





Additions to the fauna of casebearer moths (Lepidoptera, Coleophoridae) of Omsk Region, Russia. Results of expeditions in 2021-2023

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Abstract

The data on the casebearer moth family Coleophoridae from Omsk Region was summarized based on materials collected by the second author in 2021-2023. A list of 53 species is given. 25 species are new to the territory of Omsk Region. Six species are new to Asian part of Russia, among them *Orthographis impalella* (Toll, 1961), *Orthographis uralensis* (Toll, 1961), *Multicoloria spumosella* (Staudinger, 1859), *Casignetella helgada* (Anikin, 2005), *Casignetella riffelensis* (Rebel, 1913) and *Goniodoma auroguttella* (Fischer von Röslerstamm, 1841). *Multicoloria perissa* (Reznik, 1975) is reported for the fauna of Russia for the first time. The total number of Coleophoridae from Omsk Region is increased to 80 species.

Key words Lepidoptera, Coleophoridae, fauna, Omsk Region, West Siberia, Russia, biodiversity.

Introduction

The presented work is a continuation of the author's research on the fauna of the casebearer moths of Western Siberia within the Omsk Region (Anikin and Knyazev 2012; 2016; 2021; Knyazev 2022), which expands the aspect of species previously known in the Asian part of Russia. A detailed aspect of the works devoted to faunal research in Western Siberia on this family was presented in the work of the authors in 2021 (Anikin and Knyazev 2021). As a result of modern studying the main part of material collected by S.A. Knyazev on the territory of Omsk Region in 2021-2023. 25 species were found in Omsk Region for the first time, including *Orthographis impalella* (Toll, 1961), *Orthographis uralensis* (Toll, 1961), *Multicoloria spumosella* (Staudinger, 1859), *Casignetella helgada* (Anikin, 2005), *Casignetella riffelensis* (Rebel, 1913) and *Goniodoma auroguttella* (Fischer von Röslerstamm, 1841), that are new for the Asian part of Russia and one species – *Multicoloria perissa* (Reznik, 1975), new to Russia. The list of new and additional records of Coleophoridae presented below.

Material and Methods

54°10'0.94"N, 74°45'24.40"E;

The paper is based on material collected by the second author in various parts of the Omsk Region in 2021-2023, as well as on a limited material kindly provided by S.M. Saikina, O.N. Kholodov, colleague-entomologists from Omsk and I.A. Makhov – a colleague-lepidopterist from St.-Petersburg. The studied material is partly stored in the laboratory of insect taxonomy of the Zoological Institute of the Russian Academy of Sciences (St.-Petersburg, Russia), in the Zoological Museum of the Saratov State University, and in the private collection of the second author. The map was prepared using the Google-Earth program (Fig. 1). Localities were imported into it from a csv-file.

Geographical coordinates of the collecting sites (in alphabetical order):

Agat – Nizhneomsky district, 3.5 km N of Pystynnoe village, Agat ravine, 55°59'8.90"N, 74°42'15.66"E;

Ataichye – Cherlaksky district, 9 km NE of Dzhartagul' village, lake Ataichye, 54°27'14.64"N, 75°40'0.39"E;

Atmas – Cherlaksky district, 2 km N of Malyi Atmas village, river Irtysh, 54°0'48.74"N, 74°56'39.91"E; **Bekishevo** – Tyukalinsky district, 1,8 km SSW of Bekishevo village, 55°33'45.58"N, 72°41'38.57"E; **Berezovka** – Azovsky district, 1 km W of Berezovka village, 54°47'57.05"N, 73°2'9.76"E;

Bol`shaya Bitcha – Ust`-Ishim district, 3 km NW of Bol`shaya Bitcha village, 57°53'29.03"N, 70°34'21.05"E;

Bol`shoi Atmas – Cherlaksky district, 3.5 km N of Bol`shoi Atmas village, at light, 54°6'22.15"N, 74°56'26.85"E:

Buzan – Russko-Polyansky district, 2 km SE of Buzan village, 53°54'38.93"N, 73°57'9.98"E;

Ebargul` - Ust`-Ishimsky district, 3 km SW of Ebargul village, swamp, 57°40′0.99"N, 71°20′28.43"E; **Ebeity** – Moskalensky district, 6 km SW of Gvozdevka village, lake Ebeity, 54°35′27.89"N, 71°47′5.37"E;

