

CONTRIBUTION TO THE STUDY OF THE NOCTUIDAE OF ČELAREVO (SERBIA)

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Abstract

Moths were collected in Čelarevo (UTM CR81) from 2008 to 2014 using a light trap, type RO Agrobecej, with a 250W mercury lamp. A total of 234000 specimens were collected, of which 223226 are identified at species level (292 species in all). The present paper provides data relating to 28921 specimens of 137 Noctuidae species. The faunistically most important findings are as follows: *Diachrysia nadeja*, *Diachrysia zosimi*, *Diachrysia chryson*, *Acontia candefacta*, *Acronicta aceris*, *A. strigosa*, *Simyra albovenosa*, *Cucullia fraudatrix*, *Amphipyra livida*, *Meganephria bimaculosa*, *Heliothis nubigera*, *Charanyca ferruginea*, *Calamia tridens*, *Helotropha leucostigma*, *Gortyna borellii lunata*, *Hydraecia micacea*, *Archanara dissoluta*, *Apamea anceps*, *Mesogona oxalina*, *Panolis flammea*, *Saragossa porosa kenderesiensis*, *Hadena irregularis*, *Senta flammea*, *Agrotis puta*, *A. vestigialis*, *Cerastis rubricosa*.

KEY WORDS: Noctuidae; fauna; porosa

Introduction

Previous data on the Lepidoptera of Čelarevo included 189 species (Vajgand *et al.*, 2009, 2010a, 2010b, 2010c, 2010d, 2012a, 2012b, 2016, Stojanović *et al.*, 2017). From this region, data on moths are available for Fruška Gora (Stojanović, 2012), Novi Sad (Kereši & Almaši, 2009) and Sombor (Vajgand 1988, Vajgand, 1995a, Vajgand, 1995b, Vajgand 1996, Vajgand 1999, Vajgand 2001, Vajgand 2003, Stojanović & Vajgand 2007, Stojanović *et al.* 2006, Vajgand 2009, Vajgand 2010a, Vajgand 2010c, Vajgand 2011, Vajgand 2012a).

A light trap was used to monitor the presence/absence and the phenology of moths that significantly affect agriculture. Since no selective attractant was used, a considerable number of photophilous insects was collected. Vajgand (2016) presented the first part of research into moths, and therefore this paper only presents data on the Noctuidae.

Methods

The research was performed between 2008 and 2014 with a light trap operating a few kilometers north of the village of Čelarevo, UTM code CR81. Čelarevo is situated on the left bank of the Danube River. The light trap was placed in an experimental field belonging to the Agrimatco Company. Nearby are 0.5 ha of apple orchards surrounded by a 2-km wide circle of agrobiocenosis, the dominant crops being corn, wheat, soybean and sugar beet. The main soil type is a degraded chernozem-like meadow. Further towards the south is a wetland area, 1 km wide. This area is partly flooded when the level of the Danube is high. Poplars (*Populus* spp.), as well as other marsh trees (*Salix* spp., *Quercus* spp., etc.), shrubs (*Prunus spinosa*, *Crataegus* spp., etc.) and herbaceous plants (*Phragmites* spp., *Typha* spp., etc.) are dominant in the area. Behind this area runs the main stream of the Danube River.

The light trap was of type RO Agrobečej. The light source used was a 250 W mercury vapor lamp. The trap operated from the beginning of April until mid-October. Specimens were killed with a dichlorvos-based insecticide, and were removed from the trap every day. They were packed separately and sent to the laboratory for identification.

The identification of moths was performed with a help of the following keys: Abafi-Aigner (1907), Forster & Wohlfahrt (1980), Rakosy (1996), Hacker *et al.* (2002) and Fibiger *et al.* (2009).

Certain specimens were preserved by standard procedure Simova Tošić & Spasić (1995) and are kept in author's collection. Taxonomy follows Karsholt *et al.* (2013), and the species codes from Karsholt & Razowski (1996). Faunal types are based on Varga *et al.* (2005) and the order of families and species follows Fauna Europaea (Karsholt & Nieuwerkerken, 2013). Migratory types follow the classification of Eitschberger *et al.* (1991).

Results

The checklist of recorded species includes code numbers. The first number provides the serial number in this paper. The second number is the code number of the species used by Karsholt & Razowski (1996). For those species where multiple specimens were recorded, the number of specimens is given in Tables in the Appendix. These specimen numbers are cumulative for five days.

Family Noctuidae

Subfamily Plusiinae

1. 9091 *Abrostola tripartita* (Hufnagel, 1766)

Collection dates: 04.06.2011, single specimen.

Faunal type: 1.3. Euro-Siberian.

2. 9093 *Abrostola triplasia* (Linnaeus, 1758)

Collection dates: 30.04.-22.09. (Appendix Table A-I), 43 specimens.

Faunal type: 1.3. Euro-Siberian.

3. 9081 *Trichoplusia ni* (Hübner, 1803)

Collection dates: 13.06.-10.09. (Appendix Table A-II), 28 specimens.

Faunal type: 0.3. Tropical- pantropical.

4. 9051 *Macdunnoughia confusa* (Stephens, 1850)

Collection dates: 10.04.-22.10. (Appendix Table A-III), 413 specimens.

Faunal type: 1.3. Euro-Siberian.

5. 9045 *Diachrysia chrysitis* (Linnaeus, 1758)

Collection dates: 03.05.-07.10. (Appendix Table A-IV), 37 specimens.

Faunal type: 1.3. Euro-Siberian.

6. 9046 *Diachrysia stenochrysis* (Warren, 1913)

Collection dates: 07.05.-09.10. (Appendix Table A-V), 84 specimens.

Faunal type: 1.3. Euro-Siberian.

7. 9047 *Diachrysia nadeja* (Oberthür, 1880)

Collection dates: 29.05.2008 and 23.06.2011.

Faunal type: 3.06. Manchurian- (southern Siberian) - Ponto-Pannonian disjunct.

8. 9048 *Diachrysia zosimi* (Hübner, 1822)

Collection dates: 03.08.2010.

Faunal type: 3.06. Manchurian- (southern Siberian) - Ponto-Pannonian disjunct.

9. 9049 *Diachrysia chryson* (Esper, 1789)

Collection dates: 14.06.2010.

Faunal type: 1.3. Euro-Siberian.

10. 9056 *Autographa gamma* (Linnaeus, 1758)

Collection dates: 17.04.-22.10. (Appendix Table A-VI), 996 specimens.

Faunal type: 1.2. Holopalaeartic.

11. 9053 *Plusia festucae* (Linnaeus, 1758)

Collection dates: 07.07.2008, 20.09.2010, 12.07.2011, 13.07.2011, 04.09.2011.

Faunal type: 1.3. Euro-Siberian.

Subfamily Eustrotiinae

12. 9114 *Deltote pygarga* (Hufnagel, 1766)

Collection dates: 21.05.2011 (two), 22.05.2011, 27.05.2011, 01.06.2011, 04.06.2011, 05.06.2011, 13.06.2011, 26.07.2011 (two), 28.07.2011, 29.07.2011, 30.07.2011, 03.08.2011, 04.08.2011, 14.08.2011, 07.06.2012, 21.05.2014 and 22.05.2014, 19 specimens collected.

Faunal type: 1.3. Euro-Siberian.

13. 9117 *Deltote uncula* (Clerck, 1759)

Collection dates: 16.05.2011 and 20.06.2014.

Faunal type: 2.3. Boreo-continental.

14. 9118 *Deltote bankiana* (Fabricius, 1775)

Collection dates: 29.05.-28.08. (Appendix Table A-VII), 24 specimens.

Faunal type: 2.3. Boreo-continental.

Subfamily Acontiinae

15. 8965 *Tyta luctuosa* (Denis & Schiffermüller, 1775) (formerly *Acontia*)

Collection dates: 22.04.-27.09. (Appendix Table A-VIII), 523 specimens.

Faunal type: 1.3. Euro-Siberian.

16. 9097 *Acontia trabealis* (Scopoli, 1763)

Collection dates: 30.04.-03.10. (Appendix Table A-IX), 4127 specimens.

Faunal type: 1.3. Euro-Siberian.

17. 9099 *Acontia candefacta* (Hübner, 1831)

Collection dates: 10.05.2013, 06.07.2013, 09.08.2014 and 22.08.2014.

Faunal type: 0.04. Nearctic, introduced.

18. 9100 *Acontia lucida* (Hufnagel, 1766)

Collection dates: 04.06.2008, 26.08.2009, 11.06.2012, 14.07.2012, 11.06.2012 and 18.08.2012.

Faunal type: 4.3. Holo-Mediterranean.

19. 8958 *Aedia funesta* (Esper, 1786)

Collection dates: 24.05.-28.09. (Appendix Table A-X), 26 specimens.

Faunal type: 4.3. Holo-Mediterranean.

20. 8959 *Aedia leucomelas* (Linnaeus, 1758)

Collection dates: 22.05.-25.09. (Appendix Table A-XI), 44 specimens.

Faunal type: 0.1.3. Palaeotropical.

Subfamily Pantheinae

21. 10372 *Colocasia coryli* (Linnaeus, 1758)

Collection dates: 22.05.2011, 23.05.2011, 26.05.2011, 27.05.2011, 14.07.2011, 29.04.2013, 13.04.2012, 14.04.2012, 30.04.2012, 29.06.2012, 07.07.2012 and 08.07.2012, 12 specimens collected.

Faunal type: 1.3. Euro-Siberian.

Subfamily Acronictinae

22. 8772 *Moma alpium* (Osbeck, 1778)

Collection dates: 21.06.2008 and 23.06.2011.

Faunal type: 4.3. Holo-Mediterranean.

23. 8778 *Acronicta aceris* (Linnaeus, 1758)

Collection dates: 24.07.2010.

Faunal type: 4.3. Holo-Mediterranean.

24. 8780 *Acronicta megacephala* (Denis & Schiffermüller, 1775)

Collection dates: 26.04.-07.09. (Appendix Table A-XII), 26 specimens.

Faunal type: 2.3. Boreo-continental.

25. 8781 *Acronicta strigosa* (Denis & Schiffermüller, 1775)

Collection dates: 28.04.2008 and 16.08.2011.

Faunal type: 2.3. Boreo-continental.

