Aplikasi Pupuk SP-36 dan Pupuk Organik Cair terhadap Pertumbuhan Bibit Asal Setek Kopi Robusta (*Coffea canephora* Pierre). (Application of SP-36 Fertilizer and Liquid Organic Fertilizer on the Growth of Seedlings from Robusta Coffee Cuttings (*Coffea canephora* Pierre)). Supervisor by Ir. Sri Rahayu, M.P.

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ABSTRACT

Coffee is one of the leading commodities of plantation crops that has a significant contribution to the economy. According to the Directorate General of Plantations (2021). In 2019 with an area of 1,245,358 ha produced 0.604 tonnes/ha, and in 2020 with an area of 1,250,452 produced 0.609 tonnes/ha of robusta coffee. fertiliser application is one of the efforts to improve the quality of coffee seedlings. This study aims to determine the interaction between the dose of phosphate fertiliser and liquid organic fertiliser on the growth of seedlings from cuttings. The research was conducted from September to January 2024 on the land of Jember State Polytechnic. The experimental design used was Randomized Complete Block Design (RCBD) repeated 3 times. The first factor was the dose of phosphate fertiliser consisting of 4 g/plant (D1), 6 g/plant (D2), and 8 g/plant (D3). The second factor was liquid organic fertiliser concentration of 2 cc L-1 (K1), 3 cc L-1 (K2), 4 cc L-1 (K3). Data were analysed using ANOVA, and continued with DMRT test at 5% level if it showed significantly different results. The results showed that the interaction between the dose of phosphate fertiliser 8 g/plant, with the concentration of liquid organic fertiliser 4 cc L-1 (D3K3) had a significant effect on root length of 35.00 cm and root volume of 114.17 ml. While the interaction between the dose of phosphate fertiliser 6 g/plant, with the concentration of liquid organic fertiliser 4 cc L-1 (D2K3) had a significant effect on the weight of dry bran with an average value of 92.34 grams, and a very significant effect on the weight of wet bran with an average value of 46, 17 grams.

Key words: Phosphate Fertiliser, POC, Coffee Cuttings Origin.