Elita – Omsky district, Omsk City, Elita gardens, 55°01'48.8"N, 73°32'54.3"E;

Gorsky Ravine – Gor`kovsky district, 3 km N of Lezhanka village, Gorsky ravine, 55°29'46.81"N, 73°27'46.00"E:

Kamyshino – Okoneshnovsky district, 4.5 km NW of Kamyshino village, 54°43'36.33"N, 74°50'7.52"E;

Keizes – Sedel`nikovsky district, 8.5 km W of Keizes village, river Stanovaya, 56°55'13.58"N, 75°34'40.31"E;

Kormilovka – Kormilovsky district, 10 km E of Kormilovka village, 54°59'58.23"N, 74°16'55.40"E; **Krasnyi Oktyabr**` – Cherlaksky district, Krasnyi Oktyabr` village, 54° 7'47.01"N, 75° 0'57.16"E;

Krutye Luki – Kalatshinsky district, 1.5 km N of Krutye Luki, river Om, 55°9'44.80"N, 74°53'2.25"E; Novovarshavka – Novovarshavky district, 3 km E of Novovarshavka village, river Irtysh,

Omsk – Omsky district, Omsk City, Malinovskogo str., 54°2'16.87"N, 73°19'34.66"E;

Petropavlovka – Muromtsevsky district, Petropavlovka village, at light, 56°24'0.93"N, 75°16'5.10"E; **Podgorodka** – Omsky district, 2 km SW of Podgorodka village, dendropark, 55° 8'9.67"N, 73°30'44.18"E;

Ptichya Gavan` – Omsky district, Omsk City, Nature Park «Ptichya Gavan`», 54°58'20.00"N, 73°20'42.29"E;

Tatarka – Cherlaksky district, 1 km NW of Tatarka, 53°58'34.47"N, 75°2'17.44"E;

Tleusai – Russko-Polyansky district, 8 km SE of Khlebodarovka village, Tleusai river, 53°42'7.53"N, 73°25'11.71"E:

Ust`-Ishim – Ust`-Ishim district, Ust`-Ishim village, 57°41'46.53"N, 71° 8'25.49"E;

Victory Park – Omsky district, Omsk City, Victory Park, 54°58'3.21"N, 73°22'0.03"E;

Yuryevo – Kormilovsky district, Yureyvo village vicinity, Tarbuga river, 55°10'09.2"N, 74°09'34.3"E;

Species firstly reported for the Omsk Region are marked by an asterisk; species new to the Asian part of Russia – by a double asterisk; species new for Russia – by triple asterisk. The abbreviations of the names of the collectors are given by their initials: SK - S.A. Knyazev, SS - S.M. Saikina, OK - O.N. Kholodov, IM - I.A. Makhov.



Figure 1. The map of collecting localities of Coleophoridae in Omsk Region.

Results

Below is a list of 53 species of Coleophoridae, made in accordance with the system of the Catalog of Lepidoptera of Russia (Anikin 2019). We also provide additional locality records for some species that have been previously indicated from the studied territory.

List of species

1. Casas albella (Thünberg, 1788)

Material examined. 1♀, 31.05.2021, Bol`shoi Atmas (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

2. Orghidania gryphipennella (Hübner, 1796)

Material examined. 2 ♂, 29-30.05.2021, Novovarshavka (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

3. Symphypoda parthenica (Meyrick, 1891)

Material examined. 1° , 30.06.2021, Ataichye (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

4. Chnoocera botaurella (Herrich-Schäffer, 1861)

Material examined. 1° , 20-21.06.2022, Tatarka (SK et SS); 2° , 16-17.06.2023, Petropavlovka (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

5. *Protocryptis sibiricella (Falkovitsh, 1965)

Material examined. 1 \updownarrow , 20-21.06.2022, Tatarka (SK et SS); 3 \circlearrowleft , 1 \updownarrow , 29.05.2023, Ptichya Gavan` (SK et SS), ex larva on Larix.