26. 8787 *Acronicta rumicis* (Linnaeus, 1758)

Collection dates: 09.04.-05.10. (Appendix Table A-XIII), 463 specimens.

Faunal type: 1.3. Euro-Siberian.

27. 8789 *Craniophora ligustri* (Denis & Schiffermüller, 1775)

Collection dates: 01.05.2009, 04.05.2010, 18.08.2011, 20.08.2011 (two), 23.08.2011, 01.05.2012 (two), 11.08.2012 and 25.04.2014, ten specimens collected.

Faunal type: 1.3. Euro-Siberian.

28. 8793 *Simyra albovenosa* (Goeze, 1781)

Collection dates: 22.06.2008, 18.08.2009, 21.06.2011 and 23.06.2011.

Faunal type: 2.3. Boreo-continental.

Subfamily Metoponiinae

29. 9343 *Aegle kaekeritziana* (Hübner, 1799)

Collection dates: 14.05.2008, 18.05.2008, 28.05.2008, 20.06.2008, 18.05.2009, 19.05.2009, 22.05.2009, 27.05.2009 (two), 09.06.2009, 26.05.2010, 09.06.2010, 10.06.2010, 05.06.2011, 16.06.2013 and 23.05.2014. In total 16 specimens collected.

Faunal type: 4.3. Holo-Mediterranean.

Subfamily Cuculliinae

30. 9181 *Cucullia fraudatrix* Eversmann, 1837

Collection dates: 02.06.2008 and 17.07.2011.

Faunal type: 1.3. Euro-Siberian.

Subfamily Amphipyrinae

31. 9307 *Amphipyra pyramidea* (Linnaeus, 1758)

Collection dates: 03.07.2009, 24.08.2009, 28.08.2009, 09.07.2013, 12.07.2013, 03.08.2013, 30.06.2014 and 19.07.2014, 8 specimens collected.

Faunal type: 1.3. Euro-Siberian.

32. 9310 *Amphipyra livida* (Denis & Schiffermüller, 1775)

Collection dates: 01.07.2009, 07.07.2014 and 26.07.2014.

Faunal type: 1.3. Euro-Siberian.

33. 9311 *Amphipyra tragopoginis* (Clerck, 1759)

Collection dates: 03.09.2008, 05.07.2009, 25.09.2009, 10.06.2010, 20.09.2010, 29.09.2012 and 09.10.2013.

Faunal type: 1.3. Euro-Siberian.

34. 9689 *Valeria oleagina* (Denis & Schiffermüller, 1775)

Collection dates: 14.04.2008, 22.04.2011, 13.04.2012, 15.04.2013, 23.04.2013, 10.04.2010, 11.04.2010 (two), 07.04.2009, 09.04.2009, 10.04.2009 (three) and 11.04.2009, 14 specimens collected.

Faunal type: 1.3. Euro-Siberian.

35. 9679 *Meganephria bimaculosa* (Linnaeus, 1767)

Collection dates: 27.09.2009.

Faunal type: 4.04. Holo-Mediterranean (-Turkestanian, -Iranian).

36. 9682 *Allophies oxyacanthae* (Linnaeus, 1758)

Collection dates: 20.10.2008, 10.10.2013 (two), 11.10.2013, 12.10.2013, 19.10.2013, 22.10.2013, 11.10.2014, 16.10.2014 and 18.10.2014, 10 specimens collected.

Faunal type: 4.07. Ponto-Mediterranean.

Subfamily Oncocnemidinae

37. 9240 *Calophasia lunula* (Hufnagel, 1766)

Collection dates: 19.04.-29.08. (Appendix Table A-XIV), 26 specimens.

Faunal type: 1.3. Euro-Siberian.

Subfamily Condicinae

38. 9524 *Eucarta amethystina* (Hübner, 1803)

Collection dates: 21.05.-18.08. (Appendix Table A-XV), 26 specimens.

Faunal type: 3.06. Manchurian- (southern Siberian) - Ponto-Pannonian disjunct.

39. 9525 *Eucarta virgo* (Treitschke, 1835)

Collection dates: 29.05.-27.08. (Appendix Table A-XVI), 67 specimens.

Faunal type: 3.06. Manchurian- (southern Siberian) - Ponto-Pannonian disjunct.

Subfamily Heliothinae

40. 9358 *Protoschinia scutosa* (Denis & Schiffermüller, 1775)

Collection dates: 21.07.2008, 11.07.2009, 22.08.2009 (five), 19.09.2009, 11.07.2010, 5.09.2010, 01.07.2012, 23.07.2012, 15.08.2012, 19.08.2012 and 24.08.2012, 15 specimens collected.

Faunal type: 0.1.3. Palaeotropical.

41. 9364 *Heliothis viriplaca* (Hufnagel, 1766)

Collection dates: 25.07.2011.

Faunal type: 1.3. Euro-Siberian.

42. 9367 *Heliothis peltigera* (Denis & Schiffermüller, 1775)

Collection dates: 16.05.-05.08. (Appendix Table A-XVII), 66 specimens collected.

Faunal type: 4.3. Holo-Mediterranean.

43. 9368 *Heliothis nubigera* Herrich-Schäffer, 1851

Collection dates: 22.04.2009, 10.06.2009 and 15.06.2012.

Faunal type: 0.1.3. Palaeotropical.

44. 9370 *Helicoverpa armigera* (Hübner, 1808)

Collection dates: 30.04.-16.10. (Appendix Table A-XVIII), 6624 specimens.

Faunal type: 0.3. Tropical – pantropical.

45. 9372 *Pyrrhia umbra* (Hufnagel, 1766)

Collection dates: 10.05.-06.09. (Appendix Table A-XIX), 190 specimens.

Faunal type: 1.3. Euro-Siberian.

Subfamily Bryophilinae

46. 8819 *Nyctobrya* sp. (muralis group)

Collection dates: 25.07.2012 and 16.08.2014 and 21.08.2014.

Faunal type: 1.3. Euro-Siberian.

Subfamily Noctuinae

47. 9122 *Pseudeustrotia candidula* (Denis & Schiffermüller, 1775)

Collection dates: 17.05.-02.09. (Appendix Table A-XX), 40 specimens.

Faunal type: 2.3. Boreo-continental.

48. 9460 *Spodoptera exigua* (Hübner, 1808)

Collection dates: 11.06.-06.10. (Appendix Table A-XXI), 205 specimens.

Faunal type: 0.3. Tropical – pantropical.

49. 9396 *Elaphria venustula* (Hübner, 1790)

Collection dates: 25.04.-21.08. (Appendix Table A-XXII), 190 specimens.

Faunal type: 1.3. Euro-Siberian.

50. 9424 *Caradrina kadenii* Freyer, 1836

Collection dates: 28.08.2013, 16.09.2013 and 24.09.2013.

Faunal type: 1.3. Euro-Siberian.

51. 9433 *Caradrina clavipalpis* (Scopoli, 1763)

Collection dates: 14.09.2009 (two) and 04.09.2012 (two).

Faunal type: 1.1. Holarctic.

52. 9454 *Hoplodrina ambigua* (Denis & Schiffermüller, 1775)

Collection dates: 07.05.-13.10. (Appendix Table A-XXIII), 376 specimens.

Faunal type: 4.3. Holo-Mediterranean.

53. 9471 *Chilodes maritima* (Tauscher, 1806)

Collection dates: 20.05.2008, 28.05.2008 (two), 29.05.2008, 02.06.2008, 04.08.2008, 08.08.2008, 15.08.2008, 16.08.2008 and 17.08.2008, 09.06.2009, 13.05.2010, 29.08.2011, 21.08.2012 and 05.05.2013, 15 specimens collected.

Faunal type: 1.3. Euro-Siberian.

54. 9456 *Charanyca trigrammica* (Hufnagel, 1766)

Collection dates: 02.05.-20.06. (Appendix Table A-XXIV), 69 specimens.

Faunal type: 4.3. Holo-Mediterranean.

55. 9483 *Charanyca ferruginea* (Esper, 1785)

Collection dates: 30.06.2009.

Faunal type: 1.3. Euro-Siberian.

56. 9481 *Dypterygia scabriuscula* (Linnaeus, 1758)

Collection dates: 20.05.-09.09. (Appendix Table A-XXV), 32 specimens.

Faunal type: 1.3. Euro-Siberian.

57. 9501 *Trachea atriplicis* (Linnaeus, 1758)

Collection dates: 21.04.-04.10. (Appendix Table A-XXVI), 760 specimens.

Faunal type: 1.3. Euro-Siberian.

58. 9492 *Polyphaenis sericeata* (Esper, 1787)

Collection dates: 02.07.2008, 08.07.2010, 09.07.2010, 08.07.2012 (two), 06.07.2013, 25.06.2014, 29.06.2014, 08.07.2014 and 09.07.2014, 10 specimens collected.

Faunal type: 4.3. Holo-Mediterranean.

59. 9496 *Thalpophila matura* (Hufnagel, 1766)

Collection dates: 22.08.-15.09. (Appendix Table A-XXVII), 62 specimens.

Faunal type: 1.3. Euro-Siberian.

60. 9515 *Actinotia polyodon* (Clerck, 1759)

Collection dates: 24.04.-12.09. (Appendix Table A-XXVIII), 29 specimens.

Faunal type: 2.3. Boreo-continental.

61. 9505 *Phlogophora meticulosa* (Linnaeus, 1758)

Collection dates: 13.04.-23.10. (Appendix Table A-XXIX), 156 specimens.

Faunal type: 1.3. Euro-Siberian.

62. 9503 *Euplexia lucipara* (Linnaeus, 1758)

Collection dates: 09.05.-11.08. (Appendix Table A-XXX), 30 specimens.

Faunal type: 1.3. Euro-Siberian.

63. 9848 *Calamia tridens* (Hufnagel, 1766)

Collection dates: 30.06.2008.

Faunal type: 1.3. Euro-Siberian.

64. 9857 *Helotropha leucostigma* (Hübner, 1808) (formerly *Celaena leucostigma*)

Collection dates: 14.08.2009.

Faunal type: 2.3. Boreo-continental.

65. 9841 *Gortyna flavago* (Denis & Schiffermüller, 1775)

Collection dates: 22.09.2008, 19.09.2010, 02.10.2010, 03.10.2013, 03.09.2014 and 02.10.2014.

