

ABSTRACT

EFFECT OF FERTILIZER COMPOSITION TO STEM BORER (*Ostrinia furnacalis* Guenee) AND COB BORER (*Helicoverpa armigera* Hubner) AT CROPPING CORN (*Zea mays*)

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Stem borer (*Ostrinia furnacalis* Guenee) and cob borer (*Helicoverpa armigera* Hubner) was an important pest on corn. The increasing number of pests have been reported with high doses of fertilizer nitrogen (N). While the provision of fertilizers that contain the element potassium (K) can enhance plant resistance against various pests. This research aimed to determine the effect of manure composition with different doses of the number of stem borer (*Ostrinia furnacalis* Guenee) and cob borer (*Helicoverpa armigera* Hubner) in corn. The hypothesis advanced were (1) Provision of fertilizer composition with a high dose of N (urea 800 kg / ha + SP-36 150 kg / ha + KCl 75 kg / ha) could be increasing the number of stem borer (*Ostrinia furnacalis* Guenee) and cob borer (*Helicoverpa armigera* Hubner) in maize. (2) The composition of K fertilizer with a high dose (400 kg urea / ha + SP-36 150 kg / ha + KCl 150 kg / ha) could be reducing the number of stem borer (*Ostrinia furnacalis* Guenee) and pests cob borer (*Helicoverpa armigera* Hubner) in corn.

Research carried out in field trials Polytechnic Lampung, Bandar Lampung from November 2011 until February 2012. Treatments arranged in a randomized block design (RBD) consisting of 4 treatments with 5 replicates including control so that there are 20 experimental units. The treatment consists of (1) the composition of fertilizers (urea 400 kg / ha + SP-36 150 kg / ha + KCl 75 kg / ha), (2) the composition of fertilizers (urea 800 kg / ha + SP-36 150 kg / ha + KCl 75 kg / ha), (3) the composition of fertilizers (urea 400 kg / ha + SP-36 150 kg / ha + KCl 150 kg / ha) and (4) Phonska NPK fertilizer at 100 kg / ha. Observed variable was the level of pest attack cobs and number of stem borer and corn cobs on the plant.

Data was analyzed using the results of observations of variance (Anova), followed by the mean comparison test (LSD) with a real level 5%.

The results showed that administration of a dose of N fertilizer komposisi high (800 kg urea / ha + SP-36 150 kg / ha + KCl 75 kg / ha) can increase the level of pest attacks and the number of stem borer (*Ostrinia furnacalis* Guenee) and cob borer (*Helicoverpa armigera* Hubner) in maize, while giving the composition of K fertilizer with a high dose (400 kg urea / ha + SP-36 150 kg / ha + KCl 150 kg / ha) can reduce the attack rate and the number of stem borer (*Ostrinia furnacalis* Guenee) and cob borer (*Helicoverpa armigera* Hubner) in maize.

Keyword : Attack rate and the number of stem and cob borer, fertilizer N, P and K.