

THE SPECIES OF MACROLEPIDOPTERA COLLECTED FROM THE GUȘTERIȚA HILL, SIBIU, EXISTING WITHIN THE COLLECTION OF DR. VIKTOR WEINDEL

STANCĂ-MOISE Cristina

Abstract. The present paper represents a contribution to the knowledge of the Macrolepidoptera collected in the past from the area around Sibiu. This material collected from the Gușterița Hill, near Sibiu is presented in according with the recent systematic list published about Romanian Lepidoptera (RAKOSY et al., 2003). Among those 10 families with a number of 152 species, the best represented species belong to the families: Papilionidae, Lycaenidae, Geometridae and Nymphalidae. The period of collected material is more than 54 years that represents an important contribution to the knowledge of Macrolepidoptera collected in the past from Gușterița Hill, near Sibiu.

Keywords: Lepidoptera, collection Dr. V. Weindel, Gușterița Hill, Sibiu, biodiversity.

Rezumat. Specii de macrolepidoptere colectate din Dealul Gușteriței-Sibiu, existente în cadrul colecției dr. V. Weindel. Prezenta lucrare reprezintă o contribuție importantă la cunoașterea lepidopterelor colectate în trecut din împrejurimile Sibiului. Cea mai mare parte a lucrării o reprezintă prezentarea sistematică a materialului colectat din Dealul Gușteriței folosindu-se nomenclatura din ultima listă publicată a fluturilor din România: Catalogul lepidopterelor României (RÁKOSY et al., 2003). Dintre cele 10 familii care cuprind un număr de 152 de specii, cel mai bine reprezentate sunt speciile aparținând Familiilor: Geometridae, Papilionidae, Lycaenidae și Nymphalidae. Perioada colectărilor acoperă un interval de timp de peste 54 de ani ceea ce reprezintă o contribuție importantă la cunoașterea speciilor de lepidoptere colectate în trecut din Dealul Gușteriței.

Cuvinte cheie: lepidoptere, colecție Dr. V. Weindel, Dealul Gușteriței, Sibiu, biodiversitate.

INTRODUCTION

The present study is a part of an ample project for an inventory of the Lepidoptera species collected in the past and in the present around Sibiu city. Along the time I collected and studied species from the Forest Dumbrava Sibiului and from around Sibiul village situated at 22 km distance from Sibiu (STANCĂ-MOISE, 2016).

In my project I also studied the Collection Dr. Viktor Weindel, one of the most important Macrolepidoptera collection preserved at the Natural History Museum in Sibiu.

Along the time, some specialists studied this material (SCHNEIDER, 1984; SCHNEIDER, 1996; SZÉKELY, 1996, 2003, 2008, 2014; VLAD-ANTONIE & CIOBANU, 2004; MOISE, 2011a,b,c,d; STANCĂ-MOISE, 2002, 2015, 2017). On remarks the paper of Dr. C. Bucșa and Dr. I. Tăușan that presents the entomological studies made around Sibiu, by many specialists and their collections during the time, inclusive Dr. Viktor Weindel collection (BUCȘA & TĂUȘAN, 2011).

In the material existing in the Dr. V. Weindel collection I selected the species collected near Sibiu, on the Gușterița Hill.

The Gușterița Hill is situated in the N-Eastern part of Sibiu city, and because of the favourable ground and climate, has a xerothermic steppic vegetation, similar with that in Transsylvanian Plain, and also in Blaj zone (SCHNEIDER-BINDER, 1971). The Gușterița Hill is characterized by mixed forests with a different specific to the other forest massifs from the Sibiu depression and its marginal hills, situated in the triangle formed by the confluence of the river Cibin with the river Olt, from Tâlmăciu conglomerates till the Podu Olt (SCHNEIDER-BINDER, 1972).

These forest on the Gușterița Hill are similar, by their floristic composition (ANTONIE, 2016; MOISE, 2016), with those from the Olt narrow path, here are present species of: *Quercus robur*, *Quercus petraea*, *Tilia cordata*, *Cerasus avium*, *Sorbus torminalis*, and *Carpinus betulus*. The grassy vegetation is characterized by balcanic and mediterranean influences with species of: *Galium kitaibelianum*, *G. valantoides*, *Genista ovata*, *Primula columnae*, *Tamus communis* that give a southern character of these forests from the Gușterița Hill (SCHNEIDER-BINDER, 1973).

In the present day the Gușterița Hill suffered a major transformation because of the man's intervention that cleared a part of forest, and the grounds were transferred in the intravillan part destined the dwellings constructions.

