

The Effects of NPK Organic Fertilizer Made from Tofu Waste on The Growth and Production of Cabbage (Kubis (*Brassica oleracea* L.))

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ABSTRACT

*The study was conducted to understand the effects of organic fertilizer made from tofu waste combined with Gamal, Azolla, Guano fertilizer, and ash of coconut fiber on the growth and production of Cabbage plant (*Brassica oleracea* L). The combination of these fertilizers is used instead of inorganic fertilizers. The study was carried out in Magelang from December 2015 to January 2016.*

The study was designed using randomized completely block design (RCBD) with a single factor and five types of organic materials: T1 = 13.22 tons/ha solid tofu waste, T2 = 6,49 ton/hektar of soild tofu waste + 5.43 tons/ha of Gamal compost + 15.20 tons/ha ash of coconut fibers, T3 = 6.49 ton/hektar of solid tofu waste + 3.15 tons/ha Azolla compost + 15.20 tons/ha ash of coconut fibers, T4 = 6.49 tons /ha of solid tofu waste + 2,17 tons ha Guano fertilizer + 15,20 tons/ha ash of coconut fibers, T5 = anorganick fertilizers (0.44 tons/ha Urea , 0.99 tons/ha Phosphate and 0.77 tons/ha KCl).

The results showed that there was no significant difference among the treatments. However the T4 showed that the use of 6.49 tons/ha solid tofu waste + 2,17 tons/ha Guano fertilizer + 15.20 tons /ha ash of coconut fibers tended to te the best treatments for supporting the growth and production of cabbage plant

Keywords: Organic fertilizer, Tofu waste, Azolla, Gamal, Guano, ash of coconut fiber, cabbage plant.