Faunal type: 2.3. Boreo-continental.

66. 9845 *Gortyna borelii lunata* Freyer, 1838

Collection dates: 10.10.2009.

Faunal type: 3.04. Ponto-Caspian (-southern Siberian).

67. 9834 *Hydraecia micacea* (Esper, 1789)

Collection dates: 15.08.2009.

Faunal type: 2.3. Boreo-continental.

68. 9814 *Rhizedra lutosa* (Hübner, 1803)

Collection dates: 04.09.-23.10. (Appendix Table A-XXXI), 37 specimens.

Faunal type: 2.3. Boreo-continental.

69. 9859 *Nonagria typhae* (Thunberg, 1784)

Collection dates: 10.06.2009, 29.06.2012, 6.07.2012, 7.07.2012, 9.07.2012 (two), 10.07.2012.

Faunal type: 2.3. Boreo-continental.

70. 9864 *Lenisa geminipuncta* (Haworth, 1809)

Collection dates: 29.06.2008, 06.07.2008, 11.07.2008, 13.07.2008 (two), 10.07.2009, 23.07.2009, 30.07.2009, 19.07.2010, 07.07.2012, 08.07.2012, 11.07.2012, 16.07.2013, 08.07.2014 and 18.07.2014, 15 specimens collected.

Faunal type: 2.3. Boreo-continental.

71. 9866 *Archanara dissoluta* (Treitschke, 1825)

Collection dates: 29.07.2014.

Faunal type: 2.3. Boreo-continental.

72. 9867 *Globia sparganii* (Esper, 1790) (formerly *Archanara sparganii*)

Collection dates: 02.07.2008, 13.07.2008, 16.07.2009, 18.07.2009, 20.07.2009, 24.07.2009 (two), 25.07.2009, 12.07.2010, 08.07.2011, 11.07.2011, 19.07.2011, 11.07.2012, 27.07.2012, 09.08.2012, 18.07.2013 and 9.08.2013, 17 specimens collected in seven years.

Faunal type: 1.3. Euro-Siberian.

73. 9748 *Apamea monoglypha* (Hufnagel, 1766)

Collection dates: 17.06.2014.

Faunal type: 1.3. Euro-Siberian.

74. 9770 *Apamea anceps* (Denis & Schiffermüller, 1775)

Collection dates: 01.06.2011.

Faunal type: 2.3. Boreo-continental.

75. 9771 *Apamea sordens* (Hufnagel, 1766)

Collection dates: 25.05.2009, 27.05.2009, 27.05.2011, 01.06.2011, 20.05.2012 and 28.04.2014.

Faunal type: 2.3. Boreo-continental.

76. 9789 *Mesapamea secalis* (Linnaeus, 1758)

Collection dates: 21.05.2008, 03.06.2008, 07.06.2008, 16.06.2008, 05.09.2011, 09.09.2011, 05.07.2012, 31.08.2012, 22.08.2013, 29.06.2014, 07.07.2014 and 08.07.2014, 12 collected specimens.

Faunal type: 2.3. Boreo-continental.

77. 9780 *Oligia strigilis* (Linnaeus, 1758)

Collection dates: 16.05.-15.06. (Appendix Table A-XXXII), 55 specimens.

Faunal type: 1.3. Euro-Siberian.

78. 9537 *Apterogenum ypsilon* (Denis & Schiffermüller, 1775)

Collection dates: 25.05.2009 (two), 30.05.2009, 03.06.2009, 05.06.2009, 09.06.2009 (two), 10.06.2009, 02.06.2012, 06.06.2013, 07.06.2013, 15.06.2013, 16.06.2013 and 25.05.2014, 14 specimens collected.

Faunal type: 2.3. Boreo-continental.

79. 9558 *Tiliacea sulphurago* (Denis & Schiffermüller, 1775) (formerly *Xanthia sulphurago*)

Collection dates: 01.10.2008, 03.10.2009, 18.09.2012, 25.09.2012, 30.09.2012, 11.09.2013, 03.10.2013 and 12.10.2013.

Faunal type: 2.3. Boreo-continental.

80. 9559 *Cirrhia icteritia* (Hufnagel, 1766) (formerly *Xanthia icteritia*)

Collection dates: 25.09.2008, 26.10.2009, 25.10.2012, 30.10.2012, 01.10.2013, 08.10.2013, 09.10.2013 (two), 22.09.2014, 23.09.2014, 05.10.2014 and 14.10.2014, 12 specimens collected.

Faunal type: 1.3. Euro-Siberian

81. 9566 *Agrochola circellaris* (Hufnagel, 1766)

Collection dates: 04.09.-23.10. (Appendix Table A-XXXIII), 84 specimens.

Faunal type: 1.3. Euro-Siberian.

82. 9569 *Agrochola lota* (Clerck, 1759)

Collection dates: 15.10.2008, 16.10.2008 and 23.10.2008.

Faunal type: 1.3. Euro-Siberian.

83. 9609 *Conistra rubiginea* (Denis & Schiffermüller, 1775)

Collection dates: 15.04.2009, 17.04.2009, 20.04.2009 and 19.09.2010.

Faunal type: 4.3. Holo-Mediterranean.

84. 9556 *Xanthia togata* (Esper, 1788)

Collection dates: 01.10.2012 and 11.10.2013.

Faunal type: 1.3. Euro-Siberian.

85. 9560 *Cirrhia gilvago* (Denis & Schiffermüller, 1775) (formerly *Xanthia gilvago*)

Collection dates: 02.10.2008, 08.10.2008, 09.10.2008, 03.10.2011, 04.10.2011, 05.10.2011 and 02.10.2012.

Faunal type: 1.3. Euro-Siberian.

86. 9561 *Cirrhia ocellaris* (Borkhausen, 1792) (formerly *Xanthia ocellaris*)

Collection dates: 01.10.2012, 05.10.2012 and 06.10.2012.

Faunal type: 1.3. Euro-Siberian.

87. 9596 *Eupsilia transversa* (Hufnagel, 1766)

Collection dates: 08.10.2008 (two), 21.10.2008 (two), 11.04.2009 and 23.09.2009, 17.09.2013 and 14.10.2013.

Faunal type: 1.3. Euro-Siberian.

88. 9527 *Ipimorpha retusa* (Linnaeus, 1761)

Collection dates: 09.06.-09.07. (Appendix Table A-XXXIV), 31 specimens.

Faunal type: 2.3. Boreo-continental.

89. 9528 *Ipimorpha subtusa* (Denis & Schiffermüller, 1775)

Collection dates: 28.05.-17.08. (Appendix Table A-XXXV), 133 specimens.

Faunal type: 2.3. Boreo-continental.

90. 9548 *Cosmia affinis* (Linnaeus, 1767)

Collection dates: 17.06.-27.09. (Appendix Table A-XXXVI), 21 specimens.

Faunal type: 1.3. Euro-Siberian.

91. 9549 *Cosmia pyralina* (Denis & Schiffermüller, 1775)

Collection dates: 09.06.-30.06. (Appendix Table A-XXXVII), 22 specimens.

Faunal type: 1.3. Euro-Siberian.

92. 9550 *Cosmia trapezina* (Linnaeus, 1758)

Collection dates: 07.06.-28.07. (Appendix Table A-XXXVIII), 28 specimens.

Faunal type: 1.3. Euro-Siberian.

93. 9552 *Atethmia centrago* (Haworth, 1809)

Collection dates: 06.09.-09.10. (Appendix Table A-XXXIX), 98 specimens.

Faunal type: 4.3. Holo-Mediterranean.

94. 9540 *Mesogona oxalina* (Hübner, 1803)

Collection dates: 22.10.2010, 23.09.2011 and 27.09.2011.

Faunal type: 2.3. Boreo-continental.

95. 9649 *Aporophyla lutulenta* (Denis & Schiffermüller, 1775)

Collection dates: 07.10.2009, 08.10.2009, 01.10.2012, 09.10.2013, 09.10.2013 (three), 12.10.2013, 13.10.2013 and 16.10.2013.

Faunal type: 4.07. Ponto-Mediterranean.

96. 10052 *Panolis flammea* (Denis & Schiffermüller, 1775)

Collection dates: 13.04.2013.

Faunal type: 2.3. Boreo-continental.

97. 10037 *Orthosia incerta* (Hufnagel, 1766)

Collection dates: 11.04.2009, 12.04.2009, 14.04.2009 (two), 16.04.2009, 18.04.2009 (two), 20.04.2009, 26.04.2010, 13.04.2013 and 18.04.2013 (two), 12 specimens collected.

Faunal type: 1.3. Euro-Siberian.

98. 10038 *Orthosia gothica* (Linnaeus, 1758)

Collection dates: 11.04.-25.04. (Appendix Table A-XXXX), 58 specimens.

Faunal type: 1.3. Euro-Siberian.

99. 10048 *Orthosia gracilis* (Denis & Schiffermüller, 1775)

Collection dates: 11.04.-25.04. (Appendix Table A-XXXXI), 22 specimens.

Faunal type: 4.3. Holo-Mediterranean.

100. 10050 *Orthosia munda* (Denis & Schiffermüller, 1775)

Collection dates: 13.04.2012 and 13.04.2012.

Faunal type: 1.3. Euro-Siberian.

101. 10054 *Egira conspicillaris* (Linnaeus, 1758)

Collection dates: 11.04.-28.05. (Appendix Table A-XXXXII), 129 specimens.

Faunal type: 4.3. Holo-Mediterranean

102. 10064 *Tholera cespitis* (Denis & Schiffermüller, 1775)

Collection dates: 12.09.2008, 13.09.2010 and 11.09.2013.

Faunal type: 2.3. Boreo-continental.

103. 10065 *Tholera decimalis* (Poda, 1761)

Collection dates: 22.09.2009 (two), 23.09.2009, 27.09.2012 and 25.09.2013.

Faunal type: 2.3. Boreo-continental.

104. 9895 *Anarta trifolii* (Hufnagel, 1766)

Collection dates: 13.04.-23.10. (Appendix Tables XXXXIIIa and XXXXIIIb), 3599 specimens.

Faunal type: 1.3. Euro-Siberian.

