Cercetări Agronomice în Moldova
Vol. XLVI , No. 4 (156) / 2013

STRUCTURE, DYNAMICS AND ABUNDANCE OF COLEOPTERA SPECIES IN SWEET AND SOUR CHERRY PLANTATIONS FROM IAŞI AND VASLUI COUNTIES, ROMANIA

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Received February 20, 2013

ABSTRACT. The paper brings contributions to the knowledge of fauna of beetles (Coleoptera) in some ecosystems of sweet and sour cherry from Iaşi and Vaslui counties, Romania. For catching insects from orchards two methods have been used: the sampling with the Barber soil traps method, six traps placed in each experimental group, which were fixed with a salt solution (NaCl) 5%, and the beating method, where insects collected were kept and preserved in alcohol 90°, and after them, the insects collected were pooled and brought to the laboratory, where they were prepared for determination. During the vegetation, at Barber soil traps the insects have been collected in sweet and sour cherry plantations, where various control methods have been applied. From the collected material, Coleoptera species were selected, and were determined by species. Among the most common Coleoptera have identified: *Stethourus punctilum* Weisse, *Carabus violaceus* L.; *Silpha obscura* L., *Cymindis humeralis* Fourc., *Apion atomarium* Kirby, *Otiorrynchus ovatus* L., *Dermestes laniarius* Illig., *Harpalus calceatus* Duft.

Key words: Predators; Poluation; Treatments; Pests.

REZUMAT. Structura, dinamica şi numărul speciilor de Coleoptera din plantaţiile de cireş şi vişin din judeţele Iaşi şi Vaslui. Lucrarea aduce contribuţii la cunoaşterea faunei de coleoptere (ordinul Coleoptera) din unele ecosisteme de cireş şi vişin din judeţele Iaşi şi Vaslui, România. Pentru colectarea insectelor din livezi s-au ales doua metode: colectarea cu ajutorul metodei capcanelor de sol tip Barber, amplasate câte şase în fiecare lot experimental, care au ca soluţie fixatoare o soluţie de sare (NaCl) 5%, şi metoda frapajului, unde insectele colectate au fost păstrate şi conservate în alcool 90°, iar în

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uma acestora, insectele colectate au fost centralizate şi aduse în laborator, unde au fost pregătite pentru determinare. În timpul perioadei de vegetaţie, la capcanele de tip Barber, au fost colectate insecte din plantaţiile de cireş şi vişin, în care au fost aplicate diverse metode de control; dintre cele mai utilizate amintim: metode biologice de combatere şi metoda chimică de combatere. Din materialul colectat au fost selectate speciile de Coleoptera şi au fost determinate pe specii. Dintre cele mai comune coleoptere s-au identificat: *Stethourus punctilum* Weisse, *Carabus violaceus* L.; *Silpha obscura* L., *Cymindis humeralis* Fourc, *Apion atomarium* Kirby, *Otiorrynchus ovatus* L., *Dermestes laniarius* Illig., *Harpalus calceatus* Duft.

Cuvinte cheie: prădători; poluare; tratamente; dăunători.

INTRODUCTION

Fruit trees and shrubs growing is particularly important from the economic point of view, their fruits are among the most appreciated foods, essentials in making an appropriate food rations.

Although the measures being undertaken, in cherry and sour cherry plantations in Romania operates several species very damaging, including Coleoptera species: *Sciaphobus squalidus, Melolontha melolontha, Agriotes spp.*, etc. (Amzăr and Ivaşcu, 2003; Tălmaciu *et al.,* 2004). Also, there are species of predatory beetles that populate tree ecosystems, such as *Carabus, Calosoma, Pterostichus, Brachynus*, etc. Ideally, would be a balance between species (predatory and harmful), so that they do not cause damage (Herea *et al.,* 2011).

The paper is a comparative study of Coleoptera species found in sweet and sour cherry plantations from Iaşi and Vaslui counties, Romania.

MATERIALS AND METHODS

The research was conducted in sweet and sour cherry plantations from Agricultural Society Loturi Service SRL Deleşti, Vaslui county and V. Adamachi didactic Farm from University of Agricultural Sciences and Veterinary Medicine of Iaşi, in 2009; the material collection was done with the Barber soil traps and beating method (Tălmaciu *et al.,* 2001; Tălmaciu *et al.,* 2004; Herea *et al.,* 2011). Installation of Barber soil traps was made in mid-May, and the harvest was done until September (*Table 1*).