6. *Aporiptura ochroflava (Toll,1961)

Material examined. 16, 9-10.06.2022, Elita (SK et SS);

7. Oedicaula serinipennella (Christoph, 1872)

Material examined. 1 \circlearrowleft , 6-7.06.2022, Gorsky Ravine (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

8. Coleophora albidella (Denis & Schiffermuller, 1775)

Material examined. 1, 20.06.2022, Elita (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

9. Coleophora betulella Heinemann & Wocke, 1877

Material examined. 2♂, 15.06.2021, Elita (SK); 1 ♂, 10-11.07.2021, Petropavlovka (SK). This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

10. Coleophora ibipennella Zeller, 1849

Material examined. 56, 7-8.06.2023, Bol`shaya Bitcha (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

11. **Orthographis impalella (Toll, 1961)

Material examined. 26, 39, 9.05.2022, Ebeity (SK et SS).

12. **Orthographis uralensis (Toll, 1961)

Material examined. 1♂, 12.05.2021, Tleusai (SK).

13. Damophila alcyonipennella (Kollar, 1832)

Material examined. 2° , 20-21.06.2022, Tatarka (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

14. Damophila deauratella (Lienig et Zeller, 1846)

Material examined. 1♂, 21.07.2018, Keizes (SK); 2♂, 30-31.05.2021, Elita (SK et SS); 3♂, 1♀, 15.06.2021, Elita (SS); 2♀, 30.06.2021, Krasnyi Oktyabr` (OK); 1♀, 1.07.2021, Krasnyi

Oktyabr` (OK); $1 \circlearrowleft$, $2 \circlearrowleft$, 10-11.07.2021, Petropavlovka (SK et SS); $2 \circlearrowleft$, 6-7.06.2022, Gorsky Ravine (SK et SS); $2 \circlearrowleft$, 7-8.06.2023, Bol`shaya Bitcha (SK et SS); $1 \hookrightarrow$, 22.07.2023, Ust`-Ishim (SK et SS); $2 \circlearrowleft$, $1 \hookrightarrow$, 23.07.2023, Bol`shaya Bitcha (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

15. *Damophila frischella (Linnaeus, 1758)

Material examined. 1♂, 10-11.07.2021, Petropavlovka (SK et SS).

16. Damophila trifolii Curtis, 1832

Material examined. 13♂, 10-11.06.2020, Elita (SS); 1♀, 29-30.06.2021, Atmas (SK et SS); 1♀, 1.07.2021, Krasnyi Oktyabr` (OK); 1♂, 16-17.06.2023, Buzan (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2012; 2016; 2021).

17. Eupista ornatipennella (Hübner, 1796)

Material examined. $1 \circlearrowleft$, $2 \circlearrowleft$, 16-17.06.2023, Buzan (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

18. Eupista samarensis Anikin, 2001

Material examined. 1♀, 25.05.2021, Krasnyi Oktyabr` (OK); 1♂, 26-27.05.2021, Buzan (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

19. Eupista pr. lixella (Zeller, 1849)

Material examined. 1° , 30-31.05.2021, Elita (SK et SS).

The external morphology and genitalia of both male and female are similar with the species of lixella complex (Baldizzone et Nel 2014). The safe identification requires the DNA barcoding.

20. *Apista adelpha (Falkovitsh, 1979)

Material examined. 26, 9-10.05.2014, Podgorodgka (SK).

21. Apista gallipennella (Hübner, 1796)

Material examined. 1♂, 13.06.2018, Krutye Luki (SK); 1♂, 1♀, 29-30.05.2021, Novovarshavka (SK); 1♂, 31.05.2021, Bol`shoi Atmas (SK et SS). This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

22. Apista dignella (Toll, 1961)

Material examined. 1 \bigcirc , 30-31.05.2021, Elita (SS); 1 \bigcirc , 15.06.2021, Elita (SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2012; 2016).

23. Multicoloria conspicuella (Zeller, 1849)

Material examined. 1♂, 7.06.2022, Elita (SK et SS); 2♂, 25.06.2022, Gorsky Ravine (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

24. Multicoloria ditella (Zeller, 1849)

Material examined. 1♂, 13.06.2018, Krutye Luki (SK); 1♀, 26-27.05.2021, Buzan (SK et SS); 1♂, 16-17.06.2023, Buzan (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

25. *Multicoloria flavicosta (Reznik, 1974)

Material examined. 1♂, 17.07.2023, Bekishevo (SK et SS).

26. *Multicoloria fuscociliella (Zeller, 1849)

Material examined. 1♂, 31.05.2021, Bol`shoi Atmas (SK et SS); 1♀, 15.06.2021, Elita (SS).

27. ***Multicoloria perissa (Reznik, 1975)

Material examined. 1♀, 30.06.2021, Ataichye (SK).