105. 9912 *Lacanobia w-latinum* (Hufnagel, 1766)

Collection dates: 24.04.-16.09. (Appendix Table A-XXXXIV), 57 specimens.

Faunal type: 4.04. Holo-Mediterranean (-Turkestanian, -Iranian)

106. 9914 *Lacanobia splendens* (Hübner, 1808)

Collection dates: 09.06.2008, 13.07.2008, 18.08.2010 and 29.07.2011.

Faunal type: 3.04. Ponto-Caspian (-southern Siberian).

107. 9917 *Lacanobia oleracea* (Linnaeus, 1758)

Collection dates: 12.04.-14.10. (Appendix Table A-XXXXV), 907 specimens.

Faunal type: 1.3. Euro-Siberian.

108. 9920 *Lacanobia suasa* (Denis & Schiffermüller, 1775)

Collection dates: 25.04.-29.09. (Appendix Table A-XXXXVI), 218 specimens.

Faunal type: 1.3. Euro-Siberian.

109. 9987 *Mamestra brassicae* (Linnaeus, 1758)

Collection dates: 01.05.-27.09. (Appendix Table A-XXXXVII), 155 specimens.

Faunal type: 1.3. Euro-Siberian.

110. 9982 *Saragossa porosa kenderesiensis* Kovács, 1968

Collection dates: 14.07.2008.

Faunal type: 9.1. Turano - eremic.

111. 9933 *Hadena bicruris* (Hufnagel, 1766)

Collection dates: 15.05.2009 (two), 08.06.2009, 05.07.2009, 14.07.2009, 28.04.2011, 22.05.2011 and 01.06.2011.

Faunal type: 1.3. Euro-Siberian.

112. 9935 *Conisania luteago* (Denis & Schiffermüller, 1775) (formerly *Hadena luteago*)

Collection dates: 11.05.-15.07. (Appendix Table A-XXXXVIII), 34 specimens.

Faunal type: 4.3. Holo-Mediterranean.

113. 9955 *Sideridis rivularis* (Fabricius, 1775) (formerly *Hadena rivularis*)

Collection dates: 16.05.2011.

Faunal type: 1.3. Euro-Siberian.

114. 9964 *Hadena irregularis* (Hufnagel, 1766)

Collection dates: 07.09.2011.

Faunal type: 3.04. Ponto-Caspian (-southern Siberian).

115. 9999 *Mythimna turca* (Linnaeus, 1761)

Collection dates: 03.05.-07.10. (Appendix Table A-XXXXIX), 519 specimens.

Faunal type: 2.3. Boreo-continental.

116. 10001 *Mythimna ferrago* (Fabricius, 1787)

Collection dates: 09.06.-18.10. (Appendix Table A-L), 52 specimens.

Faunal type: 1.3. Euro-Siberian.

117. 10002 *Mythimna albipuncta* (Denis & Schiffermüller, 1775)

Collection dates: 29.04.-23.10. (Appendix Table A-LI), 784 specimens.

Faunal type: 1.3. Euro-Siberian.

118. 10003 *Mythimna vitellina* (Hübner, 1808)

Collection dates: 04.05.-17.10. (Appendix Table A-LII), 570 specimens.

Faunal type: 1.3. Euro-Siberian.

119. 10007 *Mythimna pallens* (Linnaeus, 1758)

Collection dates: 07.05.-27.09. (Appendix Table A-LIII), 337 specimens.

Faunal type: 1.3. Euro-Siberian.

120. 10010 *Mythimna obsoleta* (Hübner, 1803)

Collection dates: 01.05.-11.09. (Appendix Table A-LIV), 159 specimens.

Faunal type: 1.3. Euro-Siberian.

121. 10017 *Senta flammea* (Curtis, 1828) (formerly *Meliana flammea*)

Collection dates: 07.07.2008, 17.08.2008, 24.04.2011, 29.07.2011 and 14.04.2012.

Faunal type: 1.04. European-eastern Asian disjunct.

122. 10022 *Mythimna l-album* (Linnaeus, 1767)

Collection dates: 17.06.-16.10. (Appendix Table A-LV), 38 specimens.

Faunal type: 1.3. Euro-Siberian.

123. 10238 *Peridroma saucia* (Hübner, 1808)

Collection dates: 07.06.-12.10. (Appendix Table A-LVI), 25 specimens.

Faunal type: 0.2. Subtropical.

124. 10336 *Agrotis crassa* (Hübner, 1803)

Collection dates: 15.08.2008, 28.08.2008, 19.08.2009, 26.08.2012, 28.08.2013, 02.09.2013, 20.08.2014, 27.08.2014 and 28.08.2014, nine specimens collected.

Faunal type: 3.2. Southwestern Siberian.

125. 10343 *Agrotis puta* (Hübner, 1803)

Collection dates: 19.09.2009.

Faunal type: 44. Holo-Mediterranean (-Turkestanian, -Iranian).

126. 10346 *Agrotis ipsilon* (Hufnagel, 1766)

Collection dates: 25.04.-22.10. (Appendix Table A-LVII), 292 specimens.

Faunal type: 0.2. Subtropical.

127. 10348 *Agrotis exclamationis* (Linnaeus, 1758)

Collection dates: 02.05.-21.09. (Appendix Table A-LVIII), 732 specimens.

Faunal type: 0.2. Subtropical.

128. 10351 *Agrotis segetum* (Denis & Schiffermüller, 1775)

Collection dates: 24.04.-15.10. (Appendix Table A-LIX), 818 specimens.

Faunal type: 1.3. Euro-Siberian.

129. 10356 *Agrotis vestigialis* (Hufnagel, 1766)

Collection dates: 07.08.2012.

Faunal type: 2.3. Boreo-continental.

130. 10082 *Axylia putris* (Linnaeus, 1761)

Collection dates: 28.04.-29.09. (Appendix Table A-LX), 890 specimens.

Faunal type: 4.3. Holo-Mediterranean.

131. 10086 *Ochropleura plecta* (Linnaeus, 1761)

Collection dates: 23.04.-12.09. (Appendix Table A-LXI), 60 specimens.

Faunal type: 1.3. Euro-Siberian.

132. 10224 *Cerastis rubricosa* (Denis & Schiffermüller, 1775)

Collection dates: 10.04.2011, 18.04.2011, 13.4 2012 and 12.4 2013.

Faunal type: 2.3. Boreo-continental.

133. 10096 *Noctua pronuba* Linnaeus, 1758

Collection dates: 17.05.-16.10. (Appendix Table A-LXII), 799 specimens.

Faunal type: 4.3. Holo-Mediterranean.

134. 10100 *Noctua fimbriata* (Schreber, 1759)

Collection dates: 04.06.-25.09. (Appendix Table A-LXIII), 25 specimens.

Faunal type: 4.3. Holo-Mediterranean.

135. 10199 *Xestia c-nigrum* (Linnaeus, 1758)

Collection dates: 13.04.-22.10. (Appendix Table A-LXIV), 931 specimens.

Faunal type: 0.2. Subtropical.

136. 10212 *Xestia xanthographa* (Denis & Schiffermüller, 1775)

Collection dates: 20.08.-11.10. (Appendix Table A-LXV), 147 specimens.

Faunal type: 4.1. Extra-Mediterranean- (Central) European.

137. 10178 *Eugnorisima depuncta* (Linnaeus, 1761)

Collection dates: 01.09.2012, 04.09.2012, 27.09.2012, 01.10.2013, 09.10.2013 and 11.10.2013.

Faunal type: 4.08. Ponto-Mediterranean- (-Turkestanian, -Iranian).

Table I. Quantitative survey of all collected moths.

Family	Number of species	Percentage of total species	Number of specimens	Percentage of total specimens
fam. Psychidae	1	0.34	1	0.0004
fam. Tortricidae	2	0.68	10	0.0045
fam. Cossidae	4	1.37	519	0.2320
fam. Limacodidae	1	0.34	7	0.0031
fam. Crambidae	3	1.03	178095	79.7827
fam. Drepanidae	4	1.37	143	0.0641
fam. Lasiocampidae	7	2.40	506	0.2267
fam. Saturniidae	1	0.34	15	0.0067
fam. Sphingidae	13	4.45	592	0.2652
fam. Geometridae	55	18.84	8953	4.0108
fam. Notodontidae	14	4.79	433	0.1940
fam. Erebidae	44	15.05	4423	1.9812
fam. Nolidae	6	2.05	531	0.2378
fam. Noctuidae	137	46.89	28921	12.9557
TOTAL	292	100%	223226	100%

Table II. Quantitative survey of collected Noctuidae.

Subfamily of Noctuidae	Number of species	Percentage of total species	Number of specimens	Percentage of total specimens
subfam. Plusiinae	11	8.0	1534	5.3
subfam. Eustrotiinae	3	2.2	45	0.2
subfam. Acontiinae	6	4.4	4729	16.4
subfam. Pantheinae	1	0.7	12	0.0
subfam. Acronictinae	7	5.1	508	1.8
subfam. Metoponiinae	1	0.7	16	0.1
subfam. Cuculliinae	1	0.7	2	0.0
subfam. Amphipyriinae	6	4.4	43	0.1
subfam. Oncocnemidinae	1	0.7	26	0.1
subfam. Condicinae	2	1.5	93	0.3
subfam. Heliothinae	6	4.4	6899	23.9
subfam. Bryophilinae	1	0.7	3	0.0
subfam. Noctuinae	91	66.4	15011	51.9
TOTAL	292	100%	223226	100%

Table III. Faunal type survey.

	Number of species	Share (%)
0.1.3. Palaeotropical	3	2.2
0.2. Subtropical	4	2.9
0.3. Tropical / pantropical	3	2.2
0.04. Nearctic, introduced	1	0.7
1.1. Holarctic	1	0.7
1.2. Holopalaeartic	1	0.7
1.3. Euro-Siberian	62	45.3
1.04. European-eastern Asian disjunct	1	0.7
2.3. Boreo-continental	28	20.4
3.2. Southwestern Siberian	1	0.7
3.04. Ponto-Caspian (southern Siberian)	3	2.2
3.06. Manchurian- (southern Siberian) - Ponto-Pannonian disjunct	4	2.9
4.1. Extra-Mediterranean- (Central) European	1	0.7
4.3. Holo-Mediterranean	17	12.4
4.04. Holo-Mediterranean (Turkestanian, Iranian)	3	2.2
4.07. Ponto-Mediterranean	2	1.5
4.08. Ponto-Mediterranean (Turkestanian, Iranian)	1	0.7
9.1. Turano - eremic	1	0.7

Table IV. Annual number of species and specimens.

