

**Pengaruh Tingkat dan Frekuensi Penyiraman Terhadap Pertumbuhan Bibit Kakao Asal Biji MCC 02 (*Theobroma cacao* L.). *The Influence of the Level and Frequency of Watering Seedlings Growth Against the Original Cocoa Beans MCC 02 (*Theobroma cacao* L.).* Advisor: Ir. Sri Rahayu, MP dan Bayu Setyawan, S.P., M.Sc.**

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### ***ABSTRACT***

*Cocoa (*Theobroma cacao* L.) is a plantation commodity in the last 5 years which has experienced an increase and descent due to a lack of quality seeds. the level and frequency of watering this research was carried out from May to July 2018 at the Coffee and Cocoa Research Center located in the green house, Kaliwining, Jember Regency. The experimental design used in this study was factorial Randomized Complete Block Design (RCBD) using 2 factors. The first factor Watering Rate (P) which includes 50 ml Watering Rate ( $P_1$ ), Watering Rate 37.5 ml ( $P_2$ ), Watering Rate 25 ml ( $P_3$ ), and Watering Rate 12.5 ml ( $P_4$ ) and second factor Watering Frequency (F) which includes once a day ( $F_1$ ), once every 2 days ( $F_2$ ), and once every 3 days ( $F_3$ ). The Watering Rate ( $P_1$ ) gave the best value on the parameters of plant height is 27.28 cm, stem diameter is 4.47 cm, watering rate ( $P_2$ ) number of leaves is 9.59 strands, and watering rate ( $P_1$ ) the length of the leaves are 21.21 cm. Watering frequency ( $F_1$ ) plant height 26.75 cm, stem diameter is 4.40 mm, number of leaves is 9.28 strands, and root volume is 20,93 mm. Interaction of Watering Rate and Watering Frequency ( $P_1F_1$ ) gives the best value at 4.85 mm diameter.*

**Key words:** *Cocoa, Watering rate, Watering frequency.*