28. **Multicoloria spumosella (Staudinger, 1859)

Material examined. 1♀, 20-21.06.2021, Tatarka (SK et SS); 6♂, 29-30.06.2021, Atmas (SK et SS).

29. Multicoloria vibicigerella (Zeller, 1839)

Material examined. 7 \circlearrowleft , 26-27.05.2021, Buzan (SK et SS); 5 \circlearrowleft , 1 \circlearrowleft , 29-30.05.2021, Novovarshavka (SK et SS); 1 \circlearrowleft , 31.05.2021, Bol`shoi Atmas (SK et SS); 1 \circlearrowleft , 1-2.06.2021, Tleusai (SK et SS); 1 \circlearrowleft , 1 \circlearrowleft , 20-21.06.2021, Tatarka (SK et SS); 1 \circlearrowleft , 1 \circlearrowleft , 14.05.2022, Tleusai (SK); 1 \circlearrowleft , 26.05.2022, Kormilovka (IM); 1 \circlearrowleft , 6-7.07.2022, Gorsky Ravine (SK); 1 \circlearrowleft , 16-17.06.2023, Buzan (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016; 2021).

30. Perygra alticolella (Zeller, 1849)

Material examined. 1, 29-30.05.2021, Novovarshavka (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

31. *Perygra caespititiella (Zeller, 1839)

Material examined. $1 \circlearrowleft$, $1 \hookrightarrow$, 15.06.2021, Elita (SS).

32. *Perygra glaucicolella (Wood, 1892)

Material examined. 1° , 22-23.06.2020, Elita (SS); 1° , 30-31.07.2021, Yuryevo (SK); 1° , 23.07.2023, Bol`shaya Bitcha (SK et SS).

33. Ecebalia gaviaepennella (Toll, 1952)

Material examined. 1 \circlearrowleft , 14-15.08.2012, Buzan (SK); 6 \circlearrowleft , 5 \updownarrow , 30-31.07.2021, Yuryevo (SK); 1 \circlearrowleft , 1.08.2021, Gorsky Ravine (SK); 2 \updownarrow , 6-7.08.2021, Berezovka (SK); 1 \circlearrowleft , 17-18.08.2021, Kamyshino (SK); 1 \circlearrowleft , 21-22.08.2021, Omsk (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016; 2021).

34. *Ecebalia halophilella (Zimmermann, 1926)

Material examined. 1\$\tilde{\cappa}\$, 5-6.08.2021, Elita (SK et SS); 1\$\tilde{\cappa}\$, 6-7.08.2021, Berezovka (SK); 2\$\tilde{\cappa}\$, 7\$\tilde{\cappa}\$, 17-18.08.2021, Kamyshino (SK et SS); 2\$\tilde{\cappa}\$, 19-20.08.2021, Agat (SK); 1\$\tilde{\cappa}\$, 23-24.08.2021, Elita (SS).

35. *Ecebalia pseudolinosyris (Kasy, 1979)

Material examined. 1\$\int_\$, 5-6.08.2021, Elita (SK et SS); 1\$\int_\$, 17-18.08.2021, Kamyshino (SK et SS); 2\$\bar{\phi}\$, 19-20.08.2021, Agat (SK); 2\$\bar{\phi}\$, 27-28.08.2021, Buzan (SK); 2\$\bar{\phi}\$, 9-10.09.2023, Tleusai (SK).

36. Ecebalia saxicolella (Duponchel, 1843)

Material examined. $2 \ \updownarrow$, 10-11.07.2021, Petropavlovka (SK et SS); $1 \ \circlearrowleft$, 6-7.08.2021, Berezovka (SK); $1 \ \circlearrowleft$, 23-24.08.2021, Elita (SS); $1 \ \circlearrowleft$, 1 $\ \updownarrow$, 25.08.2021, Elita (SK et SS). This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

37. *Ecebalia sternipennella (Zetterstedt, 1839)

Material examined. 1♂, 6-7.08.2021, Berezovka (SK); 1♀, 17-18.08.2021, Kamyshino (SK et SS); 1♀, 23-24.08.2021, Elita (SK et SS); 1♂, 2.08.2023, Victory Park (SK et SS).

