EFFECT OF CONCENTRATION AND TIME INTERVAL OF GAMAL (Gliricidia sepium) LEAF LIQUID ORGANIC FERTILIZER ON WAXY CORN (Zea mays Var. Ceratina) GROWTH AND PRODUCTION

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ABSTRACT

Excessive use of chemical fertilizers leads to soil degradation which gradually reduces corn productivity. Therefore, using organic fertilizers such as liquid organic fertilizers made from Gamal aka Gliricidia leaves and their proper application needs to be encouraged. This study aims to determine the growth and yield of waxy corn plants in response to the administration of liquid gliricidia leaf fertilizer with various concentrations and time intervals. This research was conducted in Politeknik Negeri Jember, East Java from July 2024 to October 2024. This research was conducted on a Non-Factorial Randomized Block Design where the treatment level was a combination of the liquid fertilizer concentration and application time interval consisting of control, 50 ml / l + 1 week, 50 ml / l + 2 weeks, 75 ml / l + 1 week, 75 ml / l + 2 weeks, 100 ml / l + 1 week, and 100 ml / l + 2 weeks. The results showed that the treatment of 75 ml/l concentration + 2-week interval significantly showed the best results in stem diameter, cob length, cob diameter, and cob weight. It can be concluded that the application of liquid organic fertilizer made from gliricidia leaves can be an alternative to minimize the use of chemical fertilizers in waxy corn plants.

Keywords: *glutinous corn, green fertilizer, organic matter*