All these changes of the ecosystem had a negativ effect on the flora that constitute a food source for larvas and a support to deposition of eggs for adults and also on the former lepidoptera fauna.

MATERIALS AND METHOD

Studying the collection V. Weindel preserved at the Natural History Museum in Sibiu, I found 152 Lepidoptera species, collected only on the Gușterița Hill, near Sibiu. I studied all data in this collection and for every species I noticed data about collected specimen with their day, month and the year of collection. I made also a verification of all data after the Catalogue: *Macrolepidopterele din colecția Dr. V. Weindel* published by SCHNEIDER

(1984). In this paper is mentioned that this collection of V. Weindel was taken by acquisition from Natural History Museum in Sibiu in 1964 and contains 4.322 samples of Macro- and Microlepidoptera collected during the period 1900-1959. The species proceed from South of Transsylvania, but also from environs of Sibiu. Unfortunately some labels are incomplete, without information about the day, the month or the year of collection. The systematic list is brought up to date in accordance with the nomenclature presented by „*Catalogul lepidopterelor României*” (RÁKOSY et al., 2003), with an identification number for every species.

RESULTS AND DISCUSSIONS

The paper presents the systematic list of the Lepidoptera species collected during the years 1903-1957, on the Gușterița Hill near Sibiu city. These species are in the Lepidoptera Collection of *Dr. Victor Weindel*, preserved at the Natural History Museum in Sibiu.

1. Family HESPERIOIDEA

1. *Erynis tages* (Linnaeus, 1758): July 10, 1903, July 23, 1921, July 25, 1921, July 20, 1924 (3410 Ro, 6879 K & R)
2. *Carcharodus alceae* (Esper, 1780): July 13, 1924 (3 ex.) (3412 Ro, 6882 K & R)
3. *Pyrgus malvae malvae* (Linnaeus, 1758): April 16, 1952 (3427 Ro, 6904 K & R)
4. *Carterocephalus palaemon* (Pallas, 1771): June 9 (without a year) (3435 Ro, 6919 K & R)
5. *Thymelicus lineola* (Ochsenheimer, 1808): July 13, 1924 (3438 Ro, 6923 K & R)
6. *Hesperia comma* (Linnaeus, 1758): September 26, 1920 (2 ex.) (3442 Ro, 6928 K & R)
7. *Ochlodes venatus* (Bremer & Grey, 1853): July 9, VII.1907 (2 ex.), July 25, 1921 (3444 Ro, 6930 K & R)

2. Family PAPILIONIDAE

8. *Iphiclides podalirius podalirius* (Linnaeus, 1758): April 1920 (4 ex.), July 4, 1904, July 20, 1917, July 26, 1921 (2 ex.), July 20, 1924 (2 ex.), July 10, 1938 (2 ex.), April 6, 1957, April 28, 1957 (3458 Ro, 6958 K & R)
9. *Papilio machaon machaon* Linnaeus, 1758: July 4, 1904 (2 ex.), July 28, 1904, April, 1920 (2 ex.) makes the day of collection, July 25, 1921, July 28, 1921 (4 ex.), September 26, 1920 (2 ex.), July 13, 1924, April 5, 1925, July 10, 1938, July 9, 1953, July 17, 1955 (3460 Ro, 6960 K & R)
10. *Leptidea sinapis sinapis* (Linnaeus, 1758): May 6, 1956, April 6, 1957, July 24, 1955 (3464 Ro, 6966 K & R)
11. *Anthocharis cardamines* (Linnaeus, 1758): April 28, 1957 (3469 Ro, 6973 K & R)
12. *Pieris rapae* (Linnaeus, 1758): July 7, 1922 (3 ex.), July 14, 1922, August 17, 1922, July 2, 1950 (3478 Ro, 6998 K & R)
13. *Pontia daplidice* auct. September 31, 1957 (3484 Ro, 7003 K & R)
14. *Pieris rapae* (Linnaeus, 1758): May 6, 1956, August 7, 1904, August 15, 1921 (3 ex.), September 25, 1921 (2 ex.) (3478 Ro, 6998 K & R)
15. *Pieris napi napi* (Linnaeus, 1758): July 28, 1904, August 18, 1921 (3480 Ro, 7000 K & R)
16. *Colias hyale* (Linnaeus, 1758): July 28, 1904, July 25, 1921, July 26, 1921, August 28, 1921 (5 ex.), July 23-27, 1921 (5 ex.), August 2, 1921, September 25, 1921 (6 ex.) September 28, 1919, 19.X.1921, July 24, 1955 (3492 Ro, 7021 K & R)
17. *Colias croceus* (Fourcroy, 1785): August 10, 1903, July 4, 1904, September 28, 1919 (2 ex.), September 26, 1920, September 31, 1957, 1925 (3489 Ro, 7015 K & R)
18. *Colias myrmidone myrmidone* (Esper, 1780): August 4, 1925 (3490 Ro, 7017 K & R)
19. *Colias chrysotheme chrysotheme* (Esper, 1780): September 16, 1957 (2 ex.) (3491 Ro, 7018 K & R)