Year	Number of species	Number of specimens
2008	89	6075
2009	94	5047
2010	80	2857
2011	89	3299
2012	93	8183
2013	79	1840
2014	71	1620

Table V. Comparison of the frequency of certain Noctuidae species found in Čelarevo and Novi Sad.

Species	Total caught in Novi Sad 179,031	Order in Novi Sad	Total caught in Čelarevo 223,206	Order in Čelarevo
<i>Helicoverpa armigera</i>	0		6624	1
<i>Acontia trabealis</i>	7032	5	4127	2
<i>Anarta trifolii</i>	9502	3	3599	3
<i>Autographa gamma</i>	10188	2	996	4
<i>Xestia c-nigrum</i>	11698	1	931	5
<i>Lacanobia oleracea</i>	5800	6	907	6

Species	Total caught in Novi Sad 179,031	Order in Novi Sad	Total caught in Čelarevo 223,206	Order in Čelarevo
(Table V – continued)				
<i>Axylia putris</i>	5259	8	890	7
<i>Agrotis segetum</i>	3181	10	817	8
<i>Noctua pronuba</i>	759	17	799	9
<i>Mythimna albipuncta</i>	551	18	784	10
<i>Macdunnoughia confusa</i>	3791	9	413	17
<i>Mythimna pallens</i>	8172	4	337	19
<i>Lacanobia suasa</i>	5450	7	218	21

Discussion

The family Noctuidae had the most species, with 46.89% of all species in Čelarevo (Table I), followed by the Crambidae family, had the most specimens contributing 12.9557% of all moths collected in light trap at Čelarevo (Table I).

In the family Noctuidae, the subfamily Noctuinae had the most species (91) and contributed 31% (Table II). Following it are the subfamilies Plusiinae (11 species; 8%), and Acronictinae (7 species; 5.1%). The subfamily Noctuinae also holds first position regarding the number of specimens. There were 15 011 specimens collected and they make up 6.7% of all Lepidoptera at Čelarevo. Next is the subfamily Heliiothinae, with 6899 specimens or 3.1%, primarily due to the species *H. armigera* that was the most abundant Noctuid species. The next subfamily is Acronictinae, with 4729 specimens or 2.1% (Table II).

According to distribution, most species (62 or 45%) belong to the Euro-Siberian faunal type (Table III). Twenty-eight species (20.4%) belong to the Boreo-continental faunal type, the next being the Holo-Mediterranean type, with 17 species (12.4%).

Most species were collected in 2009, then 2012, 1994 and 1993; the fewest species were collected in 2014 (71) (Table IV). Most specimens were collected in 2012 (8183), followed by 2008 (6075) and 2009 (5047) (Table IV). This was because the most common species, *H. armigera* and *A. trabealis*, were most frequent in these years.

The most common species in the period 2008-2014 at Čelarevo was *H. armigera*. Kereši & Almaši (2009) for the locality Rimski Šančevi near Novi Sad (Table V) and the period 1981 to 1991, do not mention it at all. This is tropical, migrant species, which in the last decades has overwintered in Central Europe. *Acontia trabealis*, which was the second most common at Čelarevo, at Rimski Šančevi was the fifth. *Anarta trifolii* was the third most common at both Čelarevo and Rimski Šančevi. A significant difference between these two localities is for the species *M. pallens*. It was fourth most common at Rimski Šančevi, but nineteenth at Čelarevo.

The following are the migratory species recorded by the traps: group Eumigrants: *A. gamma*, *A. ipsilon*; group Emigrants: *T. ni*, *M. confusa*, *A. luctuosa*, *A. lucida*, *P. scutosa*, *H. viriplaca*, *H. peltigera*, *H. armigera*, *S. exigua*, *Ph. meticulosa*, *M. vitellina*, *P. saucia*, *N. pronuba*, *N. fimbriata*; group Dismigrants: *M. brassicae*, *M. albipuncta*, *M. l-album*, *A. exclamationis*, *A. segetum* and *X. c-nigrum*.

Faunistically important species:

Diachrysia nadeja – known Serbia known from Bečej (Varga, 1981) and Sombor (Vajgand 2001, 2010) At Čelarevo, two specimens were collected on 29.05.2008 and 23.06.2009. In Romania it is known from a single locality in the Romanian part of Banat, and several localities from the Danube delta (Rákossy, 1996).

Diachrysia zosimi – a single specimen was found on 03.08.2010. The species was recorded from the surroundings of Sombor (Vajgand, 2001, 2010), Novi Sad, Kupinski Rit and Batajnica (Vasić, 2002). in Romania, it is present in several localities next to the Hungarian and Ukrainian borders (Rákossy, 1996). in Middle Europe, it inhabits humid habitats of Tessina (Swiss), Lower Austria, Burgenland, Moravia and Hungary (Forster & Wohlfahrt, 1980).

Diachrysia chryson – a single specimen was registered on 14.06.2010. in Romania, the species is known from several localities throughout the country (Rákossy, 1996). in Middle Europe, it is widespread but local and mostly rare (Forster & Wohlfahrt, 1980). in Serbia, *D. chryson* was found at the following localities: Kraljevica (Zečević, 1976) Belgrade, Boranja, Goč, Djerdap and Debeli Lug (Vasić, 2002).

Acontia candefacta – four specimens were registered on 10.05.2013, 06.07.2013, 09.08.2014. and 22.08.2014. The first single specimen for the country was previously registered at locality Kurmatura-Šomrda in eastern Serbia (Stojanović *et al.*, 2011). There are a few new localities: Farkaždin, Cer, Ludaš, Obedska bara (Hric & Jovanov, 2014); Baranica, Bajmok, Sombor, Gospodjinci (Stojanović *et al.*, 2017).

Acronicta aceris – a single moth was registered on 24.07.2010. A widespread and common species in Central Europe (Forster & Wohlfahrt, 1980). In Serbia, recorded at localities Ristovača, Belgrade, Užice, Kraljevica (Vasić, 2002), Grgurevac hunters' hut on Fruška Gora (Stojanović, 2009) and Srbobran (Hric & Jovanov, 2014).

Acronicta strigosa – only two specimens were registered on 28.04.2008 and 16.08.2011. In Central Europe it is a local and rare species (Forster & Wohlfahrt, 1980). Relatively common in Romania (Rákossy, 1996). This species is in significant decline in many parts of Europe, probably due to increased drainage and monoculture forests (Fibiger *et al.*, 2009). In Serbia, it was registered at multiple localities: Dubovac, Klenak and Debeli Lug, all within the Deliblato Sands (Vasić, 2002).

Simyra albovenosa – four specimens were registered on 22.6.2008, 18.08.2009, 21.06.2011 and 23.06.2011. In Europe it is local at moist spots (Forster & Wohlfahrt, 1980 and Fibiger *et al.*, 2009). Omnipresent in Romania (Rákossy, 1996). In Vojvodina, registered at the following localities: Šušara, Korn, Dolina, Devojački Bunar (Vasić, 1969); again Korn (Tomić *et al.*, 1994); Zemun (Hadžistević, 1969), Sombor (Vajgand, 1988, 1995a, 1996) and Lugovo (Vajgand, 2000b). Vasić (2002) stated that it is widespread in Serbia, but gave no specific records. Recent records come from Novi Sad (Kereši & Almaši, 2009), Jazovo (Stojanović, 2009), Novi Banovci, Srbobran, Mužljanski Rit and Bogojevo (Hric & Jovanov, 2014).

Cucullia fraudatrix – two specimens were registered on 02.06.2008 and 17.07.2011. Local and rare species in Central Europe (Forster & Wohlfahrt, 1980). In Romania, it is present at multiple dry localities, common only in Zibenburg (Rákossy, 1996). In Serbia, it was recorded at localities Lugovo and Sombor (Vajgand, 1988, 1995a, 1995b, 1996, 2010a, 2012b).

Amphipyra livida – three specimens were registered on 01.07.2009, 07.07.2014 and 26.07.2014. In the southeastern part of Central Europe, it is slightly more common; in other parts, local and rare (Forster &

Wohlfahrt, 1980). Relatively common all over Romania (Rákosy, 1996). In Serbia, registered at localities Mol, Belgrade, Zaječar (Planinica), Vrška Čuka, Vitomirica (Vasić, 2002), Stražilovo (Stojanović, 2009), Stara Pazova, Kosmaj, Ovčar Banja, Jošanička Banja and Brusnica (Hric & Jovanov, 2014).

Meganephria bimaculosa – a single specimen was registered on 27.09.2009. Listed as local and rare species of warm and dry habitats in Central Europe (Forster & Wohlfahrt, 1980). A relatively rare species, recorded in multiple localities in Romanian Banat (Rákosy, 1996). In Serbia, found at localities Fruška Gora, Đerdap, Deliblato Sands, Palić, Belgrade, Jastrebac, Stol, Vitomirica (Vasić, 2002) and Kosmaj (Hric & Jovanov, 2014).

Heliothis nubigera – registered on 22.04.2009, 10.06.2009 and 15.06.2012. Described as a very rare migrant in Central Europe (Forster & Wohlfahrt, 1980). Known from only four localities in Romania (Rákosy, 1996). In Serbia, only registered in Sombor (Vajgand, 2000b).

Heliothis armigera – the most common Noctuid from the research. Altogether, 6624 specimens were collected. At the beginning of the season there was a combination of overwintering and migrant specimens. After that, the species developed on corn and vegetables cultivated near the light trap.

Charanyca ferruginea – registered only once, on 30.06.2009. In Central Europe (Forster & Wohlfahrt, 1980) and Romania (Rákosy, 1996) it is a widespread and not uncommon species. In Serbia, recorded at localities Fruška Gora, Belgrade, Avala, Kosmaj, Rudnik, Užice, Stol, Suvobor, Zlatar, Goč, Đerdap (Vasić, 2002) and Stražilovo (Stojanović, 2009).

