

Ministry of Education and Science of Ukraine

Kherson State Agricultural University

August 28, 2018

the city of Kherson

ACT №1

of counting insects caught using anti-mosquito equipment

Commission consisting of the Chairman, Doctor of Science in Agriculture, Professor, Pro-Rector for Academic Affairs and International Activity Averchev O.V., members of the commission: Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection, Dean of the Faculty of Agronomy Mrynskyi I.M., Master of Agriculture, Assistant Professor, acting head of Botany and Plant Protection Department Markovs'ka O.Ye., Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection Makukha O.V., Candidate of Chemical Sciences, Assistant Professor of the Department of Chemistry and Biology Liashenko Ye. V. has carried out the registration of insects, caught using the following anti-mosquito devices: Mosquito Magnet, Mosquito Crusher, Biogents BG Mosquitoire, Environmentally compliant mosquito control system (the results are added).

During the counting it was found that the total weight of insects, caught using the Mosquito Magnet trap was 0.12 g, Mosquito Crusher - 0.14 g, Biogents BG Mosquitoire - 0.01 g, Environmentally compliant mosquito control system - 6, 72 g.

The total weight of insects found in the Environmentally compliant mosquito control system trap significantly exceeded similar rates of other traps in 48-672 times.

The number and weight of mosquitoes in Mosquito Magnet trap was 36 pcs. and 0.08 g respectively, Mosquito Crusher -12 pcs. and 0.04 g respectively, Biogents BG Mosquitoire – 11 pcs., 0,01 g. respectively, Environmentally compliant mosquito control system - 943 pcs. and 1.99 g respectively. The Environmentally compliant mosquito control system trap exceeded other devices

in 26-86 and 25-199 times, respectively, in terms of quantity and weight of mosquitoes.

Besides mosquitoes, flies, butterflies (owl-moths and moths), useful insects, and other insects were found in traps.

One moth was found in each trap, namely: Mosquito Magnet and Biogents BG Mosquitoire; 10 moths were found in Mosquito Crusher trap. The greatest number and weight of moths was found in the Environmentally compliant mosquito control system trap – 295 pcs., 1,71g. respectively.

There were 12 entomophages – including lacewings, ladyflies, bees - found in Environmentally compliant mosquito control system trap, their weight is 0,13 g.

The weight of other insects, found in Environmentally compliant mosquito control system trap was 2, 87 g, having exceeded performance of other devices.

The specific weight of various insects in Environmentally compliant mosquito control system trap was: mosquitoes – 29,7 %, flies – 0,3 %, moths – 25,4%, useful insects – 1,9%, other insects – 42, 7%.

Chairman

 O. Averchev

Members of the Commission

 I. Mrynskyi

 O. Markovs'ka

 O. Makukha

 Ye. Liashenko

Ministry of Education and Science of Ukraine

Kherson State Agricultural University

August 29, 2018

the city of Kherson

ACT №2

of counting insects caught using anti-mosquito equipment

Commission consisting of the Chairman, Doctor of Science in Agriculture, Professor, Pro-Rector for Academic Affairs and International Activity Averchev O.V., members of the commission: Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection, Dean of the Faculty of Agronomy Mrynskyi I.M., Master of Agriculture, Assistant Professor, acting head of Botany and Plant Protection Department Markovs'ka O.Ye., Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection Makukha O.V., Candidate of Chemical Sciences, Assistant Professor of the Department of Chemistry and Biology Liashenko Ye. V. has carried out the registration of insects, caught using the following anti-mosquito devices: Mosquito Magnet, Mosquito Crusher, Biogents BG Mosquitoire, Environmentally compliant mosquito control system (the results are added).

During the counting it was found that the total weight of insects, caught using the Mosquito Magnet trap was 0.08 g, Mosquito Crusher - 0.31 g, Biogents BG Mosquitoire - 0.34 g, Environmentally compliant mosquito control system - 3, 85 g.

The total weight of insects found in the Environmentally compliant mosquito control system trap significantly exceeded similar rates of other traps in 11-48 times.

The number and weight of mosquitoes in Mosquito Magnet trap was 18 pcs. and 0.04 g respectively, Mosquito Crusher -72 pcs. and 0.12 g respectively, Biogents BG Mosquitoire – 133 pcs., 0,21 g. respectively, Environmentally compliant mosquito control system - 408 pcs. and 0.36 g respectively. The

Environmentally compliant mosquito control system trap exceeded other devices in 3-23 and 2-9 times, respectively, in terms of quantity and weight of mosquitoes.

Besides mosquitoes, flies, wasps, butterflies (owl-moths and moths) and other insects were found in traps.

There were 6 butterflies found in Mosquito Crusher trap, 1 butterfly found in Biogents BG Mosquitoire. The weight and number of butterflies, found in Environmentally compliant mosquito control system trap, was the greatest: 355 pcs, 2.10 g.

No entomophages found in any of the traps.

The weight of other insects, found in Environmentally compliant mosquito control system trap was 1,39 g, having exceeded performance of other devices.

The specific weight of various insects in Environmentally compliant mosquito control system trap was: mosquitoes – 9,4 %, flies – 0,1 %, moths – 54,4%, other insects – 36,1%.