3. Family LYCAENIDAE

20. *Hemeris lucina* (Linnaeus, 1758): July 25, 1921 (3499 Ro, 7030 K & R)
21. *Callophrys rubi* (Linnaeus, 1758): June 15, 1903 (3518 Ro, 7058 K & R)
22. *Satyrium ilicis* (Esper, 1779): July 6, 1907 (3523 Ro, 7065 K & R)
23. *Lycaena phlaeas phlaeas* (Linnaeus, 1761): September 26, 1920, April 28, 1957 (3502 Ro, 7034 K & R)
24. *Lycaena tityrus tityrus* (Poda, 1761): July 26, 1921, August 21, 1921 (3506 Ro, 7039 K & R)
25. *Cupido minimus minimus* (Fuessly, 1775=alsus [Denis & Schiffermüller], 1775: July 6, 1907, July 26, 1921 (3533 Ro, 7088 K & R)
26. *Cupido osiris* (Meigen, 1829): June 15, 1903 (3534 Ro, 7089 K & R)
27. *Everes argiades* (Pallas, 1771): July 25, 1921 (3 ex.), July 26, 1921, August 28, 1921 (2 ex.), April 30, 1950 (2 ex.), May 2, 1952 (3536 Ro, 7093 K & R)
28. *Everes decolorata* (Staudinger, 1886): July 13, 1924, July 20, 1924 (3537 Ro, 7094 K & R)
29. *Celastrina argiolus* (Linnaeus, 1761): July 6, 1907, July 25, 1921 (2 ex.) (3540 Ro, 7097 K & R)
30. *Maculinea arion* (Linnaeus, 1761): July 13, 1924, July 24, 1955 (2 ex.) (3551 Ro, 7112 K & R)

31. *Plebeius argus argus* (Linnaeus, 1761): August 10, 1903, July 28, 1904, August 7, 1904, July 25, 1921, July 26, 1921 (5 ex.), August 21, 1921, July 13, 1924 (2 ex.), July 20, 1924, July 20, 1952, June 17, 1956, July 19, 1956, July 24, 1955 (6 ex.) (3560 Ro, 7127 K & R)
32. *Plebeius argyrognomon* (Bergsträsser, 1779): July 20, 1952, July 19, 1956 (3562 Ro, 7129 K & R)
33. *Polyommatus thersites* (Cantener, 1835): September 31, 1951 (3577 Ro, 7162 K & R)
34. *Polyommatus icarus* (Rottemburg, 1775): August 3, 1904, July 25, 1921 (2 ex.), July 26, 1921, August 15, 1921 (5 ex.), August 28, 1921, June 30, 1957, September 16, 1951 (2 ex.) (3578 Ro, 7163 K & R)
35. *Meleageria daphnis* ([Denis & Schiffermüller], 1775): July 22-25, 1921 (5 ex.), June 30, 1957 (3580 Ro, 7171 K & R)
36. *Meleargia bellargus* (Rottemburg, 1755): June 15, 1903, August 21, 1921 (3581 Ro, 7172 K & R)

