## APPLICATION OF NITROGEN FERTILIZER AND HUMIC ACIDS ON GROWTH AND YIELD PLANT OF PEANUT Supervised by : Ir. Herlinawati, MP

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## ABSTRACT

Peanut is one of the legumes family as a source of protein that has a high economic value. One of the reasons for the low productivity of peanuts is the low levels of soil nitrogen. This research aim was to examine the effect of doses nitrogen fertilizer and humic acid on the growth and yield of peanuts. This research was conducted in Tulungrejo Banyuwangi from November 2020 to March 2021. The experimental design using a factorial Randomized BlockDesign (RBD) with 2 factors. The first factor consisted of 3 levels, namely 11.5 kg.ha<sup>-1</sup>, 23 kg.ha<sup>-1</sup> and 34.5 kg.ha<sup>-1</sup> while the second factor consisted of 4 level, namely 0 kg.ha<sup>-1</sup>, 2.5 kg.ha<sup>-1</sup>, 5 kg.ha<sup>-1</sup> and 7.5 kg.ha<sup>-1</sup>. The variables observed consisted of wet weight of pods, plant biomass, number of pithy pods, number of cipo pods, dry weight of pods, wet weight of seed, dry weight of seed and 100 weight of seed. Collecting data were analyzed using ANOVA and if it showed significantly different, it would be tested using DMRT at 5% level. The results showed that there was no interaction between the dose of nitrogen fertilizer and humic acid on all observed variables. The application of nitrogen fertilizer is used 34.5 kg.ha<sup>-1</sup> had a significant effect for the number of cipo pods with an average of 4.75 pieces. The application of humic acid is used 5 kg.ha<sup>-1</sup> had a significant for the dry weight of seed with an average of 12.26 grams.

Keywords: Growth, Humic Acid, Nitrogen Fertilizer, Peanuts, Yield