Using the beating method, were collected samples, which consisted in the sudden shaking of two branches of 10 trees. Each time, the sampling was done from five regular trees and marked with distinctive signs early in the season, and five trees randomly selected (Herea *et al.*, 2011).

Table 1 - Stationary name, sampling data and sampling method

Stationary	Sampling data	Sampling method	
		Barber soil traps	Beating method
Iaşi	6.05		x
	18.05	x	
	5.06	x	x
	22.06	x	x
	2.07		x
	15.07	x	x
	28.07	x	x
	18.08	x	x
	7.09		x
Vaslui	7.05		x
	22.05	x	x
	6.06	x	x
	19.06	x	x
	6.07	x	x
	15.07	x	x
	14.08	x	x
	4.09		x

RESULTS AND DISCUSSION

In total, in 2009, in sweet and sour cherry plantations from Iaşi county 165 specimens of insects there were identified, determined by specialized dictionary (Chatenet, 1990), and belonging to a total of 40 species (*Table 2*).

The sampling situation was as follows:

- to first sampling, dated on 18.05.2009, 72 samples of Coleoptera were collected, belonging to 21 species; the collected species were: *Cymindis humeralis* (22 samples); *Otiorrinchus ovatus* (6 samples); *Harpalus calceatus* (6 samples); *Omias rotundum* (5 samples); *Apion apricans* (4 samples); *Psylliodes chrysocephala* (4 samples.); *Cryptophilus obliteratus* (4 samples); *Brachynus* L. (1 sample); *Carabus coriaceus* (3 samples); *Harpalus distinguendus* (2 samples); *Harpalus aeneus* (2 samples); *Calathus fuscipes* (2 samples), *Orchesia micans* (2 samples), other species are represented by only one sample;
- to second sampling, dated on 05.06.2009, four samples were collected, belonging to the following two species: *Carabus violaceus* L. (2 samples) and *Calathus fuscipes* (2 samples);
- to third sampling, dated on 22.06.2009, 52 samples were collected, belonging to 16 species, of which has been noted: *Pterostichus niger* (4 samples); *Omias rotundum* (6 samples); *Harpalus calceathus* (10 samples); *Dermestes laniarius* L. (11 samples);

- to fourth sampling, dated on 15.07.2009, nine samples were collected, belonging to three species: *Leptinotarsa decemlineata* (5 samples), *Omias rotundum* (3 samples) and *Mordella fasciatta* (1 sample).
- to fifth sampling, dated on 28.07.2009, 17 samples were collected, belonging to six species: *Mordella fasciata* (8 samples); *Omias rotundum* (3 samples); with 2 specimens were represented the species *Phyllotreta vittula* şi *Baryplithes araneiformis*; *Longitatsus tabidus* and *Ennearthron cornutum* species were represented by one single sample;
- to sixth sampling, dated on 18.08.2009, 11 samples were collected, belonging to five species: *Mordella fasciata* (1 sample); *Calathus fuscipes* (4 samples); *Longitatsus tabidus* (3 samples); with 2 specimens were represented *Harpalus distinguendus* species, *Phyllotreta vittula* and *Baryplithes araneiformis*; *Mordella fasciata* and *Lagria hirta* species were represented by one single sample.

Table 2 - Coleoptera species collected by the Barber soil traps from sweet and sour cherry plantations, belonging V. Adamachi didactic Farm, Iaşi, 2009

No.	Species name	Sampling number / Sampling data					
		I 18.05	II 5.06	III 22.06	IV 15.07	V 28.07	VI 18.08
1	*Cymindis humeralis* Fourc./ *Carabidae*	22	0	0	0	0	0
2	*Otiorrhynchus ovatus* L./ *Curculionidae*	6	0	0	0	0	0
3	*Omias rotundatus* Germar/ *Curculionidae*	5	0	6	3	3	0
4	*Harpalus distinguendus* Duft./ *Carabidae*	2	0	2	0	0	2
5	*Harpalus calceatus* Duft. / *Carabidae*	6	0	10	0	0	0
6	*Cryptophilus obliteratus* Reitter/ *Cryptophagidae*	4	0	0	0	0	0
7	*Phyllodrepa melanocephala* F./*Staphylinidae*	1	0	0	0	0	0
8	*Silpha obscura* L./ *Silphidae*	1	0	0	0	0	0
9	*Opatrum sabulosum* L./*Tenebrionidae*	1	0	0	0	0	0
10	*Apion apricans* Dejean./ *Curculionidae*	4	0	0	0	0	0
11	*Psylliodes chrysocephala* L./ *Chrysomelidae*	4	0	1	0	0	0
12	*Orchesia minor* Walk./ *Melandryidae*	1	0	0	0	0	0
13	*Harpalus aeneus/ Carabidae*	2	0	2	0	0	0
14	*Calathus fuscipes* Goeze./ *Carabidae*	2	2	0	0	0	4