4. Family NYMPHALIDAE

37. *Argynnis pandora* ([Denis & Schiffermüller], 1775): August 3, 1904 (3594 Ro, 7203 K & R)
38. *Argynnis adippe* ([Denis & Schiffermüller], 1775): June 17, 1956 (3596 Ro, 7205 K & R)
39. *Neptis sappho* [Pallas, 1771]: July 13, 1924, August 28, 1956 (3652 Ro, 7290 K & R)
40. *Issoria lathonia* (Linnaeus, 1758): October 3, 1920, August 28, 1921 (3600 Ro, 7210 K & R)
41. *Boloria euphrosyne* (Linnaeus, 1758): May 2, 1952 (2 ex.) (3607 Ro, 7220 K & R)
42. *Boloria selene* ([Denis & Schiffermüller]: 1775): July 17, 1921 (3609 Ro, 7222 K & R)
43. *Vanessa cardui* (Linnaeus, 1758): July 6, 1907 (3617 Ro, 7245 K & R)
44. *Aglais urticae* (Linnaeus, 1758): August 27, 1921 (3621 Ro, 7250 K & R)
45. *Polygonia c-album* (Linnaeus, 1758): July 6, 1907 (2 ex.) (3623 Ro, 7252 K & R)
46. *Melitaea phoebe* ([Denis & Schiffermüller], 1775): August 19, 1956, August 23, 1956 (3637 Ro, 7271 K & R)
47. *Melitaea trivialis trivialis* ([Denis & Schiffermüller], 1775): July 16, 1921 (3640 Ro, 7274 K & R)
48. *Melitaea didyma didyma* (Esper, 1778): July 26, 1921 (4 ex.) (3641 Ro, 7276 K & R)
49. *Melitaea aurelia aurelia* Nickerl, 1850: July 30, 1952, July 24, 1955 (2 ex.), June 26, 1921 (3 ex.) (3643 Ro, 7280 K & R)
50. *Melitaea athalia athalia* (Rottemburg, 1775): June 26, 1921 (3 ex.), July 20, 1952 (3645 Ro, 7283 K & R)
51. *Apatura iris* (Linnaeus, 1758): August 4, 1923 (3658 Ro, 7299 K & R)
52. *Pararge aegeria* (Linnaeus, 1758): July 13, 1924, May 6, 1956, (3665 Ro, 7307 K & R)
53. *Lasiommata megera megera* (Linnaeus, 1767): September 19, 1920, September 26, 1920 (3 ex.), July 26, 1921, August 19, 1956, July 13, 1924, September 16, 1951 (3667 Ro, 7309 K & R)
54. *Lasiommata maera maera* (Linnaeus, 1758): August 3, 1904 (3668 Ro, 7312 K & R)
55. *Lopinga achine achine* (Scopoli, 1763): June 15, 1903, June 17, 1956 (3670 Ro, 7315 K & R)
56. *Coenonympha glycerion glycwion* (Borkhausens, 1788): June 12, 1921, August 13, 1921, August 21, 1921, *Coenonympha pamphilus* (Linnaeus, 1758): July 28, 1904 (2 ex.), July 6, 1907, July 25, 1921, July 26, 1921, September 26, 1920, August 15, 1921, April 16, 1951, July 20, 1952, July 17, 1955 (3677 Ro, 7334 K & R)
57. *Aphantopus hyperatus* (Linnaeus, 1758): July 23, 1921, July 25, 1921, July 13, 1924, July 20, 1952 (3682 Ro, 7344 K & R)
58. *Melanargia galathea* (Linnaeus, 1758): June 30, 1903, July 6, 1907 (4 ex.), June 29, 1922 (2 ex.) (3704 Ro, 7415 K & R)
59. *Minois dryas* (Scopoli, 1763): July 25, 1921 (2 ex.), July 26, 1921, July 27, 1921, July 24, 1955 (3706 Ro, 7427 K & R)
60. *Chazara briseis briseis* (Linnaeus, 1764): July 28, 1904, July 20, 1914, July 26, 1921, August 15, 1921 (2 ex.), August 19, 1956 (4 ex.) (3718 Ro, 7449 K & R)

5. Family LEMONIIDAE

61. *Lemonia taraxaci* ([Denis & Schiffermüller], 1775): 9 ex. July 22, 1942, August (7) without day and year (3359 Ro, 6806 K & R)

6. Family SPHINGOIDEA

62. *Mimas tiliae* (Linnaeus, 1758): August 7, 1939 (3366 Ro, 6819 K & R)
63. *Agrius convolvuli* (Linnaeus, 1758): August 7, 1938 (3373 Ro, 6828 K & R)
64. *Hemaris tityus* (Linnaeus, 1758): May 1, 1927 (3384 Ro, 6839 K & R)

7. Family GEOMETROIDEA

65. *Heliomata glarearia* ([Denis & Schiffermüller]: April 14, 1921, May 8, 1921, July 23, 1921, July 28, 1921 (3774 Ro, 7537 K & R)
66. *Macaria alternaria* Hübner, [1805]: July 23, 1921, July 25, 1921, August 6, 1921, August (without day and year) (3777 Ro, 7540 K & R)
67. *Chiasmia clathrata* (Linnaeus, 1758): July 21-23, 1921 (3784 Ro, 7547 K & R)

