ABSTRAK

Penggerek batang jagung, *Ostrinia furnacalis* Guenee adalah hama utama tanaman jagung di Asia. Hama ini menyerang hampir semua bagian tanaman jagung seperti daun, tangkai, bunga jantan, bunga betina, dan tongkol. Penelitian ini bertujuan untuk menentukan apakah, *O. furnacalis* yang dipelihara di laboratorium masih memiliki kemampuan menggerek batang jagung. Larva yang dipelihara di laboratorium diberi pakan buatan sejak 2009. Larva yang dikumpulkan dari lapangan dipelihara di laboratorium menggunakan makanan alami. Penelitian di laboratorium bertujuan untuk mengetahui apakah larva instar empat dapat menggerek batang jagung ruas ke tiga dan empat dari varietas jagung BISI 2 berumur 55 hari. Penelitian di lapangan infestasi menggunakan larva instar ketiga pada varietas jagung BISI 2 dan Talenta yang berumur 45 hari. Penelitian di laboratorium menghasilkan bahwa larva yang dipelihara di laboratorium memiliki kapasitas merusak batang jagung yang lebih rendah, dibandingkan dengan larva yang diperoleh dari lapangan. Namun, perbedaan ruas tidak mempengaruhi panjang gerekan larva. Talenta lebih rentan terhadap *O. furnacalis* dibandingkan dengan BISI 2. Dalam kondisi lapangan, lebih banyak ditemukan serangan alami di atas tongkol.

Kata kunci : *Ostrinia furnacalis*, tanaman jagung, pakan alami, pakan buatan, varietas, panjang gerekan.

ABSTRACT

Asian Corn Borer, *Ostrinia furnacalis* Guenee is a major pest of corn in Asia. This pest attacks almost all parts of corn plants such as leaves, stalks, male flowers, female flowers, and cob. This study aimed to determine whether the laboratory reared *O. furnacalis* maintained their capacity in damaging corn stalks. The laboratory reared larvae have been fed with artificial diet since 2009. Field collected larvae were reared in the laboratory using the natural diet. A laboratory experiment was conducted to determine the capacity of the fourth instar larvae in tunneling the third and fourth node of 55 days old BISI 2 corn varieties. A field experiment was conducted by infesting the third instar larvae to 45 days old BISI 2 and Talenta corn varieties. The laboratory study resulted that the laboratory reared larvae had lower capacity in tunneling than that of the field collected larvae. However, the node where the tunnels were made did not affect these larvae. Talenta was more susceptible to *O. furnacalis* compared to that of BISI 2. Under fieldcondition, more natural holes were found above the cob.

Keywords: *Ostrinia furnacalis*, corn plants, natural feed, artificial feed, varieties, length of the hoist