dosage