68. *Plagodis pulveraria* (Linnaeus, 1758): July 27, 1921 (2 ex.) (3806 Ro, 7606 K & R)
69. *Plagodis dolabraria* (Linnaeus, 1758): July 31, 1938 (3807 Ro, 7607 K & R)
70. *Pseudopanthera macularia* (Linnaeus, 1758): June 15, 1903 (3816 Ro, 7620 K & R)
71. *Selenia teralunaria* (Hufnagel, 1767): August 10, 1903 (3834 Ro, 7643 K & R)
72. *Artiora evonymaria* ([Denis & Schiffermüller]: 1775): August 28, 1921, August 1937, August 6, 1939 (3836 Ro, 7645 K & R)
73. *Peribatodes rhomboidaria* ([Denis & Schiffermüller]: 1775): August 21, 1921 (3885 Ro, 7754 K & R)
74. *Ectropis bistortata* Goeze, 1781: June 30, 1903 (3912 Ro, 7796 K & R)
75. *Ematurga atomaria atomaria* (Linnaeus, 1758): March 27, 1921 (3920 Ro, 7804 K & R)
76. *Pseudoterpna pruinata* (Hufnagel, 1767): August 2, 1925, August 28, 1938 (4006 Ro, 7965 K & R)
77. *Thetidia smaragdaria* (Fabricius, 1787): August 13, 1938 (4013 Ro, 7975 K & R)
78. *Chlorissa viridata* (Linnaeus, 1758): July 27, 1921 (4017 Ro, 7982 K & R)
79. *Chlorissa cloraria* (Hübner, [1813]): July 23, 1921 (2 ex.), July 27, 1921, August 6, 1921, August 8, 1921 (2 ex.) (4018 Ro, 7983 K & R)
80. *Hemistola chrysoprasaria* (Esper, 1795): July 27, 1921, August 5, 1939 (4026 Ro, 8000 K & R)
81. *Chylophora punctaria* (Linnaeus, 1758): May 14, 1921 (4040 Ro, 8022 K & R)
82. *Timandra griseata* auct. (*comae* A. Schmidt, 1931): July 23, 1921, August 28, 1921 (4044 Ro, 8028 K & R)
83. *Scopula ornata* (Scopoli, 1763): July 27, 1921 (2 ex.), August 6, 1921 (2 ex.), August 10, 1921 (4054 Ro, 8045 K & R)
84. *Scopula rubiginata* (Hufnagel, 1767): August 8, 1921, August 1, 1939 (4057 Ro, 8054 K & R)
85. *Scopula marginepunctata* (Goeze, 1781): August (without day and year) (4059 Ro, 8059 K & R)
86. *Scopula incanata* (Linnaeus, 1758): July 25, 1921, August 25, 1921 (4060 Ro, 8060 K & R)
87. *Idaea ochrata* (Scopoli, 1763): July 25, 1921 (4077 Ro, 8099 K & R)
88. *Idaea moniliata* ([Denis & Schiffermüller]: 1775): July 23, 1921 (4085 Ro, 8120 K & R)
89. *Idaea dilutaria* (Hübner, 1799): July 10, 1921 (4091 Ro, 8136 K & R)
90. *Idaea seriata* (Schrank, 1802): August 17, 1921 (4095 Ro, 8155 K & R)
91. *Idaea pallidata* ([Denis & Schiffermüller], 1775): May 14, 1921 (4099 Ro, 8168 K & R)
92. *Idaea aversata aversata* (Linnaeus, 1758): July 25, 1921 (4105 Ro, 8184 K & R)
93. *Rhodostrophia vibricaria* (Clerck, 1759): August 28, 1921 (2 ex.), August (without day and year) (4111 Ro, 8205 K & R)
94. *Scotopteryx chenopodiata* (Linnaeus, 1758): August 10, 1903, July 23, 1923, July 27, 1923 (2 ex.) (4129 Ro, 8239 K & R)
95. *Scotopteryx bipunctaria* ([Denis & Schiffermüller], 1775): August 10, 1903, July 27, 1921 (2 ex.), August 6, 1921, August 10, 1921 (4128 Ro, 8236 K & R)
96. *Catarhoe rubidata* ([Denis & Schiffermüller], 1775): July 13, 1934 (4150 Ro, 8268 K & R)
97. *Catarhoe cuculata* (Hufnagel, 1767): May 8, 1921 (4151 Ro, 8269 K & R)
98. *Epirrhoe rivata* (Hübner, 1813): August 9, 1921 (4156 Ro, 8277 K & R)
99. *Epirrhoe galiata* ([Denis & Schiffermüller], 1775): July 31, 1938, July (without day and year) (4158 Ro, 8279 K & R)
100. *Camptogramma bilineata* (Linnaeus, 1758): June 7, 1954 (4162 Ro, 8289 K & R)
101. *Pelurga comitata* (Linnaeus, 1758): August 25, 1921 (4177 Ro, 8314 K & R)
102. *Cosmorhoe ocellata* (Linnaeus, 1758): August 28, 1921 (4182 Ro, 8319 K & R)
103. *Colostygia pectinataria* (Knoch, 1781): August 2, 1921, August 7, 1938 (4226 Ro, 8385 K & R)
105. *Melanthia procellata* ([Denis & Schiffermüller], 1775): August 1, 1938, August 14, 1938 (4242 Ro, 8411 K & R)
106. *Triphosa dubitata* (Linnaeus, 1758): June 12, 1921 (4255 Ro, 8428 K & R)
107. *Perizoma lugdunaria* (Herrich-Schäffer, 1855): August 8, 1921, August (without day and year) (4276 Ro, 8458 K & R)
108. *Perizoma flavofasciata* (Thunberg, 1792): July 16, 1928 (4281 Ro, 8464 K & R)
109. *Eupithecia centaureata* ([Denis & Schiffermüller], 1775): July 27, 1921, August (without day and year) (4317 Ro, 8509 K & R)
110. *Eupithecia tripunctaria* Herrich-Schäffer, 1852: July 25, 1921 (4334 Ro, 8535 K & R)
111. *Minoa murinata* (Scopoli, 1763): June (without day and year) (4413 Ro, 8663 K & R)
112. *Clostera anastomosis* (Linnaeus, 1758): June 31, 1938 (4440 Ro, 8701 K & R)
113. *Notodonta ziczac* (Linnaeus, 1758): August (without day and year) (4455 Ro, 8719 K & R)
114. *Cryphia erepticula* (Treitschke, 1825): August 4, 1939 (4529 Ro, 8806 K & R)
115. *Idia calvaria* ([Denis & Schiffermüller], 1775): July 23, 1939 (4540 Ro, 8835 K & R)
116. *Polypogon tentacularia* (Linnaeus, 1758): July 27, 1921, August 9, 1921, August 10, 1921 (4552 Ro, 8849 K & R)
117. *Catocala elocata elocata* (Esper, 1787): August 27, 1939, August 28, 1938 (4574 Ro, 8877 K & R)
118. *Catocala electa electa* (Vieweg, 1790): August 3, 1939 (4577 Ro, 8883 K & R)
119. *Lygephila cracca* ([Denis & Schiffermüller], 1775): June 1938 (without day) (4602 Ro, 8934 K & R)
120. *Euclidia glyphica* (Linnaeus, 1758): August 19, 1956 (4617 Ro, 8969 K & R)
121. *Hypena proboscidalis* (Linnaeus, 1758): July 3, 1950 (4633 Ro, 8994 K & R)

