

**Pengaruh Aplikasi Pupuk Kotoran Sapi dan Dosis NPK 16-16-16 Terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus* L.), *Effect of Cow Manure Application and NPK Dosage 16-16-16 on Production and Quality of Cucumber Seeds (*Cucumis sativus* L.).* Supervised by Dr. Ir. Nantil Bambang Eko S., MSi.**

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### ***ABSTRACT***

*The cucumber plant (*Cucumis sativus* L.) is a climbing plant which is a type of vegetable plant from the Cucurbitaceae family. Cultivation is carried out widely throughout the world, both in areas with temperate (sub-tropical) or hot (tropical) climates. The majority of cucumber plants in Indonesia are cultivated in the lowlands. Efforts are needed to increase cucumber seed production. One effort used to increase cucumber production is through fertilization. These findings aim to be able to see the effect of the application of cow dung fertilizer and the dose of NPK 16-16-16 on the production and quality of cucumber seeds carried out from September 2023 to January 2024 on Jl. Tawang Mangu, Ward no. 177, West Krajan, Tegalgede, District. Sumbersari, Kab. Jember. The experimental design used was a factorial Randomized Block Design (RAK) which was repeated three times. The first factor is the dose of cow dung fertilizer, including 40 tons/ha (K2), 30 tons/ha (K1), 50 tons/ha (K3). The second factor is the dose of NPK 16-16-16, including 300kg/ha, 200 kg/ha (N1), (N2) 400kg/ha (N3). The data was analyzed via Anova. If the results explain a real difference, then the next test is applied via DMRT at a level of 5% or 1%. The results of the research showed that the interaction of 10.5 kg/plot cow manure treatment and 82 grams/plant (K1N3) dose of NPK 16-16-16 (K1N3) resulted in a number of healthy seeds, namely 709.9286 seeds and seed production per ha (gram) showed different results. Really, with a dose of cow manure of 10.5 kg/plot and a dose of NPK 16-16-16 of 82 grams/plant (K1N3) gives a seed yield per ha of 0.39465 tonnes.*

***Keywords:*** Cow Manure, NPK 16-16-16, Cucumber Seeds