

Utjecaj različite doze feromona na ulov maslinove muhe *Bactrocera (Dacus) oleae* Gmelin

Josip RAŽOV¹, Kristijan FRANIN², Božena BARIC³, Miklos TOTH⁴.

¹Sveučilište u Zadru, Odjel za poljodjelstvo i akvakulturu Sredozemlja, Mihovila Pavlinovića bb, Zadar 23000, Hrvatska, (e-mail: jrazov@unizd.hr)

²Poljoprivredna, prehrambena i veterinarska škola Stanka Ožanića, Dr. Franje Tuđmana bb., 23000 Zadar, Hrvatska

³Sveučilište u Zagrebu, Agronomski fakultet, Svetošimunska cesta 25, 10000 Zagreb, Hrvatska

⁴Plant Protection Institute, HAS, P.O.B.102, 1525, Budapest, Hungary

Sažetak

Maslinova muha najvažniji je štetnik masline u Hrvatskoj. Za potrebe praćenja najčešće se koriste lovke različite izvedbe sa uporabom sintetskog feromona. Trgovački pripravci su često nepoznate dozacije i čistoće. Godine 2008. i 2009. usporedili smo tri različite dozacije feromona i kontrolu. Pokus je postavljen u masliniku na lokalitetu Petrčane pored Zadra. Korištene su prozirne lovke CSALOMON® PAL. Korišteni feromon je racemični spoj 1,7-dioksaspiro (5,5) undekan (minimalno 97% čistoće, Sigma-Aldrich Kft., Budapest, Hungary) u dozi 4, 8 i 16 mg, postavljen u prozirnu posudicu s poklopcem na držaču. Pokus je postavljen u 4 repeticije u periodu 2. listopada - 20. studeni 2008 i 22. rujna - 29. listopada 2009. Rezultati su obrađeni pomoću ANOVA te Games - Howell i Bonferroni - Dunn testovima. Rezultati pokazuju da nema značajne razlike ni u jednoj godini između doza. Značajno je više ulovljeno mužjaka na lovkama sa feromonom sve tri doze nego na kontroli što nije slučaj sa ženka. Sveukupno je ulovljeno značajno više mužjaka. Može se zaključiti da bi doza od 8 mg odgovarala i za eksperimentalne i komercijalne svrhe u navedenim uvjetima kao optimalna između doze od 4 mg koja bi ipak mogla biti preniska u određenim uvjetima i doze 16 mg koja je značajno skuplja.

Ključne riječi: maslinova muha, lovke, feromoni, doze, ulovi.

sa2011_a0922

Effect of different pheromone dosage on catch of the Olive fruit fly *Bactrocera (Dacus) oleae* Gmelin

Josip RAZOV¹, Kristijan FRANIN², Božena BARIC³, Miklos TOTH⁴.

¹University of Zadar, Department of Mediterranean Agriculture and Aquaculture, Mihovila Pavlinovica bb, 23000 Zadar, Croatia, (e-mail: jrazov@unizd.hr)

²School of Agriculture, Food Science and Veterinary Medicine, Dr. Franje Tuđmana bb, 23000 Zadar, Croatia

³University of Zagreb, Faculty of Agriculture, Svetosimunska cesta 25, 10000 Zagreb, Croatia

⁴Plant Protection Institute, HAS, P.O.B.102, 1525, Budapest, Hungary

Abstract

The olive fruit fly is the most important olive pest in Croatia. For monitoring purposes traps with synthetic pheromone are commonly used. Commercial pheromones are often unknown regarding the dose and the purity. In 2008 and 2009 we compared three different doses of the pheromone and unbaited control. The experiment was set in the olive orchard near Petrcane, Zadar. We used transparent CSALOMON[®] PAL traps. The pheromone was racemic 1,7-dioxaspiro (5,5) undecan (min. 97% pure, Sigma-Aldrich Kft., Budapest, Hungary) in doses of 4, 8, 16 mg, loaded into transparent polyethylene vials with lid. The experiment was set at 4 repetitions in the period of October 2 - November 20, 2008 and September 22 - October 29, 2009. The results were analysed by ANOVA, followed by Games-Howell and Bonferroni-Dunn tests. The results show that there were no significant differences between doses in any years. The traps of all three doses caught significantly more males than the control, which was not the case with females. Altogether significantly more males were caught. It could be concluded that the 8 mg dose would be suitable both for experimental and for commercial purposes in these conditions. This could be an optimal dose between the 4 mg which in some conditions might be too small and the 16 mg which is too expensive.

Key words: The Olive fruit fly, traps, Pheromones, doses, catches.

sa2011_a0922