122. *Phytometra viridaria* (Clerck, 1759): July 25, 1921, August 6, 1921, August (without day and year) (4638 Ro, 9006 K & R)
123. *Rivula sericealis* (Scopoli, 1763): July 26, 1921 (4640 Ro, 9008 K & R)
124. *Abrostola trigeminna* Werneburg, 1864: June 12, 1921 (4692 Ro, 9093 K & R)
125. *Trichoplusia ni* (Hübner, 1803): August 1, 1939 (4686 Ro, 9081 K & R)
126. *Emmelia trabealis* (Scopoli, 1763): July 6, 1907, July 27, 1921 (2 ex.), August 6, 1921, August 15, 1921 (4696 Ro, 9097 K & R)
127. *Pseudeustrotia candidula candidula* ([Denis & Schiffermüller]: August 26, 1921 (4713 Ro, 9122 K & R)
128. *Amphipyra pyramidea* (Linnaeus, 1758): August (without day and year) (4803 Ro, 9307 K & R)
129. *Amphipyra berbera* (Rungs, 1949): August 31, 1921 (4804 Ro, 9308 K & R)
130. *Heliothis viriplaca viriplaca* (Hufnagel, 1766): August 27, 1939 (4830 Ro, 9364 K & R)
131. *Heliothis peltigera* ([Denis & Schiffermüller]: 1775): July 22, 1938 (4833 Ro, 9367 K & R)
132. *Thalophila matura* (Hufnagel, 1767): August 10, 1921 (4901 Ro, 9496 K & R)
133. *Phlogophora meticulosa* (Linnaeus, 1758): August 1934 (without day)
134. *Calamia tridens tridens* (Hufnagel, 1766): July 30, 1939 (5013 Ro, 9848 K & R)
135. *Dianobia contigua* ([Denis & Schiffermüller], 1775): July 13, 1938 (5061 Ro, 9919 K & R)
136. *Hada nana* (Hufnagel, 1767): August 28, 1938 (5076 Ro, 9925 K & R)
137. *Hadena irregularis* (Hufnagel, 1766): August 1, 1939 (5118 Ro, 9964 K & R)
138. *Tholera decimalis* (Poda, 1761): August 1937 (without day) (5128 Ro, 10065 K & R)
139. *Mythimna turca* (Linnaeus, 1761): August 27, 1939 (5131 Ro, 9999 K & R)
140. *Hyphilara albipuncta* ([Denis & Schiffermüller], 1775): August 28, 1938, August 6, 1939 (5144 Ro, 10002 K & R)
141. *Conistra rubiginosa* (Scopoli, 1763): April 5, 1925 (5218 Ro, 9603 K & R)

