RESPONSE OF THE GROWTH AND PRODUCTION OF TWO VARIETIES OF CORN (Zea mays L.) AT LIQUID ORGANIC FERTILIZER CONCENTRATION BANANA WEEVIL (Musa paradisiaca) Supervised by Christa Dyah Utami, S.P., M.P.

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ABSTRACT

Corn is the second most important food commodity in Indonesia after rice. Maize productivity in Indonesia in 2020 is still relatively low, namely 5.4 tons/ha when compared to the yield potential of the Bisma varieties (7.5 tons/ha) and Bisi-2 (13 tons/ha). The application of POC banana weevil to two varieties of corn is expected to increase the growth and production of corn. The advantages of banana weevil POC are that it contains various nutrients, relatively easy and inexpensive to manufacture. This study aims to analyze the interaction of varieties with banana weevil POC concentrations on the growth and production of maize (Zea mays L.). This experiment was conducted from June to September 2022 in Bintoro Village, Patrang, Jember. The experiment was designed using a factorial randomized block design (RBD) with 2 factors and 3 replications. The first factor was the varieties Bisma and Bisi-2, while the second factor was the POC concentration of the banana weevil which consisted of 5 levels, namely 0%, 4.76%, 9.52%, 14.28% and 19.04%. The results showed that the application of 19.04% POC banana cobs on Bisi-2 corn gave the highest yields on plant height (230 cm), fresh cob weight per sample (233.43 g), dry cob weight per sample (196.22 g), and dry shell weight per sample (125.88 g). The concentration treatment of banana weevil POC gave the highest results on fresh cob weight per sample (233.43 g), dry cob weight per sample (196.22 g), and dry shell weight per sample (125.88 g), namely a concentration of 19. 04%. The Bisi-2 variety showed a significant response to the weight of fresh cobs per plot (2.89 kg), the weight of dry cobs per plot (1.91 kg), the weight of dry shells per plot (1.7 kg), and the weight of 100 seeds (31,17g).

Keyword: Corn, POC Banana Weevil, Varieties