Calamia tridens – registered on 30.06.2008. In Central Europe it is widespread, even common locally in dry spots (Forster & Wohlfahrt, 1980). It is widespread throughout Romania (Rákosy, 1996). In Serbia, it was recorded at localities Deliblato Sands, Vršački Breg, Fruška Gora, Belgrade, Topčider, Avala, Pirot, Zaječar, Stol, Đerdan, Priština (Vasić, 2002), Sombor, Lugovo (Vajgand, 2010), Irig and Krčedin (Hric & Jovanov, 2014).

H. leucostigma – registered on 14.08.2009. More common in the northern parts of Central Europe in moist areas; in southern parts rare (Forster & Wohlfahrt, 1980). Distributed all over Romania, more common in Romanian Banat (Rákosy, 1996). In Serbia, found at Zrenjanin (Vasić, 2002), Lugovo and Sombor (Vajgand, 2010a).

Gortyna borellii lunata – registered on 10.10.2009. In Serbia, it was registered at localities Jazovo (Radovanović, 1971), Kozara forest, Vila, Štrbac and Sombor (Vajgand, 2003 and Vajgand 2010a). In neighboring countries, it was recorded in Croatia, Bulgaria, Romania and Hungary (Barany *et al.* 2006). For Hungary it was listed in the Red Book (Varga, 1990) as VU – vulnerable species. Present only in the Romanian part of Banat (Rákosy, 1996). Development of the caterpillar is linked to the plant *Peucedanum officinale*, present in many meadows in Bačka, so it can be expected at more localities.

Hydraecia micacea – a single specimen registered on 15.08.2009. Widespread in Central Europe, but local in moist spots (Forster & Wohlfahrt, 1980). A relatively rare species in Romania (Rákosy, 1996). In Serbia, recorded at Fruška Gora (Vasić and Jodal, 1976), Rimski Šančevi near Novi Sad (Kereši & Almaši, 2009) and Sombor (Vajgand, 2012b).

Archana dissoluta – a single moth was registered on 29.07.2014. Distributed locally throughout Central Europe, connected everywhere to marshy habitats and reed belts (Forster & Wohlfahrt, 1980). In Romania, recorded in marshy habitats (Rákosy, 1996). In Serbia, found at locality Ledinci (Stojanović, 2009).

Apamea anceps – only one specimen was registered on 01.06.2011. In Central Europe and Romania, it is considered a widely distributed and relatively common species (Forster & Wohlfahrt, 1980, Rákósy, 1996). In Serbia, known from Fruška Gora, Maljen, Zlatibor, Golija, Kopaonik, Leskovac, Vitomirica, Kraljevica, Stol, Ploče (Vasić, 2002).

Mesogona oxalina – three specimens were registered on 22.10.2010, 23.09.2011 and 27.09.2011. In Romania found at several localities, mostly single specimens (Rákósy, 1996). In Serbia, found at Babušnica (Hric and Jovanov, 2014), Bor, Zaječar and Peć (Vasić, 2002).

Panolis flammea – though this species is cited as very common in Serbia, during the research only a single specimen was recorded on 13.04.2013. In Serbia, known from localities Deliblato Sands, Košutnjak, Avala, Kosmaj, Užice, Zaječar (Vasić, 2002), Čortanovci (Stojanović, 2009) and Temska (Hric & Jovanov, 2014).

Saragossa porosa kenderesiensis – a single specimen collected on 14.07.2008 (Vajgand, 2012b). In Romania, only five specimens of this steppe species were recorded close to the Hungarian border (Rákósy, 1996). In Hungary, the species was classified as vulnerable – VU (Varga, 1990). The caterpillar feeds on *Artemisia maritima*, *A. pontica* and *Tanacetum* spp. According to Hacker et al. (2002), this is a species with disjunct distribution. It is encountered in the steppes of eastern Europe and southern forest-steppes, preferring local saline meadows and steppe habitats with *Artemisia* plants. In Serbia, a single specimen recorded by Ivan Pančić at locality Erdelji Salaš (vicinity of Zrenjanin) (Hric & Jovanov, 2014).

Hadena irregularis – a single specimen registered on 07.09.2011. Steppe species, recorded in Romania from several localities; it lives in sandy and calcareous steppes (Rákósy, 1996). In Serbia, previously recorded in Deliblato Sands (Vasić, 2002 and Hric & Jovanov, 2014) and Sombor (Vajgand, 2012b).

Senta flammea – five specimens were registered on 07.07.2008, 17.08.2008, 24.04.2011, 29.07.2011 and 14.04.2012. In Romania, it was recorded from July to October (Rákósy, 1996), despite the explanation that it has two broods covering the period May-October. In the vicinity of Sombor from 1986 onwards, 20 specimens were recorded between 17.7 and 04.08. Outside this span, two specimens were recorded on 12.08.1993 and 01.07.2008, and then in 2011, two specimens were recorded on April 24 and 25, respectively! This confirmed the existence of two broods in Serbia. Near Sombor and Čelarevo, large areas are covered with reeds, so the gathered data indicate this is not a common species. Hacker et al. (2002) also state the species is local where there are large areas covered by reed belts. In Serbia, it was recorded at Sombor (Vajgand, 1988, 1995a), Lugovo (Vajgand2000b and 2012b), Novi Sad (Kereši & Almaši, 2009) and Ečka (Hric & Jovanov, 2014).

A. puta – a single specimen was registered on 19.09.2009. In Romania, it was found only in the south (Rákósy, 1996). In Serbia, known from Belgrade, Avala, Kopaonik, Piroć, Kosovo, (Vasić, 2002) and Novi Sad (Hric & Jovanov, 2014).

Agrotis vestigialis – a single specimen recorded on 07.08.2012. In Romania it is found in sandy areas, most common at the Danube delta (Rákósy, 1996). In Serbia, recorded at localities Palić, Zaječar (Vasić, 2002) and Deliblato Sands (Vasić, 2002; Hric & Jovanov, 2014).

Cerastis rubricosa – represented by four specimens, on 10.04.2011, 18.04.2011, 13.04.2012 and 12.04.2013. Widely distributed in Romania (Rákósy, 1996). In Serbia, known from localities Deliblato Sands, Fruška Gora, Belgrade, Avala, Kosmaj, Užice, Jelova Gora, Zlatibor, Timočka Krajina, Peć, Vitomirica, Prizren (Vasić, 2002), Ravne at Fruška Gora (Stojanović, 2009), Vranje, Zrenjanin, Stara Pazova and Kosmaj (Hric & Jovanov, 2014).

Conclusions

Moths were researched in Čelarevo from 2008 to 2014. A light trap, type RO Agrobečej, was used. Altogether, more than 234000 specimens were collected, and 223226 of them were identified. A total of 292 moth species was recorded from 14 families. The first part of the data was published by Vajgand (2016), while the present paper includes the records of 28921 specimens representing 137 species belonging to the family Noctuidae. Most common were species of the subfamilies Noctuinae (66%), Plusiinae (8%) and Acronictinae (5.1%). Most specimens came from the subfamilies Noctuinae (51.9%) and Heliiothinae (23.9%).

The order of common species at localities Čelarevo and Rimski Šančevi is similar. The biggest difference was recorded for the species *H. armigera*. It was the commonest species at Čelarevo, but was not recorded at all at Rimski Šančevi from 1981 to 1991. The species *M. pallens* was fourth most frequent at Rimski Šančevi, but just nineteenth at Čelarevo.

Significant findings are: *Diachrysia nadeja*, *D. zosimi*, *D. chryson*, *Acontia candefacta*, *Acronicta aceris*, *A. strigosa*, *Simyra albovenosa*, *Cucullia fraudatrix*, *Amphipyra livida*, *Meganephria bimaculosa*, *Heliiothis nubigera*, *Nyctobrya amasina*, *Charanyca ferruginea*, *Calamia tridens*, *Helotropha leucostigma*, *Gortyna borelii lunata*, *Hydraecia micacea*, *Archanara dissoluta*, *Apamea anceps*, *Mesogona oxalina*, *Panolis flammea*, *Saragossa porosa kenderesiensis*, *Hadena irregularis*, *Senta flammea*, *Agrotis puta*, *A. vestigialis*, *Cerastis rubricosa*.

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ПРИЛОГ ПОЗНАВАЊУ СОВИЦА (NOCTUIDAE, LEPIDOPTERA) ЧЕЛАРЕВА (СРБИЈА)

ДРАГАН ВАЈГАНД

Извод

Истраживање лептира у Челареву је вршено од 2008. до 2014. године. Лептири су сакупљани светлосном клопком тип РО Агробечеј свакодневно у периоду од почетка априла до средине октобра. Клопка као извор светла користи живину сијалицу снаге 250 W. Челарево се налази на левој обали Дунава. Клопка је постављена у агробиоценози, а на 2 км од ње је мочварно, плавно подручје. Део примерака је препариран стандардном методом и чувају се у збирци аутора рада. У овом раду дати су подаци за 28921 примерак. Они су сврстани у 137 врста.

По подфамилијама је прикупљен следећи број врста: Plusiinae 11 врста, Eustrotiinae 3, Acontiinae 6, Pantheinae 1, Acronictinae 7, Metoponiinae 1, Cuculiinae 1, Amphipyridae 6, Oncocnemidinae 1, Condiciinae 2, Heliothinae 6, Bryophilinae 1 и Noctuidae 91 врста.

Најбројнија је била подфамилија Noctuidae са 6.7% свих примерака. Према фаунистичком типу највећи број врста припада Евро Сибирском типу. Највећи број врста је сакупљен 2009. године - 94. Најбројнија је била врста *Helicoverpa armigera*.

Од интересантних налаза наводимо присуство врста:

Diachrysia nadeja - два примерка. За територију Србије постоје подаци још само за Сомбор.

Acontia candefacta - четири примерка. Позната само још из Ђердапа.

Cucullia fraudatrix - два примерка, до сада позната само из Лугова и Сомбора.

Heliothis nubigera - три примерка, до сада у Србији позната само из Сомбора.

Gortyna borelii lunata- један примерак у Челареву. Редак лептир јер је исхраном гусенице везан за *Peucedanum officinale*. Забележена у Јазову и околини Сомбора.

Archanara dissoluta - један примерак. До сада забележена само на локалитету Лединци на Фрушкој гори.