8. Family NOCTUIDAE

142. *Noctua pronuba* (Linnaeus, 1758): August (without day and year)
143. *Xestia ditapezium* ([Denis & Schiffermüller], 1775): July 23, 1921 (5361 Ro, 10199 K & R)
144. *Xestia c-nigrum* (Linnaeus, 1758): August 27, 1921 (5362 Ro, 10200 K & R)
145. *Euxoa obelisca* ([Denis & Schiffermüller], 1775): August 13, 1921 (5405 Ro, 10282 K & R)
146. *Agrotis segetum* ([Denis & Schiffermüller], 1775): August (without day and year) (5427 Ro, 10351 K & R)

9. Family NOLIDAE

147. *Nola cucullatella* (Linnaeus, 1758): July 10, 1921 (5477 Ro, 10427 K & R)
148. *Nycteola degenerana* (Hübner, 1799): August 28, 1921 (5487 Ro, 10443 K & R)
149. *Bena prasinana* auct.: VII (without day and year)

10. Family ARCTIIDAE

150. *Amata phegea* (Linnaeus, 1758): July 20, 1952 (5531 Ro, 10517 K & R)
151. *Eilema complana* (Linnaeus, 1758): July 25, 1921 (5519 Ro, 10490 K & R)
152. *Euplagia quadripunctaria* (Poda, 1761): July 20, 1924 (2 ex.) (5584 Ro, 10605 K & R)

CONCLUSIONS

In this list, there are mentioned 152 species, belonging to 10 families of Lepidoptera from the scientific collection of DR. Victor Weindel.

The city Sibiu and the environmental zones, because of their geographical position, constituted a faunal region, well delimited, where there were collected different species of insects, during a long period of time.

So it is possible to study the evolution of the insect fauna in this area. The Lepidoptera collections began early in 1900 and they were continued until the present day (2018). The present study centralizes the collected species still from the year 1903 until in the year 1957 in the Lepidoptera Collection of Dr. Viktor Weindel.

Those 152 species belonging to 10 families constitute an important documentary and scientific material that characterizes biogeographically the marginal zones of the Sibiu city.

REFERENCES

- ANTONIE I. 2016. Preliminary researches regarding the epigeal fauna in the Gușterița ecological garden (Sibiu county). Scientific Papers Series - *Management, Economic Engineering in Agriculture and Rural Development*. Edit. Universității București. **16**(1): 57-61.