No.	Species name	Sampling number / Sampling data					
		I 18.05	II 5.06	III 22.06	IV 15.07	V 28.07	VI 18.08
15	*Orchesia micans* Panz./ *Melandryidae*	2	0	0	0	0	0
16	*Carabus coriaceus* L./ *Carabidae*	3	0	0	0	0	0
17	*Dermestes laniarius* Illig./ *Dermestidae*	1	0	11	0	0	0
18	*Sitona inops* Schaller./ *Curculionidae*	1	0	0	0	0	0
19	*Bembidion lampros* Herbst./ *Carabidae*	1	0	0	0	0	0
20	*Harpalus tardus/ Carabidae*	2	0	2	0	0	0
21	*Brachysomus hirtus* Hust./ *Curculionidae*	1	0	0	0	0	0
22	*Carabus violaceus* L./ *Carabidae*	0	2	0	0	0	0
23	*Otiorrhynchus raucus* Gyll./. *Curculionidae*	0	0	3	0	0	0
24	*Halyzia sedecimguttata* L./ *Coccinelidae*	0	0	3	0	0	0
25	*Amara ovata* F./ *Carabidae*	0	0	2	0	0	0
26	*Pterostichus niger* Schaller/ *Carabidae*	0	0	4	0	0	0
27	*Pseudoophonus rufipes* Schellenberg/ *Carabidae*	0	0	1	0	0	0
28	*Amara aenea* De Geer./ *Carabidae*	0	0	2	0	0	0
29	*Licinus cassideus* F./ *Carabidae*	0	0	1	0	0	0
30	*Polystichus connexus* Fourc./ *Carabidae*	0	0	1	0	0	0
31	*Combocerus glaber* Schall.- *Erotylidae*	0	0	1	0	0	0
32	*Leptinotarsa decemlineata* Say. / *Chrysomelidae*	0	0	0	5	0	0
33	Mordella fasciata Emery/ Mordellidae	0	0	0	1	8	1
34	*Longitarsus tabidus* F./ *Chrysomelidae*	0	0	0	0	1	3
35	*Ennearthron cornutum* Gyll./ *Aderidae*	0	0	0	0	1	0
36	*Phyllotreta vittula* Redt./ *Chrysomelidae*	0	0	0	0	2	0
37	*Barypeithes araneiformis* Schrank./ *Curculionidae*	0	0	0	0	2	0
38	Total	**72**	**4**	**52**	**9**	**17**	**11**
Total of six samplings				**165 samples**			

Following the structure and dynamics of Coleoptera species, collected with the Barber soil traps in sweet and sour cherry plantations, belonging to Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui county, the situation from measurements made using specialized dictionary (Panin, 1951; Rogojanu and Perju, 1979) (*Table 3*) is as follows:

- to first sampling, dated on 22.05.2009, 27 samples of Coleoptera species were collected, belonging to a total of 11 species; the highest number of specimens was represented by *Dermestes linarius* species (6 samples) and the lowest number by *Pangaeus major crux* and *Cymindis humeralis* species.
- to second sampling, dated on 06.06.2009, 28 samples were collected, belonging to a number of nine species; the highest number of samples (3) and species (6) were collected from the trap no. 6; the other traps have between 1 and 3 samples, belonging from 1, 2 or 3 species.
- to third sampling, dated on 19.06.2009, 59 samples were collected, belonging to a total of 15 species; the highest number of samples was represented by *Dermestes linarius* species (21 samples), and the lowest number by *Psylliodes chrysocephala* and *Curculio nucum* species.
- to fourth sampling , dated 06.07.2009, 10 samples were collected, belonging to a total of six species, as follows: *Dermestes lardarius*, *Carabus violaceus*, *Dermestes laniarius*, *Meligetes aeneus*, each represented by two species; *Cymindis vaporariorum* and *Harpalus punctifolis* species were represented by only one sample.
- to fifth sampling, dated 15.07.2009, eight samples of Coleoptera species were collected, belonging to a number of four species.
- to sixth sampling, dated on 14.08.2009, 20 samples were collected, which belong to a number of three species; *Carabus violaceus* species detached with a total of 17 specimens.

