BEHAVIOR OF SOME MAIZE HYBRIDS TO THE EUROPEAN CORN BORER (Ostrinia nubilalis HBN) ATTACK, AT NARDI FUNDULEA, 2013-2014

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Abstract

In this paper there were presented some results concerning testing of 18 maize hybrids to evaluate reaction at European corn borer attack (*Ostrinia nubilalis* Hbn.), in climatic conditions of the years 2013 and 2014, at NARDI Fundulea. Maize plants were artificial infested with ECB egg batches, produced in laboratory conditions, by rearing insects, successive generations, on continuous flux, using same artificial diet. Also, it has evaluated maize plants in conditions of ECB natural attack. Total number of egg batches obtained in laboratory was 133550 in 2013 and 159116 in 2014. Climatic conditions from summer period, registered at NARDI Fundulea, were more favorable for pest attack in 2014 comparative with 2013. Average natural attack frequency of the *O. nubilalis* at maize hybrids from the experiment was of 43.3 % in climatic conditions of the year 2013 and 79.4 % in climatic conditions of the year 2014. In case of artificial infestation of maize plants with ECB egg batches, average attack frequency was 91.7 % in 2013 and 95.5 % in 2014. Attack intensity was higher in 2014 comparative with 2013, both, at plants not infested and plants artificial infested. In both years, the differences between hybrids reaction to the attack of European corn borer were higher in case of artificial infestation, comparative with natural attack. Higher attack values, in both years, it has registered at Milcov, Paltin and F 59-09 hybrids while lower attack it has registered in case of F 475 M hybrid. Some maize hybrids have different reaction to ECB attack in 2013 comparative with 2014.

Key words: field testing, maize, artificial infestation