38. Ecebalia therinella (Tengstrőm, 1848)

Material examined. $1 \circlearrowleft$, 10-11.07.2021, Petropavlovka (SK et SS); $1 \hookrightarrow$, 14-15.08.2021, Petropavlovka (SK et SS); $1 \circlearrowleft$, $2 \hookrightarrow$, 30-31.07.2021, Yuryevo (SK).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

39. *Ecebalia versurella (Zeller, 1849)

Material examined. 1♂, 5-6.08.2021, Elita (SK et SS); 2♀, 6-7.07.2021, Berezovka (SK).

40. Ecebalia vestianella (Linnaenus, 1758)

Material examined. 1 \circlearrowleft , 1.08.2021, Gorsky Ravine (SK); 3 \circlearrowleft , 3 \circlearrowleft , 6-7.08.2021, Berezovka (SK); 1 \circlearrowleft , 17-18.08.2021, Kamyshino (SK et SS); 1 \circlearrowleft , 1 \circlearrowleft , 30-31.07.2021, Yuryevo (SK); 1 \circlearrowleft , 2.07.2023, Victory Park (SK et SS); 1 \circlearrowleft , 23.07.2023, Bol`shaya Bitcha (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2012; 2016; 2021).

41. *Ecebalia virgaureae (Stainton, 1857)

Material examined. 1\$\tilde{\cappa}\$, 17-18.08.2021, Kamyshino (SK et SS).

42. Casignetella albicans (Zeller, 1849)

Material examined. 1 \circlearrowleft , 26-27.05.2021, Buzan (SK et SS); 1 \updownarrow , 29-30.05.2021, Novovarshavka (SK); 1 \circlearrowleft , 22-23.06.2021, Elita (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

43. *Casignetella argentula (Stephens, 1834)

Material examined. 1♂, 23.07.2023, Bol`shaya Bitcha (SK et SS).

44. Casignetella directella (Zeller, 1849)

Material examined. 1\$\infty\$, 10-11.07.2021, Petropavlovka (SK et SS); 1\$\infty\$, 2.08.2023, Victory Park (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2021).

45. **Casignetella helgada (Anikin, 2005)

Material examined. $1 \stackrel{\frown}{\hookrightarrow}$, 29-30.05.2021, Novovarshavka (SK); $1 \stackrel{\frown}{\circlearrowleft}$, 1.08.2021, Gorsky Ravine (SK); $1 \stackrel{\frown}{\circlearrowleft}$, $1 \stackrel{\frown}{\hookrightarrow}$, 30-31.07.2021, Yuryevo (SK).

46. **Casignetella riffelensis (Rebel, 1913)

Material examined. 1\$\tilde{\cappa}\$, 31.05.2021, Bol`shoi Atmas (SK et SS).

47. Casignetella striatipennella (Tengstrőm, [1848])

Material examined. 1♀, 6-7.06.2023, Ebargul` (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2012; 2016).

48. *Casignetella treskaensis (Toll & Amsel, 1967)

Material examined. 1♂, 3-4.08.2021, Tatarka (SK).

49. *Casignetella trochilella (Duponchel, 1843)

Material examined. 1♀, 10-11.07.2021, Petropavlovka (SK et SS).

50. Carpochena binotapennella (Duponchel, 1843)

Material examined. 1♂, 30-31.07.2021, Yuryevo (SK); 1♂, 1.08.2021, Gorsky Ravine (SK); 1♀, 25.08.2021, Elita (SK et SS).

This species was previously reported from Omsk Region (Anikin and Knyazev 2016).

51. *Carpochena salicorniae (Heinemann & Wocke, 1876)

Material examined. 1 \circlearrowleft , 17-18.08.2021, Kamyshino (SK et SS); 1 \updownarrow , 19-20.08.2021, Agat (SK et SS).

52. *Carpochena squalorella (Zeller, 1849)

Material examined. $1 \circlearrowleft$, $1 \hookrightarrow$, 1.08.2021, Gorsky Ravine (SK et SS).

53. **Goniodoma auroguttella (Fischer von Röslerstamm, 1841) Material examined. 2♂, 30-31.07.2021, Yuryevo (SK).

Discussion

Thus, 53 species of casebearer moths have been identified for the fauna of the Omsk Region, 25 of which are firstly reported for the Omsk Region. Six species are new to Asian part of Russia: *Orthographis impalella* (Toll, 1961), *Orthographis uralensis* (Toll, 1961), *Multicoloria spumosella* (Staudinger, 1859), *Casignetella helgada* (Anikin, 2005), *Casignetella riffelensis* (Rebel, 1913) and *Goniodoma auroguttella* (Fischer von Röslerstamm, 1841), one species is new to Russian fauna – *Multicoloria perissa* (Reznik, 1975). According to the new studies, the number of Coleophoridae in the fauna of the Omsk Region has reached 80 species.

