The Effect of Plant Population Density on Black Corn Growth, Yield of Baby Corn, and Stover

Made Candra Gunawan

18011018

ABSTRACT

This study aims to determine the effect of plant population density on growth and yield of baby corn and black corn stover. This research was conducted from September to November 2021 in the Central Demplot for Straw Mushrooms and Integrated Agriculture. "Lestari Makmur" belongs to Mr. Sumarjan who was located in Kepuhan Hamlet, Argorejo Village, Sedayu District, Bantul Regency, Special Region of Yogyakarta on 87.5 meters above sea level altitude with Vertisol soil type. The experimental design used was Randomized Complete Block Design (RCBD) with 3 replications. The single treatment factor, namely the number of plants per hole, consisting of 4 levels of treatment, namely P1 = one plant per hole, P2 = two plants per hole, P3 = three plants per hole, and P4 = four plants per hole. Variables observed included plant height (cm), stem diameter (mm), and number of leaves (sheets) aged 2 to 6 weeks after planting, plant fresh and dry weight (g), male flowering (days after planting) , weight of baby corn with and without crabs(g), length and diameter of baby corn , and weight of stover. Observational data were analyzed by analysis of variance and further tested by Duncan's Multiple Range Test at α=5%. The results showed that a population density of 1 plant per hole resulted in the highest growth of stem diameter and plant fresh weight. A population density of 4 plants per hole gave the highest yield of baby-corn and stover compared to population densities of 1, 2, and 3 plants per hole

Keywords: *population density, plant growth, yield of baby and stover corn, black corn*