Application of Water Provision on the Growth and Production of Soybean (Glycine Max L)

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Abstract. The most essentials factor underlying water management are the characteristics of plants to water requirements, the amount of water given, the irrigation methods, and the characteristics of the soil in storing water. The research purpose is to identify and determine the best irrigation method, which can increase the growth and production of soybean plants. Knowing the best method of giving water/irrigation that can maintain soil moisture for soybean plants. The experiment used a randomized block design consisting of four treatments, namely: Control, Sprinkle Method, furrow method, and Flood method. Each treatment was repeated three times. The data were analyzed statistically and if there was a significant effect, it would be continued with an test of honestly significant difference. The results showed that the Flood method gave the best effect on almost all parameters of growth and production observations and the highest yield for production per hectare was 4.32 tons.

Keyword: soybean, sprinkle method, furrow method, and flood method.