## ABSTRACT

## EFECT OF HYACINTH COMPOST RATE (Eichhornia crassipes Mill.) AND THE TIMING OF PRUNING ON THE GROWTH AND YIELD OF TOMATO (Lycopersicon esculentum Mill.)

By

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Research on the effect of hyacinth compost (Eichhornia crassipes Mill.) and the timing of pruning buds on the growth and yield of tomato plants (Lycopersicon esculentum Mill.) was conducted in June to November 2020 at The Resik Jalan Mohamad Hatta Coral Land, Cipedes Subdistrict, Lake City, a place height of 350 m above sea level. The study used a Randomized Design Group (RAK) factorial pattern with 2 factors where the first factor is hyacinth compost consisting of 4 levels. (d0: without compost, d1: 15 ton/ha, d2: 20 ton/ha, d3: 25 ton/ha) and the second factor is the shoot pruning time consisting of 3 levels (p0: no pruning, p1: 15-day vegetative initial phase shoot pruning, p2: 30-day vegetative final phase shoot pruning). Each treatment was repeated 3 times so that the total plot of the experiment was as many as 36. The data was analyzed using a variety fingerprint with the F test and continued with Duncan double distance test with a real level of 5%. The results showed that there was an interaction between the treatment of hyacinth compost and pruning time against the height parameters of plants aged 3, 4, and 5 PAP. Independently, the treatment of hyacinth compost has a real effect on the number of leaves aged 4 PAP, the number of fruits per plant, the weight of fruit per plant, and the weight per plot and yield per plot. At the treatment of the time of pruning shoots have a real effect on the number of leaves aged 5 PAP, while the influence of hyacinth compost and the time of pruning shoots had no noticeable effect on the parameters of the diameter of the fruit and weight per fruit.

Keywords: hyacinth compost, pruning buds, tomato plants