

**Production Response of Various Varieties of Soybeans (*Glycine max* (L.) Merrill) to the Application of Liquid Organic Fertilizer Extract of Mung Bean Sprouts**

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***ABSTRACT***

*Soybeans (*Glycine max* (L.) Merrill) are the third most important commodity after rice and corn. This commodity is rich in protein. The need for soybeans continues to increase along with population growth and the need for raw materials for the food processing industry. The aim of this research was to examine the LOF concentration of green bean sprout extract on the growth of soybean plants. This research was conducted in November-January, in Antirogo sub-district, Jember Regency. The method used was a Factorial Randomized Block Design with 2 factors, namely anjasmoro, wilis, grobogan soybean varieties and LOF of green bean sprout extract. The first factor is the soybean varieties anjasmoro, wilis, grobogan. Meanwhile, the second factor is POC of green bean sprout extract with concentrations of 15%, 22.5% and 30%. The resulting data was analyzed using ANOVA and continued with a further DMRT (Duncan's Multiple Range Test) test at a level of 5%. Based on the results of the research, it shows that there was no interaction between variety and POC concentration. Single application of LOF also showed results that were not significantly different for all observed parameters. Meanwhile, the Wilis variety gave the best results in terms of plant height (77.02 cm), stem diameter (0.60 cm) and the Grobogan variety gave the best results in terms of number of pods (36.37 pods). Wilis and Grobogan varieties are varieties that are able to provide the best growth on the observed variables.*

**Keywords :** *Anjasmoro, Grobogan, Liquid Organic Fertilizer Green Bean Sprout Extract, Wilis.*