Saragossa porosa kenderesiensis - забележен само један примерак током истраживања, а за Србију постоји још само податак за још један примерак са локалитета Ердељи салаш.

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Table A-VII. Data of collection *D. bankiana* (F.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	1	0	0	0	0	0	1	2	4	0	0	0	0	0	8	
2011	0	0	0	0	0	1	1	0	0	0	1	1	0	2	0	0	0	0	6	
2012	0	0	0	0	0	2	3	2	1	0	2	0	0	0	0	0	0	0	10	
																			Total	24

Table A-VIII. Data of collection *A. luctuosa* (D. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	5	4	1	7	2	13	5	10	14	5	3	0	0	0	69	
2009	0	1	0	10	3	6	11	5	9	21	27	17	27	52	15	2	0	0	206	
2010	0	1	5	3	8	7	17	4	2	5	8	11	6	2	0	0	0	0	79	
2011	0	0	0	0	2	3	1	5	6	2	4	4	2	6	0	0	0	0	35	
2012	0	1	4	1	2	6	8	6	19	10	6	5	7	13	7	0	1	0	96	
2013	0	1	2	0	1	0	2	2	4	3	2	3	0	3	1	0	0	0	24	
2014	0	0	0	0	3	0	1	2	0	1	1	1	3	1	1	0	0	0	14	
																			Total	523

Table A-IX. Data of collection *A. trabealis* (Scop.) in the period 2008-2014.

Dates	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	5	31	26	16	73	100	173	139	213	209	19	5	1	0	0	1010	
2009	0	2	10	7	19	26	10	21	103	79	83	269	210	34	8	1	1	883	
2010	0	6	2	19	9	45	5	4	25	14	47	44	22	0	1	0	0	243	
2011	0	1	1	7	24	9	17	38	66	28	37	35	84	1	0	0	0	348	
2012	2	12	8	9	39	38	20	153	344	204	198	110	73	6	1	0	0	1217	
2013	1	6	3	1	5	7	3	4	24	43	73	43	21	18	5	0	0	257	
2014	0	1	0	8	4	4	15	13	13	25	40	27	15	3	1	0	0	169	
																		Total	4127

Table A-XIII. Data of collection *A. rumicis* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	5	0	1	0	0	3	9	18	12	5	0	2	34	14	13	7	0	1	124	
2009	2	3	0	2	1	1	0	1	8	2	2	5	4	16	24	8	2	0	81	
2010	0	0	2	0	0	0	1	1	4	1	4	0	9	42	10	8	5	1	88	
2011	0	9	1	2	1	0	4	3	8	7	2	1	1	4	9	5	0	0	57	
2012	0	0	2	0	0	0	0	6	1	4	2	5	7	8	7	2	0	0	44	
2013	0	2	5	1	0	0	0	0	6	2	2	1	2	7	2	6	2	1	39	
2014	2	1	0	0	0	0	1	1	3	2	1	0	0	6	2	11	0	0	30	
	Total																			463

Table A-XIV. Data of collection *C. lunula* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	5	
2009	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	
2010	0	11	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	15	
2012	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	Total																			26

Table A-XV. Data of collection *E. amethystina* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	4	
2009	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
2010	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3	
2011	0	0	0	1	2	4	1	0	0	3	1	1	0	0	0	0	0	0	13	
2012	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3	
2013	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
2014	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
	Total																			26

Table A-XVI. Data of collection *E. virgo* (Tr.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	2	1	0	2	0	0	2	5	3	0	0	0	0	0	15
2009	0	0	0	0	0	0	2	1	2	0	0	2	4	1	0	0	0	0	12
2010	0	0	0	0	0	3	3	1	1	0	0	3	1	0	0	0	0	0	12
2011	0	0	0	0	0	0	2	3	1	2	2	1	1	1	0	0	0	0	13
2012	0	0	0	0	0	0	4	4	0	1	0	1	1	0	0	0	0	0	11
2014	0	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0	4
Total																			67

Table A-XVII. Data of collection *H. peltigera* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2009	0	0	0	1	0	0	35	4	0	4	1	3	0	0	0	0	0	0	48
2010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2012	0	0	0	0	0	0	9	4	2	0	0	1	0	0	0	0	0	0	16
Total																			66

Table A-XVIII. Data of collection *H. armigera* (Hbn.) in the period 2008-2014.

Dates	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	1	3	5	1	2	54	154	94	248	427	563	171	33	7	1763	
2009	0	0	1	0	0	1	4	12	29	24	43	266	311	160	74	75	31	1031	
2010	0	3	0	1	3	0	2	0	8	10	41	29	99	95	130	15	6	442	
2011	1	0	2	0	2	0	0	7	11	8	4	23	85	94	44	13	11	305	
2012	0	1	3	4	1	6	0	67	84	45	354	605	829	337	345	61	40	2782	
2013	0	0	2	1	2	0	0	0	1	6	12	38	92	33	16	8	9	220	
2014	0	0	0	1	0	0	1	1	1	1	1	2	27	36	8	2	0	81	
Total																			6624

Table A-XIX. Data of collection *P. umbra* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	1	1	4	1	1	0	1	2	7	8	1	0	0	0	0	0	27
2009	0	0	0	2	1	2	1	0	2	2	2	0	2	3	0	0	0	0	17
2010	0	0	0	0	1	0	1	1	0	0	1	7	1	3	0	0	0	0	15
2011	0	0	0	5	7	7	0	3	4	9	11	16	3	2	0	0	0	0	67
2012	0	0	0	3	1	4	2	0	6	12	9	11	1	0	1	0	0	0	50
2013	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
2014	0	0	0	0	0	0	0	0	0	0	0	3	3	3	2	0	0	0	11
Total																			190

Table A-XX. Data of collection *P. candidula* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	0	0	0	0	1	3	0	0	10	2	2	0	0	0	18
2009	0	0	0	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	5
2010	0	0	0	0	0	0	0	0	1	2	1	2	0	0	0	0	0	0	6
2011	0	0	0	0	0	0	0	0	0	0	2	3	0	2	0	0	0	0	7
2012	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	4
Total																			40

Table A-XXI. Data of collection *S. exigua* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
2009	0	0	0	0	0	0	3	0	1	2	2	0	13	11	15	30	6	0	83
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
2012	0	0	0	0	0	0	0	0	1	0	1	30	30	16	14	7	11	6	116
2013	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total																			205

Table A-XXII. Data of collection *E. venustula* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	2	9	6	0	0	3	12	13	7	6	0	0	0	0	0	58
2009	0	0	0	2	3	2	0	0	0	6	5	0	0	1	0	0	0	0	19
2010	0	0	1	7	9	1	0	0	0	0	1	5	0	0	0	0	0	0	24
2011	0	1	1	9	8	11	1	0	0	4	20	7	3	0	0	0	0	0	65
2012	0	0	0	0	0	2	0	0	3	1	1	0	0	0	0	0	0	0	7
2013	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2014	0	0	1	2	4	0	0	0	0	1	4	4	0	0	0	0	0	0	16
	Total																		190

Table A-XXIII. Data of collection *H. ambigua* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	1	2	3	1	1	0	0	1	0	26	12	16	0	0	0	63
2009	0	0	1	1	3	11	7	2	0	0	0	1	6	11	22	4	0	1	70
2010	0	0	0	0	1	1	1	0	0	0	0	0	2	3	2	1	0	0	11
2011	0	0	0	0	2	1	0	1	0	0	0	0	0	0	4	2	0	0	10
2012	0	0	0	0	0	3	3	0	0	0	0	1	7	11	33	8	1	0	67
2013	0	0	0	1	3	6	5	3	0	0	0	0	2	17	40	34	14	4	129
2014	0	0	0	0	5	9	4	0	0	0	1	0	0	1	4	1	1	0	26
	Total																		376

Table A-XXIV. Data of collection *C. trigrammica* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	2	2	0	3	0	0	0	0	0	0	0	0	0	0	0	7
2009	0	0	1	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11
2010	0	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10
2011	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
2012	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2013	0	0	13	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
2014	0	0	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	Total																		69

Table A-XXV. Data of collection *D. scabriuscula* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ		
2008	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	
2009	0	0	0	0	1	0	0	0	0	2	0	2	5	1	2	0	0	0	0	13	
2010	0	0	0	0	1	0	1	0	0	0	0	1	0	0	3	1	0	0	0	7	
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
2012	0	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	4	
2013	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0	4	
2014	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	
																				Total	32

Table A-XXVI. Data of collection *T. atriplicis* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ		
2008	0	0	0	3	5	5	4	2	2	6	11	19	22	6	2	0	0	0	0	87	
2009	0	0	0	2	2	3	5	3	2	4	2	6	7	7	5	2	0	0	0	50	
2010	0	0	0	0	13	7	8	1	2	5	17	22	4	8	10	19	5	1	1	122	
2011	0	0	2	17	49	44	11	13	17	14	13	32	13	4	2	0	0	0	0	231	
2012	0	1	2	2	4	13	50	5	2	14	21	19	4	3	0	0	0	0	0	140	
2013	0	0	1	2	1	9	0	1	0	0	1	2	4	0	0	0	0	0	0	21	
2014	1	2	6	8	8	3	2	1	1	0	4	5	7	10	5	2	0	0	0	65	
																				Total	716

Table A-XXVII. Data of collection *T. matura* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ		
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11	0	0	0	0	15	
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	5	12	9	0	0	0	26	
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	0	0	0	6	
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	4	
																				Total	62

Table A-XXXI. Data of collection *R. lutosa* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	9
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	4
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	5
	Total																		37

Table A-XXXII. Data of collection *O. strigilis* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	5	15	2	1	0	0	0	0	0	0	0	0	0	0	0	23
2009	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8
2010	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
2011	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
2012	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2013	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2014	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	Total																		55

Table A-XXXIII. Data of collection *A. circellaris* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17	20
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	8
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	44	47
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17	20
	Total																		84

Table A-XXXIV. Data of collection *I. retusa* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
2009	0	0	0	0	0	3	8	2	2	0	0	0	0	0	0	0	0	0	15	
2010	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
2011	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	
2012	0	0	0	0	0	0	4	4	1	0	0	0	0	0	0	0	0	0	9	
2014	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
Total																				31