- BUCȘA C. & TĂUȘAN I. 2011. Istoricul cercetarilor entomologice din împrejurimile Sibiului. Volumul "Lucrări" al Simpozionului *Biodiversitatea și Managementul insectelor din România*. Societatea Lepidopterologică Română, Piatra Neamț: 179-200.
- MOISE CRISTINA. 2011a. Lepidoptera (Insecta: Lepidoptera) in the collection of Daniel Czekelius from Natural History Museum of Sibiu, collected from "Dumbrava Sibiului" Forest, Romania. *Analele Universității Oradea. Fascicola Biologie*. Edit. Universității Oradea. **18(2)**: 104-110.
- MOISE CRISTINA. 2011b. Lepidoptera (Insecta: Lepidoptera) in the Collection of Eugen Worell from Natural History Museum of Sibiu, Collected from "Dumbrava Sibiului" Forest. *Lucrări științifice. Seria Horticultură*. Edit. Universității Iași. **54(2)**: 571-576.
- MOISE CRISTINA. 2011c. Study on the Macrolepidoptera Collected from the Dumbrava Sibiului Forest existing within the Collection of Dr. Viktor Weindel. *Oltenia. Studii și comunicări. Științele Naturii*. Muzeul Olteniei Craiova. **27(2)**: 96-104.
- MOISE CRISTINA. 2011d. Study on contributions to the knowledge of the fauna siebenbürger saxons of lepidoptera in siebenbürger and around Sibiu, entomology collections of the Museum of Natural History in Sibiu. *18th International Economic Conference –IECS*. Edit. Universității Lucian Blaga din Sibiu: 179-187.
- MOISE G. 2016. Research on vegetation index of crop plants in an experimental garden. *Management, Economic Engineering in Agriculture Rural Development*. Edit. Universității București. **16(4)**: 223-227.
- RÁKOSY L., GOIA M., KOVACS L. 2003. *Catalogul lepidopterelor României*. Societatea Lepidopterologică Română Cluj-Napoca. Cluj-Napoca. 446 pp.
- SCHNEIDER-BINDER E. 1971. Pajiștile xeromezofile din Depresiunea Sibiului și colinele ei marginale. *Studii și Comunicări Științele Naturii*. Muzeul Brukenthal Press, Sibiu. **16**: 135-172.
- SCHNEIDER-BINDER E. 1972. Gebusche und Hecken (Prunion fruticosae Tx. 1952 und Prunion spinosae Soo (1930 n.n. 1940) im Hugelgebiet um die Zibinssenne in Siebenburgen. *Studii și Comunicări Științele Naturii*. Muzeul Brukenthal Press, Sibiu. **17**: 183-207.
- SCHNEIDER-BINDER E. 1973. Pădurile din depresiunea Sibiului și dealurile marginale. *Studii și Comunicări Științele Naturii*. Muzeul Brukenthal Press, Sibiu. **18**: 71-100.
- SCHNEIDER E. 1984. Die Gross-schmetterlinge der Sammlung "Dr. V. Weindel" – Ein Beitrag zur Faunistik der Lepidopteren Südsiebenbürgens und angrenzender Gebiete. *Studii și Comunicări, Științele Naturii*. Muzeul Brukenthal Press, Sibiu. **26**: 289-316.
- SCHNEIDER E. 1996. *Zur Schmetterlingsforschung in Hermannstadt in der Jahren 1945 bis 1985*, Beiträge zur naturwissenschaftlichen Erforschung Siebenbürgens (IV). Lienzer Tagung- Mai 1994, Edit. Stapfia Lintz, Austria. 45 pp.
- STANCĂ-MOISE CRISTINA. 2002. The entomologists from Sibiu their contribution to the knowledge of the Lepidoptero-fauna of Sibiu-Surroundings collections. Lepidoptera. *Macrolepidoptera. Analele Științifice ale Universității "Al. I. Cuza" Iași. Secțiunea I Biologie Animală*. Edit. Universității "Al. I. Cuza", Iași. **48**: 7-12.
- STANCĂ-MOISE CRISTINA. 2015. Lepidoptera collected from Dumbrava Sibiu forest, preserved in collections of Museum of Natural History in Sibiu. *The Annals of Oradea University. Biology fascicle*. Edit. Universității Oradea. **22(2)**: 81-95.
- STANCĂ-MOISE CRISTINA. 2016. Baseline monitoring of Macrolepidoptera in high grasslands around Sibiu, Romania. *Studia Universitatis "Vasile Goldiș". Seria Științele Vieții*. Edit. "Vasile Goldiș" University Press, Arad **26(3)**: 361-374.
- STANCĂ-MOISE CRISTINA. 2017. Study on the Macrolepidoptera Collected from Pălținiș (Sibiu County), existing within the Collection of Dr. Viktor Weindel. *Oltenia. Studii și comunicări. Științele Naturii*. Muzeul Olteniei Craiova. **33(2)**: 97-101.
- SZÉKELY L. 1996. *Lepidopterele (Fluturii) din sud-estul Transilvaniei (România)*. Edit. Disz-Tipo Săcele. 78 pp.
- SZÉKELY L. 2003. Istoricul cercetărilor lepidopterologice din sud-estul Transilvaniei. *Lucrările celei de a 6-a Conferințe Naționale pentru Protecția Mediului prin Metode și Mijloace Biologice și Biotehnice și a celei de a 3-a Conferințe Naționale de Ecosanogeneză*. Edit. Pelecanus, Brașov: 318-322.
- SZÉKELY L. 2008. *The Butterflies of Romania-Fluturii de zi din România*. Edit. Brastar Print-Brașov. 305 pp.
- SZÉKELY L. 2014. *Istoria Lepidopterologiei din România*. Edit. Brastar Print, Brașov. 297 pp.
- VLAD-ANTONIE I. & CIOBANU RODICA. 2004. *Der Arzt Viktor Weindel als Insektenkundler (1887-1966), Siebenbürgisch Sächsische Naturwissenschaftler*. In: Edit. Universității „Lucian Blaga”, Sibiu: 139-143.

Stancă-Moise Cristina

"Lucian Blaga" University of Sibiu, Faculty of Agricultural Sciences,
Food Industry and Environmental Protection, Sibiu, Romania.
E-mail: cristinamoisel@yahoo.com

Received: March 30, 2018
Accepted: August 02, 2018