

**The Impact of Dosage and Concentration of Fish Waste PPC on Growth and Productions of Peanut Plants (*Arachis hypogaea* L.)**

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**ABSTRACT**

*Indonesian peanut production has decreased every year. It is caused by a decrease in the harvested area. The peanut production is not enough to fulfill the peanut demand, so imports are carried out. The one of methods to increase production and suppress imports is through cultivation techniques, namely fertilization. Fertilization will increase the nutrient content in the soil. The forms of fertilizer are inorganic and organic fertilizer. Both of solid and liquid are form of organic fertilizers. One of the materials that can be used as liquid organic fertilizer is fish waste, because it contains high nitrogen. Appropriate dosage and concentration of liquid organic fertilizer can affect plant growth is still not been widely reported. This research was conducted at the State Polytechnic of Jember, Sumbersari District, Jember Regency, East Java Province. This research used a Randomized Block Design with two factors and three replications. The first factor was the dosage of fish waste liquid fertilizer complement, namely  $1.5 \text{ l.plot}^{-1}$ ,  $2.5 \text{ l.plot}^{-1}$  and  $5 \text{ l.plot}^{-1}$ . While the second factor was the concentration of fish waste liquid fertilizer complement, namely 10% ( $100 \text{ ml.l}^{-1}$ ), 12% ( $120 \text{ ml.l}^{-1}$ ), 14% ( $140 \text{ ml.l}^{-1}$ ). Data were analyzed using ANOVA and then tested using DMRT 5%. The results showed that the dosage and concentration of fish waste liquid fertilizer complement had a significant impact on the number of cipo pods interaction.*

**Keywords :** *Peanuts, Fish Waste Liquid Fertilizer Complement*