Table A-XXXV. Data of collection *I. subtusa* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	5	13	3	0	0	0	0	0	0	0	0	0	0	21	
2009	0	0	0	0	4	9	29	3	2	0	1	0	1	0	0	0	0	0	49	
2010	0	0	0	0	0	3	27	2	2	0	0	0	0	0	0	0	0	0	34	
2011	0	0	0	0	0	2	4	3	2	0	0	0	0	0	0	0	0	0	11	
2012	0	0	0	0	0	0	6	7	0	0	0	0	0	0	0	0	0	0	13	
2014	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5	
Total																				133

Table A-XXXVI. Data of collection *C. affinis* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2009	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	4	
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
2012	0	0	0	0	0	0	4	5	0	0	0	0	0	1	1	1	2	0	14	
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Total																				21

Table A-XXXVII. Data of collection *C. pyralina* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2009	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	
2010	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
2011	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	
2012	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	7	
2013	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	
																			Total	22

Table A-XXXVIII. Data of collection *C. trapezina* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	8	
2009	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
2010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
2011	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	
2012	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	
2013	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	5	
2014	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	
																			Total	28

Table A-XXXIX. Data of collection *A. centrago* (Haw.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12	2	0	15	
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	15	4	26	
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	17	8	37	
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	4	0	12	
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	5	
																			Total	98

Table A-XXXXIIla. Data of collection *A. trifolii* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	Σ
2008	4	3	10	4	0	6	31	72	38	41	209
2009	10	15	11	7	5	28	55	45	11	6	193
2010	1	10	8	1	3	0	20	13	15	19	90
2011	0	14	0	4	1	3	7	18	15	16	78
2012	2	8	9	10	3	5	42	39	56	186	360
2013	1	40	45	14	12	3	1	8	24	22	170
2014	4	5	7	0	0	2	7	14	18	7	64
										Total	1164

Table A-XXXXIIlb. Data of collection *A. trifolii* (Hufn.) in the period 2008-2014.

Dates	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	41	30	41	107	40	77	44	27	7	582	
2009	6	12	29	30	26	43	51	52	22	458	
2010	19	16	12	18	30	18	16	4	1	205	
2011	16	14	5	9	11	12	24	17	8	178	
2012	186	160	112	53	83	399	413	154	35	1769	
2013	22	8	5	4	12	30	31	10	5	275	
2014	7	9	20	9	12	7	10	1	0	132	
										Total	3599

Table A-XXXXIV. Data of collection *L. w-latinum* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
2009	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5	
2010	0	0	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	7	
2011	0	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	6	
2012	0	0	1	0	0	1	1	0	0	0	0	2	14	7	7	1	0	0	34	
2013	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
2014	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
																			Total	57

Table A-XXXXVIII. Data of collection *C. luteago* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	
2009	0	0	0	1	0	1	2	2	1	1	0	0	0	0	0	0	0	0	8	
2010	0	0	1	0	2	0	5	1	3	0	0	0	0	0	0	0	0	0	12	
2011	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	
2012	0	0	0	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	5	
2013	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
2014	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	
	Total																			34

Table A-XXXXIX. Data of collection *M. turca* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	2	10	26	3	2	0	0	0	9	26	24	2	3	1	0	0	108	
2009	0	0	0	14	7	0	0	0	0	0	2	8	8	5	0	0	0	1	45	
2010	0	0	0	0	2	2	1	0	0	0	1	24	14	10	0	1	0	0	55	
2011	0	0	0	15	67	24	4	0	0	2	17	38	16	23	2	0	0	1	209	
2012	0	0	1	6	12	11	0	0	0	2	5	4	3	7	0	0	0	0	51	
2013	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
2014	0	0	0	3	6	0	0	0	0	0	4	6	16	12	2	0	0	0	49	
	Total																			519

Table A-L. Data of collection *M. ferrago* (F.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	
2009	0	0	0	0	0	0	0	0	0	0	0	1	0	4	3	0	0	0	8	
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
2011	0	0	0	0	0	2	0	0	0	0	0	1	3	0	3	3	0	0	12	
2012	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	0	0	5	
2013	0	0	0	0	0	0	0	0	0	0	0	0	1	4	3	3	0	0	11	
2014	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	1	0	0	10	
	Total																			52

Table A-LI. Data of collection *M. albipuncta* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	3	12	14	4	1	0	3	14	5	8	6	5	9	4	12	7	107	
2009	0	0	0	3	4	4	1	0	18	34	5	4	7	4	4	24	31	18	161	
2010	0	0	0	1	4	2	0	0	1	4	10	4	4	0	4	7	14	18	73	
2011	0	0	0	3	4	3	0	0	2	2	1	1	0	1	3	11	20	8	59	
2012	0	1	1	6	5	4	2	0	7	3	1	10	8	8	19	55	64	15	209	
2013	0	1	14	10	10	6	0	0	0	7	5	6	0	2	0	8	10	35	114	
2014	0	1	8	2	4	0	0	0	1	2	1	1	2	4	8	9	11	7	61	
																			Total	784

Table A-LII. Data of collection *M. vitellina* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	7	10	17	3	0	0	0	4	26	7	9	5	1	1	90	
2009	0	0	0	4	11	20	9	4	0	0	2	12	39	54	37	23	0	21	236	
2010	0	0	1	0	4	9	0	4	1	0	0	4	2	12	7	5	4	0	53	
2011	0	0	0	3	6	6	2	3	1	0	1	0	1	10	2	3	1	1	40	
2012	0	0	0	1	9	16	8	0	1	0	0	0	0	0	0	0	0	0	35	
2013	0	0	0	2	5	4	1	1	2	0	0	0	2	9	4	7	3	4	44	
2014	0	0	4	7	16	5	0	0	0	0	0	6	2	5	11	8	5	3	72	
																			Total	570

Table A-LIII. Data of collection *M. pallens* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	1	4	28	13	7	6	1	1	12	23	44	13	2	0	0	0	155	
2009	0	0	3	6	8	14	4	0	0	0	5	11	11	21	9	0	1	0	93	
2010	0	0	1	0	6	11	2	0	0	1	3	8	2	0	0	0	0	0	34	
2011	0	0	0	1	4	3	0	0	1	1	1	0	0	8	2	1	0	0	22	
2012	0	0	0	2	3	0	1	3	1	1	0	1	1	2	1	1	0	0	17	
2013	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4	
2014	0	0	0	0	2	6	2	0	0	0	0	0	1	0	0	1	0	0	12	
																			Total	337

Table A-LIV. Data of collection *M. obsoleta* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	2	0	0	0	0	0	5	16	16	4	0	0	0	0	0	43	
2009	0	0	0	3	1	0	0	0	0	0	0	1	0	1	0	0	0	0	6	
2010	0	0	5	0	0	0	1	0	1	0	3	1	1	2	0	0	0	0	14	
2011	0	1	0	2	2	1	0	0	0	26	26	4	1	0	3	5	0	0	71	
2012	0	0	6	1	0	0	1	0	0	5	2	0	0	0	0	0	0	0	15	
2013	0	0	3	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	6	
2014	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	4	
	Total																			159

Table A-LV. Data of collection *M. l-album* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	2	6	
2009	0	0	0	0	0	0	1	0	1	0	0	0	0	1	4	7	2	0	16	
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	5	
2013	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	2	5	
2014	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	3	
	Total																			38

Table A-LVI. Data of collection *P. saucia* (Hbn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3	
2009	0	0	0	0	0	0	3	0	0	0	0	0	1	2	1	0	0	0	7	
2010	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	3	6	
2011	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	5	
2013	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	4	
	Total																			25

Table A-LVII. Data of collection *A. ipsilon* (Hufn.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	0	0	2	1	6	8	6	2	1	11	0	0	0	0	0	37	
2009	0	0	0	0	0	0	0	10	3	0	0	1	3	0	1	1	1	1	21	
2010	0	2	0	0	1	0	3	1	1	1	13	26	18	9	0	7	11	60	153	
2011	0	1	0	2	1	1	0	0	1	0	0	0	1	0	0	1	1	0	9	
2012	0	1	0	1	0	0	5	7	21	2	0	1	1	4	2	0	1	0	46	
2013	0	1	0	0	0	0	0	1	1	0	0	0	1	0	0	1	1	1	7	
2014	0	2	0	0	0	0	0	4	2	0	0	3	0	0	1	2	1	4	19	
																			Total	292

Table A-LVIII. Data of collection *A. exclamatoris* (L.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	0	3	9	7	1	0	2	17	26	34	39	3	2	0	0	0	143	
2009	0	0	2	10	7	4	3	0	1	16	25	26	17	5	0	2	0	0	118	
2010	0	0	4	3	20	2	4	0	0	11	35	33	12	1	1	1	0	0	127	
2011	0	0	1	13	31	11	2	0	0	19	16	7	6	7	2	2	0	0	117	
2012	0	0	12	21	25	11	3	0	3	19	23	23	17	3	0	0	0	0	160	
2013	0	0	2	2	2	1	0	0	0	0	0	10	3	0	0	0	1	0	21	
2014	0	0	2	3	12	4	1	0	0	4	7	6	3	3	0	1	0	0	46	
																			Total	732

Table A-LIX. Data of collection *A. segetum* (Den. & Schiff.) in the period 2008-2014.

Dates	08-21.04	22.04-01.05	02-11.05	12-21.05	22-31.05	01-10.06	11-20.06	21-30.06	01-10.07	11-20.07	21-30.07	31.07-09.08	10-19.08	20-29.08	30.08-08.09	09-18.09	19-28.09	29.09-20.10	Σ	
2008	0	0	2	7	6	8	3	2	4	40	24	26	43	10	3	9	5	0	192	
2009	0	0	3	4	0	5	1	1	4	7	8	24	11	3	2	7	9	13	102	
2010	0	0	2	2	3	1	0	0	0	3	7	11	2	3	0	1	2	4	41	
2011	0	0	3	2	2	1	0	0	3	13	15	7	5	2	3	7	5	3	70	
2012	0	1	3	14	12	2	1	0	28	81	48	22	7	7	27	11	1	5	270	
2013	0	0	2	4	6	8	0	0	0	3	3	6	7	1	2	2	3	26	73	
2014	0	7	3	4	5	1	0	0	2	6	6	11	3	0	3	12	4	2	69	
																			Total	818