For more than 10 years of research, the authors managed to study about half of the existing modern fauna of this family in the southern part of Western Siberia. It is already possible to make a preliminary analysis of the faunal complex of the discovered species. It is obvious that a significant part of the represented species are part of the so-called West Siberian elementary fauna of casebearer moths, which occupies the territory within the Euro-Siberian taiga region, but only within the borders of two provinces - the Ural Mountain and the Ob` Plain (Anikin 2002). The species included in this fauna are mainly represented by wide Transpalaearctic species (*Damophila alcyonipennella*, *Coleophora albidella*, *Multicoloria ditella*, *Casignetella striatipennella*, etc.) and Eastern Palearctic species (*Damophila frischella*, *Multicoloria fuscociliella*, *Carpochena salicorniae*, etc.) with wide interregional ranges. A small proportion of the specificity is introduced by mountain steppe species – wide endemics with distribution in the Ural province: *Orthographis uralensis* and *Apista dignella*.

However, the findings of some species indicate that elements of the Mongolian-Altai elementary fauna penetrate into Western Siberia, which is widespread in the inland territory of Asia in the Altai, West Mongolian and East Mongolian complex provinces of the Euro-Siberian taiga region, as well as in the West Mongolian and East Mongolian complex provinces of the Scythian steppe region. These compex include: *Apista adelpha*, *Multicoloria flavicosta* and *Multicoloria perissa*.

The family of casebearer moths provides a clear example of the differences observed in the Lepidoptera fauna when moving from South to North, which is largely due to the peculiarities of the climate and the dominant groups of plant families for the corresponding natural zones (Anikin 2003).

The ecological and biotopical features of the case-bearer moths of the forest-steppe biotopes of the Omsk region are demonstrated by the connection of most tribes as originally subarid meso-xerophilic groups with Mediterranean steppe plant genera. Thus, forest-steppe landscapes are characterized by a high percentage of meso-xerophilic species from the genera *Haploptilia*, *Ardania*, *Perygra*, *Phagolamia*, *Coleophora* associated with woody vegetation - *Alnus*, *Betula*, *Ulmus*, *Crataegus*, *Prunus*, as well as with forest and forest-steppe plants - *Stellaria*, *Stachys*, *Salvia*, etc.

Steppe landscape areas in the extreme south of Western Siberia in the Omsk region on the border with Kazakhstan contain combinations of forest biotopes, meadow-steppe biotopes, biotopes of steppe salt marshes, etc. In general, this allows more than 20 species of different ecological orientation, food specialization and biotopic confinement, from different zoogeographic regions and natural zones to exist. In steppe biotopes, the degree of mesophilization decreases sharply, which leads to an increase in the proportion of xerophilic species of Coleophoridae for all types of biotopes and the appearance of such species as: *Symphypoda parthenica*, *Chnoocera botaurella*, *Aporiptura ochroflava*, *Oedicaula serinipennella*, *Carpochena squalorella*, *Goniodoma auroguttella*.

Considering the presented fauna of the family by age, it is obvious that it belongs to young faunas. These faunas originated in Eurasia at the end of the Miocene, when the final rupture of the unified field of southern forests occurred and the fauna was divided into Mediterranean, Europeannemoral and Boreal (Anikin 2004). The remaining broad-leaved forests were preserved in the Mediterranean and the Far East, which were practically not affected by glaciation, which made it possible for a whole group of nemoral species to "wait out" glaciation, and a complex began to form in the liberated part of the Asian continent meadow-steppe species that developed initially on herbaceous plants or transferred from woody and shrubby tree species.

At the same time, it should be borne in mind that the composition of this young fauna began to include elements from fairly long-established faunal centers of biodiversity, in a particular case, from Altai-Gobi (Anikin 2010). Therefore, the modern fauna of the Coleophoridae family in Western Siberia (on the territory of the Omsk region) shows a different percentage of the original and introduced groups of casebearer moths. Further studies of various types of landscapes and biotopes in Western Siberia will allow us to establish in more detail the entire range of such complexes.

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