

ABSTRACT

The growth and yield of tomato plants are strongly influenced by fertilizers and nutrient content in the soil. The aim of this study was to determine the effect of nutmeg compost as a substitute for N,P ,K fertilizer on the growth and yield of tomatoes . This research was carried out at the Gunung Bulu Experimental Garden and Agronomy Laboratory, Faculty of Agroindustry, Mercu Buana University, Yogyakarta at an altitude of 87.5 meters above sea level from September to December 2021. The method used in this study was a single factor Completely Randomized Design (CRD) with a compost dose. puzzle and fertilizer N,P ,K which consisted of 7 levels and each was repeated 3 times, so that 21 experimental units were obtained. The treatments consisted of fertilizers N,P ,K with recommended doses of 180 kg/ha N, 150 kg/ha P₂O₅ and 100 kg/ha K₂O (control), 20, 30 and 40 tons/ha, 50 % nut compost. control + grass compost 15 tons/ha, 50% control+ 20 tons/ha puzzle compost and 50% control + 25 tons/ha puzzle compost. The results showed that a dose of 30 tons/ha of puzzle compost gave the best results.

Key words: *Tomatoes, Amount of puzzle compost, N,P ,K fertilizer*