Chairman



O. Averchev

Members of the Commission



I. Mrynskyi



O. Markovska



O. Makukha



Ye. Liashenko

Ministry of Education and Science of Ukraine

Kherson State Agricultural University

August 30, 2018

the city of Kherson

ACT №3

of counting insects caught using anti-mosquito equipment

Commission consisting of the Chairman, Doctor of Science in Agriculture, Professor, Pro-Rector for Academic Affairs and International Activity Averchev O.V., members of the commission: Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection, Dean of the Faculty of Agronomy Mrynskyi I.M., Master of Agriculture, Assistant Professor, acting head of Botany and Plant Protection Department Markovs'ka O.Ye., Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection Makukha O.V., Candidate of Chemical Sciences, Assistant Professor of the Department of Chemistry and Biology Liashenko Ye. V. has carried out the registration of insects, caught using the following anti-mosquito devices: Mosquito Magnet, Mosquito Crusher, Biogents BG Mosquitoire, Environmentally compliant mosquito control system (the results are added).

During the counting it was found that the total weight of insects, caught using the Mosquito Magnet trap was 0.11 g, Mosquito Crusher - 0.35 g, Biogents BG Mosquitoire - 0.09 g, Environmentally compliant mosquito control system - 4, 22 g.

The total weight of insects found in the Environmentally compliant mosquito control system trap significantly exceeded similar rates of other traps in 12-47 times.

The number and weight of mosquitoes in Mosquito Magnet trap was 31 pcs. and 0.07 g respectively, Mosquito Crusher -54 pcs. and 0.08 g respectively, Biogents BG Mosquitoire – 3 pcs., less than 0,01 g. respectively, Environmentally compliant mosquito control system - 671 pcs. and 0.55 g respectively. The Environmentally compliant mosquito control system trap

exceeded other devices in 12-224 and 7-8 times, respectively, in terms of quantity and weight of mosquitoes.

Besides mosquitoes, flies, butterflies (owl-moths and moths), useful insects, and other insects were found in traps.


Two moths were found in Mosquito Magnet trap, 5 moths were found in Mosquito Crusher trap, and 1 moth found in Biogents BG Mosquitoire. The greatest number and weight of moths was found in the Environmentally compliant mosquito control system trap – 295 pcs., 2,11g. respectively.

There were 7 entomophages (lacewings) found in Environmentally compliant mosquito control system trap, their weight is 0,04 g.

The weight of other insects, found in Environmentally compliant mosquito control system trap was 1, 43 g, having exceeded performance of other devices.


The specific weight of various insects in Environmentally compliant mosquito control system trap was: mosquitoes – 13,0 %, flies – 2,1 %, moths – 50,1%, useful insects – 0,9%, other insects – 33, 9%.

Chairman




O. Averchev

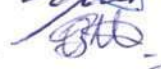
Members of the Commission




I. Mrynskyi



O. Markovs'ka



O. Makukha



Ye. Liashenko

Ministry of Education and Science of Ukraine
Kherson State Agricultural University

August 31, 2018

the city of Kherson

ACT №4

of counting insects caught using anti-mosquito equipment

Commission consisting of the Chairman, Doctor of Science in Agriculture, Professor, Pro-Rector for Academic Affairs and International Activity Averchev O.V., members of the commission: Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection, Dean of the Faculty of Agronomy Mrynskyi I.M., Master of Agriculture, Assistant Professor, acting head of Botany and Plant Protection Department Markovs'ka O.Ye., Master of Agriculture, Assistant Professor of the Department of Botany and Plant Protection Makukha O.V., Candidate of Chemical Sciences, Assistant Professor of the Department of Chemistry and Biology Liashenko Ye. V. has carried out the registration of insects, caught using the following anti-mosquito devices: Mosquito Magnet, Mosquito Crusher, Biogents BG Mosquitoire, Environmentally compliant mosquito control system (the results are added).

During the counting it was found that the total weight of insects, caught using the Mosquito Magnet trap was 0.04 g, Mosquito Crusher - 0.18 g, Biogents BG Mosquitoire - 0.01 g, Environmentally compliant mosquito control system - 5,32 g.

The total weight of insects found in the Environmentally compliant mosquito control system trap significantly exceeded similar rates of other traps in 30-532 times.

The number and weight of mosquitoes in Mosquito Magnet trap was 8 pcs. and 0.02 g respectively, Mosquito Crusher - 43 pcs. and 0.05 g respectively, Biogents BG Mosquitoire – 3 pcs., less than 0,01 g. respectively, Environmentally compliant mosquito control system - 796 pcs. and 0.60 g respectively. The Environmentally compliant mosquito control system trap

exceeded other devices in 19-265 and 12-30 times, respectively, in terms of quantity and weight of mosquitoes.

Besides mosquitoes, flies, wasps, moths (owl-moths and moths), useful insects, and other insects were found in traps.


One moth was found in Mosquito Crusher trap. The greatest number and weight of moths was found in the Environmentally compliant mosquito control system trap – 358 pcs., 2,77 g. respectively.

There were 2 entomophages (lacewing and ladyfly) found in Environmentally compliant mosquito control system trap, their weight is 0,01 g.

The weight of other insects, found in Environmentally compliant mosquito control system trap was 1, 89 g, having exceeded performance of other devices.

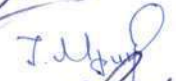
The specific weight of various insects in Environmentally compliant mosquito control system trap was: mosquitoes – 11,3 %, flies – 0,9 %, moths – 52,1%, useful insects – 0,2%, other insects – 35, 5%.

Chairman




O. Averchev


Members of the Commission




I. Mrynskyi



O. Markovs'ka



O. Makukha



Ye. Liashenko