

# **EFFECT OF GIVING GA<sub>3</sub> AND KNO<sub>3</sub> IN THE EFFORT TO ACCELERATE SEED GERMINATION ARABICA COFEE**

*(Coffea arabica L.)*

**Mentored by : Ir. Ujang Setyoko, MP.**

**Livia Mafitasari**

Plantation Crop Cultivation Study Program  
Agricultural Production Department

## **ABSTRACT**

Coffee is one of the plantation commodities that plays an important role in economic activity in Indonesia, one of which plays a role as a country's visa-generator. Seed expansion is an early stage of plant growth, including coffee plants. On an arabica coffee, it takes 50-60 days to reach the soldier phase. The use of chemicals such as KNO<sub>3</sub> can make it easier for seeds to absorb water for the imbibition process. In order for the imbibition process to take place optimally, the role of hormones in the form of ZPT is needed. And the ZPT that is often used is GA<sub>3</sub>. This research was conducted to determine the effect of soaking arabica coffee seeds using GA<sub>3</sub> and KNO<sub>3</sub> solutions. This experimental design used is a Completely Randomized Factorial Design (RALF) with two factors, each consisting of 4 levels of treatment. The first factor is immersion using GA<sub>3</sub> concentrations 0 ppm, 200 ppm, 400 ppm, and 600 ppm combined with KNO<sub>3</sub> concentrations 0%; 0,5%; 1%; and 1,5%. The results showed that soaking using GA<sub>3</sub> and KNO<sub>3</sub> had a very significant effect on the germination of Arabica coffee seeds (*Coffea arabica L.*).

**Key words :** Coffee, Germination of Arabica coffee (*Coffea arabica L.*), GA<sub>3</sub>, KNO<sub>3</sub>.