In total, 118 samples were collected, belonging to a total of 35 species.

Table 3 - Structure and dynamics of Coleoptera species collected with the Barber soil traps from sweet and sour cherry plantations, belonging to Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui county, 2009

No.	Species name	Sampling number / Sampling data					
		I 22.05	II 6.06	III 19.06	IV 6.07	V 15.07	VI 14.08
1	*Dermestes linarius*	6	6	21	2	1	0
2	*Cantharis fusca*	3	0	0	0	0	0
3	*Pangaeus crux major* L.	1	0	0	0	0	0
4	*Harpalus tardus*	2	2	0	0	0	0
5	*Harpalus calceatus*	3	3	0	0	0	0
6	*Otiorrynchus ovatus*	2	0	0	0	0	0

No.	Species name	Sampling number / Sampling data					
		I 22.05	II 6.06	III 19.06	IV 6.07	V 15.07	VI 14.08
7	*Adalia bipunctata* L.	2	0	0	0	0	0
8	*Cymindis humeralis*	1	0	0	0	0	0
9	*Omias rotundum*	2	0	0	0	0	0
10	*Opathrum sabulosum*	3	0	0	0	0	0
11	*Phyllotreta nemorum*	2	0	0	0	0	0
12	*Amara fasciatta*	0	1	0	0	0	0
13	*Coccinella 7 punctata*	0	5	0	0	0	0
14	*Otiorrynchus raucus*	0	3	2	0	0	0
15	*Brachinus crepitans*	0	0	2	0	0	0
16	*Omias rotundum*	0	3	0	0	0	0
17	*Amara aenea*	0	3	4	0	0	0
18	*Harpalus distinguendus*	0	0	2	0	0	0
19	*Harpalus calceatus*	0	3	7	0	0	0
20	*Harpalus pubescens*	0	0	2	0	0	0
21	*Harpalus azureus*	0	0	3	0	0	0
22	*Curculio nucum*	0	0	1	0	0	0
23	*Harpalus griseus*	0	0	0	0	0	1
24	*Psylliodes chrysocephala* L.	0	2	2	0	0	0
25	*Harpalus aeneus*	0	0	3	0	0	0
26	*Carabus coriaceus*	0	0	3	0	0	0
27	*Dermestes lardarius*	0	0	0	2	0	0
28	*Meligetes aeneus* F.	0	0	0	2	0	0
29	*Harpalus punctifolis*	0	0	0	1	0	0
30	*Harpalus tardus*	0	0	0	0	1	0
31	*Carabus violaceus* L.	0	0	4	2	4	17
32	*Cymindis vaporariorum*	0	0	0	1	0	0
33	*Propilea quatuordecimpunctata*	0	0	0	0	0	2
34	*Longitarsus tabidus*	0	0	0	0	2	0
35	**Total**	**27**	**25**	**30**	**10**	**6**	**20**
Total of six samplings		**118 samples**					

The researches on entomofauna of the tree crown were made in sweet and sour cherry plantations from V. Adamachi didactic Farm, Iaşi. The samples were collected with the beating method (Amzăr and Ivaşcu, 2003) and the situation is as follows (*Table 4*):

- to first sampling, dated on 05.05.2009, 27 samples were collected, belonging to seven species; the highest number of beetles was recorded by the species *Otiorrynchus ovatus* (20).
- to second sampling, dated 22.05.2009, was recorded a single species, *Cartodere elongata*, with a total of 3 samples.
- to third sampling, dated on 06.06.2009, not recorded any sample of *Coleoptera* species.
- to fourth sampling, dated on 19.06.2009, were captured a total of 10 samples of *Coleoptera*, the species

with the highest number of samples (6) being *Cartodere elongata*;
- to fifth sampling, dated on 06.07.2009, there were captured just 2 samples, belonging to *Cartodere elongate* species.
- to sixth sampling, dated on 15.07.2009, not recorded any sample of *Coleoptera* species.
- to seventh sampling, dated on 14.08.2009, there were captured 4 species of beetles, a total of 8 samples.
- to eighth sampling, dated 04.09.2009, there has been 6 samples, belonging to two species of *Coleoptera*.

