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## Variability of damage in maize genotypes caused by attack corn borer *Ostrinia nubilalis* hbn.

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### Abstract

Corn borer, *Ostrinia nubilalis* Hbn. is a pest that can cause significant economic damage on maize crop. The aim of this work is study variation of percentage damaged maize plants, number of perforation and length of channels on plant stem, caused by feeding of larvae corn borer, under application of insecticides. For study included three maize genotypes ZP 427, ZP 555 and ZP 606 and three insecticides, chlorantraniliprole (200 g l-1), bifenthrin (100 g l-1) and [lufenuron (50 g l-1)+(cypermethrin (50 g l-1) + chlorpyrifos (500 g l-1))], were applied 15 days from the peak of the second generation of corn borer. Experiment was set up in three repetition on a basic plot of 10.5 m<sup>2</sup>, conducted on field of Maize Research Institute "Zemun Polje" in 2020. The results showed that on control (without insecticide) in all three maize genotypes, the highest number of damaged plants ~ 95% which was significantly higher than on variant treatments by insecticide. The percentage of damaged plants for all three maize genotype was the lowest on treatment with chlorantraniliprole 72%, higher on treatment with insecticide bifenthrin (82%; 86%;80%) and on treatment with [lufenuron+(cypermethrin+chlorpyrifos)] – (84.8%; 87.2% ; 81.6%). On average, for all treatments, genotype ZP 427 had the smallest number of perforation (~41) and the smallest length of channels in the stem (189 cm), while ZP 606 had the smallest number of damaged plants (82.56%). The established differences for intensity of attack and degree of damages varied depending on genotype and type of applied insecticide.

*Key words:* maize, pest, damage, insecticide, genotype