

**EFFECT OF *Sargassum crassifolium* EXTRACT FORMULA AS
BIOSTIMULANT ON GROWTH AND YIELD OF *Glycine max* L. Merrill cv.**

‘Anjasmoro’

RESEARCH UNDERGRADUATE THESIS

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ABSTRACT

The research about the Effect of *Sargassum crassifolium* Extract Formula as Biostimulant to Increase Growth and Yield of Soybean *Glycine max* L. Merrill cv. 'Anjasmoro' was conducted from February until June 2020 at the warehouse of Plant Physiology Laboratory, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Andalas, Padang. The research aims to evaluate the effectiveness of liquid and powder extract formula of *S. crassifolium* as biostimulant on the growth and yield of soybean (*G. max*). The research was conducted by an experimental method arrange in a Completely Randomized Design (CRD). The experiment consisted of 3 treatments. Each treatment was laid out with nine replications. The treatments tested were control, liquid extract (0.4%), powder extract (1.6 g/L). The results showed that the application of liquid extract gave a higher tendency towards the improvement of the root system, fresh and dry weight, chlorophyll content, and 100 seeds weight of soybean plant. While the powder extracts shown the best result on the total seed weight.

Keywords: Biostimulant, Formulation, *Glycine max* L. Merrill., *Sargassum crassifolium*, Yield.