Following the eight samplings, a total of 56 samples of beetles was collected (*Table 4*).

Table 4 - The species and the samples number collected with the beating method from sweet and sour cherry plantations, belonging to V. Adamachi didactic Farm, Iaşi, 2009

No.	Species name	Sampling number / Sampling data							
		I 5.05	II 22.05	III 6.06	IV 19.06	V 6.07	VI 15.07	VII 14.08	VIII 4.09
1	*Catodere elongata*	1	3	0	6	2	0	3	0
2	*Stethourus punctilum*	1	0	0	0	0	0	0	5
3	*Otiorrynchus ovatus*	20	0	0	1	0	0	0	0
4	*Longitarsus jacobae*	0	0	0	1	0	0	2	1
5	*Phylottreta vittula*	0	0	0	0	0	0	2	0
6	*Cymindis humeralis*	0	0	0	0	0	0	1	0
7	*Coccinella 7 punctata*	2	0	0	0	0	0	0	0
8	*Apion longirostre*	1	0	0	0	0	0	0	0
9	*Apion varipes*	1	0	0	0	0	0	0	0
10	*Psylliodes chrysocephala* L.	1	0	0	0	0	0	0	0
11	*Psylliodes chalconerus*	0	0	0	2	0	0	0	0
Total		**27**	**3**	**0**	**10**	2	**0**	**8**	**6**
Total of eight samplings		**56 samples**							

The researches on entomofauna of the tree crown were also made in sweet and sour cherry plantations from Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui county. The samples were collected by beating method, and the situation is as follows (*Table 5*):
- to first sampling, dated on 15.05.2009, seven samples were collected, belonging to four species: *Stethourus punctilum, Otiorrynchus*

ovatus, Apion nigritarse and *Apion vicia*;
- to second sampling, dated on 28.05.2009, three species were captured, *Cartodere elongata, Apion atomarium*, with nine samples, and *Coccinella 7 punctata*, with a single sample;
- to third sampling, dated on 06.06.2009, four samples of *Stethorus punctillum*, *Ceuthorrhynchus sulicicolis, Halyzia 14 gutata* and *Athous rufus* species was collected, each with a one sample;
- to fourth sampling, dated on 19.06.2009, has not captured any sample of beetle species;
- to fifth sampling, dated on 10.07.2009, nine samples were captured, belonging to *Cartodere elongata, Apion atomarium, Athous rufus, Phyllotreta amoracie*, *Longitarsus apicalis* and *Coccinella 7 punctata* species;
- to sixth sampling, dated on 29.07.2009, a total of 8 samples of beetles was collected, belonging to *Stethorus punctillum* and *Coccinella 7 punctata* species;
- to seventh sampling, dated on 19.08.2009, the samples were collected, belonging to the following five species: *Stethorus punctillum, Longitarsus apicalis, Longitarsus atricillus, Coccinella 7 punctata* and *Anthonomus varions*;
- to eighth sampling, dated on 02.09.2009, a total of 36 samples was recorded, belonging to five species: *Stethorus punctillum, Longitarsus jacobeae, Longitarsus anchusae, Coccinella 7 punctata* and *Psylliodes chrysocephala*.

Following the eight samplings, a total of 113 samples of beetles was collected. The highest number of samples (36) was recorded in the seventh sampling (19.08.2009) and in the eighth sampling (2.09.2009); at the other samplings between 0-13 samples of beetles were collected.

Table 5 – The species and the samples number collected with the beating method from sweet and sour cherry plantations, belonging to Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui county, 2009

No.	Species name	Sampling number / Sampling data							
		I 15.05	II 28.05	III 6.06	IV 19.06	V 10.07	VI 29.07	VII 19.08	VIII 2.09
1	*Catodere elongata*	1	3	0	0	1	0	0	0
2	*Stethourus punctilum*	2	0	1	0	0	7	20	25
3	*Otiorrynchus ovatus*	2	0	0	0	0	0	0	0
4	*Apion nigritarse*	1	0	0	0	0	0	0	0
5	*Apion viciae*	1	0	0	0	0	0	0	0
6	*Apion atomarium*	0	9	0	0	1	0	0	0
7	*Ceuthorrynchus sulicicalis*	0	0	1	0	0	0	0	0
8	*Halyzia 14 gutata*	0	0	1	0	0	0	0	0

