Pengaruh Pemberian Pupuk NPK Mutiara dan Pupuk Kandang Sapi Terhadap Produksi dan Mutu Benih Cabai Rawit (Capsicum frutescens L.), The effect of giving NPK Mutiara fertilizer and Cow Manure fertilizer on production and seed quality of bird chili seed (Capsicum frustescenst L.) Advisor: Ir. Suwardi, MP and Anik Widya Astutik, SP

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## **ABSTRACT**

One of the efforts to increase production and seed quality is through fertilization. This research aimed to find out the interaction effect of giving NPK Mutiara fertilizer and Cow Manure fertilizer on productivity and seed quality. This research was conducted from August 2019 to January 2020 in the Stock Seed field and Quality Laboratory of PT. Aditya Sentana Agro Malang, Jl. Zentana, Krajan Hamlet, Ngijo Village, Karangploso District, Malang Regency. This research used Randomized Block Design with 2 factors and 3 replications. The first factor was giving NPK Mutiara fertilizer with 3 levels; N0: Without NPK Mutiara, N1: 7gr / plant, N2: 14gr / plant. The second factor was giving the Cow Manure fertilizer with 3 levels; K0: Without giving Cow Manure fertilizer, K1: 250gr / plant, K2: 500gr / plant. With the research parameters of plant height, fruit length (cm), fruit diameter (mm), number of fruit per plant, fruit weight per plant, seed germination rate, seed growth speed, and seed growth synchronization. Data were analysed by using the F test (ANOVA) and continued with the calculation of Duncan's Multiple Range Test (DMRT). The results obtained showed that the treatment of NPK Mutiara fertilizer significantly affected the parameters of plant height and number of fruit per plant. The highest yield for plant height parameters aged 14, 28, and 42 DAS (17.64 cm, 49.41 cm, and 80.54 cm), and the number of fruits per plant at harvest 1 (7.04), harvest 2 (16.25), harvest 3 (31.85). In addition, the application of Cow Manure fertilizer had a significant effect on the parameters of fruit production per plant (474,8).

Keywords: NPK Mutiara fertilizer, Cow Manure fertilizer, chili bird.