EFFECT OF CONCENTRATION AND TIME INTERVAL OF WHITE LEADTREE LEAF LIQUID ORGANIC FERTILIZER (*Leucaena leucocephala*) ON CORN CROP PRODUCTION (*Zee mays* L.)

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ABSTRACT

The use of organic liquid fertilizer from white leadtree leaves can reduce the excessive use of synthetic fertilizers in corn production. Fertilization must pay attention to concentration and time intervals, because these two factors affect production results. This study aims to analyze the concentration and time interval of application of liquid organic fertilizer white leadtree leaves and their interactions. This research was conducted in April-July 2022, located in Belimbing Village, Bondowoso with a factorial randomized block design. The first factor is the concentration which includes control, 30 ml/l, 60 ml/l, 90 ml/l while the second factor is the time interval for liquid organic fertilizer from white leadtree leaves 1 weeks, 2 weeks, 3 weeks. The results showed a significant difference in the interaction of concentration and time interval in the variables of sampled plant height, length of cob sampled, wet weight of cobs per plot, dry weight of cobs per plot, wet weight of cobs per plot, dry weight of cobs per plot, dry weight of shellfish per plot, dry weight of shellfish per plot, dry weight per sample and did not show an interaction with the variable diameter of cob per sample and weight of 100 seeds per plot. The highest statistical result was found in the 90 ml/l concentration treatment with an interval of once a week on all variables, while the lowest statistical result was found in the control treatment on all variables.

Keywords: *Corn, Lamtoro Leaf Liquid Organic Fertilizer, Concentration, Time Interval*