No.	Species name	Sampling number / Sampling data							
		I 15.05	II 28.05	III 6.06	IV 19.06	V 10.07	VI 29.07	VII 19.08	VIII 2.09
9	*Coccinella bipunctata*	0	0	1	0	0	0	0	0
10	*Athourus rufus*	0	0	0	0	2	0	0	0
11	*Phyllotreta armoracie*	0	0	0	0	2	0	0	0
12	*Longitarsus apicalis*	0	0	0	0	2	0	6	0
13	*Longitarsus atricillus*	0	0	0	0	0	0	6	0
14	*Longitarsus jacobeae*	0	0	0	0	0	0	0	2
15	*Longitarsus anchusae*	0	0	0	0	0	0	0	1
16	*Coccinella 7 punctata*	0	1	0	0	1	1	3	4
17	*Anthonomus varions*	0	0	0	0	0	0	1	0
18	*Psylliodes chrysocephala* L.	0	0	0	0	0	0	0	4
Total		**7**	**13**	**4**	**0**	**9**	**8**	**36**	**36**
Total of eight samplings		**113 samples**							

Regarding the total number of samples collected with the two methods, Barber soil traps and beating method, the situation is as follows:

- in V. Adamachi didactic Farm, Iaşi stationary (*Table 6*), through the first method, after six and eight samplings, respectively, a number of 165 samples were collected, and through the second method - 56 samples of beetles;
- in Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui stationary (*Table 7*), through the first method, after six and eight samplings, respectively, 118 samples were collected, and through the second method - 113 samples of beetles.

Table 6 - Dynamics and the samples number of beetles collected in V. Adamachi didactic Farm, Iaşi stationary, 2009

Collection method	Collection data and the number of samples collected								Total samples
	I 18.05	II 5.06	III 22.06	IV 15.07	V 28.07	VI 18.08	VII 14.08	VIII 4.09	
Barber traps	75	4	52	9	17	11	-	-	165
	Collection data and the number of samples collected								**Total samples**
	I 5.05	**II 22.05**	**III 6.06**	**IV 19.06**	**V 6.07**	**VI 15.07**	**VII 19.08**	**VIII 2.09**	
Beating method	27	3	0	10	2	0	8	6	56

Table 7 - Dynamics and the samples number of beetles collected in Agricultural Society Loturi Service SRL Farm Deleşti, Vaslui stationary, 2009

Collection method	Collection data and the number of samples collected								Total samples
	I 22.05	II 6.06	III 19.06	IV 6.07	V 15.07	VI 14.08	VII 19.08	VIII 2.09	
Barber traps	27	25	30	10	6	20	-	-	118
	Data collection and the number of samples collected								Total samples
	I 15.05	II 28.05	III 6.06	IV 19.06	V 10.07	VI 29.07	VII 19.08	VIII 2.09	
Beating method	7	13	4	0	9	8	36	36	113

CONCLUSIONS

In 2009, in sweet and sour cherry plantations from Agricultural Society Loturi Service SRL Deleşti, Vaslui county and V. Adamachi didactic Farm, Iaşi, using the Barber soil traps, 283 samples of beetles were collected, belonging to 40 species; the highest number of beetles were recorded to *Carabus violaceus, Harpalus calceatus, Amara aenea, Calathus fuscipes, Dermestes laniarius, Cymindis humeralis, Otiorrynchus ovatus, Mordella fasciata* species.

The highest number of samples (165) were collected with the soil traps in sweet and sour cherry plantations, belonging to V. Adamachi didactic Farm-Iaşi.

In sweet and sour cherry plantations from Agricultural Society Loturi Service Farm SRL Deleşti-Vaslui, using the Barber soil traps, a number of 118 samples of beetles was collected, belonging to 32 species.

In 2009, in sweet and sour cherry mentioned plantations, bimonthly, through the beating method, from May to September eight samplings were performed.

Following entomologic material collection through the beating method, in sweet and sour cherry plantations, belonging to V. Adamachi didactic Farm-Iaşi, a total of 56 samples of beetles have recorded, of which: *Otiorrynchus ovatus, Stethourus punctilum, Catodere elongata, Longitarsus jacobae, Coccinella 7 punctata*; in sweet and sour cherry plantations, belonging to Agricultural Society Loturi Service SRL Deleşti-Vaslui has been a total of 113 samples of beetles, of which: *Stethourus punctilum, Longitarsus atricillus, Longitarsus apicalis, Coccinella 7punctata, Otiorrynchus ovatus, Apion automarium.*

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