

THE RESULTS OF PHEROMONE MONITORING OF INVASIVE PEST
Diabrotica virgifera virgifera LeConte
IN TRANSCARPATHIAN REGION OF UKRAINE

**Vasile VOINEAC¹, Dina ELISOVETCAIA¹, Diana Cristman¹,
Mihail BABIDORICI¹, Eugenia TULGARA²,**

e-mail: vvoineac41@mail.ru

Abstract

The sex pheromone testing of maize pest - *Diabrotica virgifera* (8-methyl-2-decanilpropionate) synthesized in IGFPP by Dr. hab KOVALIOV B. G. (2008) was carried out during the years 2008 - 2012 on maize plantations, Velyka Bakta village, Beregovo district, and Onokovtsy village, Uzhgorod district (Ukraine). The testing was subject to different doses in the sections of rubber tube (1, 2, 3 mg), and different forms of sticky traps (“Delta” type, “Cardboard tube”, “Open-type” - pieces of laminated cardboard “Tetrapac” of different sizes). The most attractive dose of the pheromone was of 1 mg, which attracted on the average 2163 males on a trap during the flight (June 24, 2008 – October 03, 2008). While the doses with 2 and 3 mg have attracted 697 and 533 individuals respectively. The most attractive tested traps were “Open-type 44 cm x 29 cm”, which attracted 70% of caught males. The attraction of males at traps was between 6 a.m. up to 6 p.m. hours, with a peak from 9 up to 12 a.m. Mass copulation takes place from 12 a.m. up to 4 p.m. and then occurs egg laying till 10 p.m.. Based on the obtained results, is proposed using of pheromone traps for monitoring and regulation the density population of *D. virgifera* by method of mass catching of male.

Key words: synthetic sex pheromones, *Diabrotica virgifera*, traps, invasive pest, maize
