

A check-list of Geometridae (Insecta, Lepidoptera) of the Tyumen Region of Russia

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Abstract

A list of 247 species of Geometrid moths from 5 subfamilies (Archiearinae – 3 species, Ennominae – 70 species, Geometrinae – 9 species, Larentiinae – 132 species, Sterrhinae – 33 species) from the territory of Tyumen Region (including Yamalo-Nenets Autonomous Okrug and Khanty-Mansy Autonomous Okrug) is given. 86 species are reported for the first time. The historical overview of the Geometridae study in the Tyumen Region provided.

Keywords

Lepidoptera, Geometridae, study history, check-list, Tyumen Region, Russia

Introduction

The history of Geometridae study in the Tyumen Region, including the Khanty-Mansiysk and Yamalo-Nenets Autonomous Okrugs, began with the collections made during the expedition by B.M. Zhitkov in 1908 (Tschetverikov, 1911). The active study of the entomofauna in Western Siberia, including the Tyumen Region with the autonomous districts, started at the beginning of the 20th century. As a

result, nine papers were published with varying degrees of territorial coverage and species diversity, including Geometrid Moths (Tschetverikov, 1911; Tschugunov, 1914, 1917, 1925; Shuhov, 1914; Shchuko, 1916; Vnukovsky, 1927; Kolosov, 1933; Fridolin, 1935).

This is followed by a period of more than 30 years in which we have not noticed a single publication on this group of Moths. From the end of the 1960s to 2000, five works were published with indications of Geometridae (Mershalova, Polushkina, 1967; Korshunov, 1973a, 1973b; Vasilenko, 1990; Olshvang, 1992).

In the modern period from 2001 to the present day, 23 works have been published. But it should be noted that most of them, 12 works, are aimed at preparing the Red Books, updating them, as well as an inventory of certain specially protected natural areas, and do not include information about the findings of new species of Geometrid moth for the Tyumen Region (Lomakin et al., 2001; Red book of the Tyumen Region, 2004, 2019; Sitnikov et al., 2004; Tolstikov, 2004; Red book of the Yamalo-Nenets Autonomous Okrug, 2010; Kalinin, 2012; Galich, 2013; Sitnikov et al., 2013; Tolstikov et al., 2013; Stolbov et al., 2017; Strelnikova, Moseevsky, 2018). The remaining 11 works contain the indications of finds of new species of Geometridae for the Tyumen Region (Sizov, 2001, 2002, 2003, 2004; Vasilenko, 2002, 2003, 2007; Hausmann, 2004; Bukhhalo et al., 2014; Skou, Sihvonen, 2015; Müller et al., 2019).

Material and methods

The material for this work was taken from different publications on Geometridae of the Tyumen Region and Autonomous Okrugs from the beginning of research in 1911 to the present days.

The work also presents an extensive unpublished material accumulated over 45 years, including: the collection of P.S. Sitnikov, made from 1976 to 1999 (the material is kept in the funds of the I.Ya. Slovtsov Museum Complex (Tyumen); the collectings of A.A. Sizov from 1998 to 2002 (the material is kept in different funds: the I.Ya. Slovtsov Museum Complex (Tyumen), the Tyumen State University Museum of Zoology, the Zoological Museum of the M.V. Lomonosov Moscow State University, Moscow State Forest University, Institute of Systematics and Ecology of Animals SB RAS (Novosibirsk), Zoological Institute RAS (St. Petersburg); the collectings of D.E. Galich from 2008 to 2020 (the material is kept in the private collection (Tyumen); the materials of S.A. Knyazev and V.O. Zurilina (in private S.A. Knyazev collection (Omsk); single finds of O.G. Krevskoy, E.I. Kohegova, A.V. Soromotina, V.V. Sinitsina, (collections are kept in the funds of the I.Ya. Slovtsov Museum Complex (Tyumen) and K.P. Samko (the surviving collections are in the Tobolsk Historical and Architectural Museum-Reserve (Tobolsk).

Identification of species from the collections of P.S. Sitnikov, A.A. Sizov, O.G. Krevskoy, E.I. Kohegov, A.V. Soromotin, V.V. Sinitsin was carried out by †E.M. An-

tonova (Moscow), V.G. Mironov (St. Petersburg), and S.V. Vasilenko (Novosibirsk); identification of the material of D.E. Galich was carried out by S.A. Knyazev.

The general system and order of taxa are given according to the catalog of Lepidoptera of Russia (Beljaev et al., 2019).

Accepted abbreviations and notation: TO – Tyumen Region (without Autonomous Okrugs), KMAO – Khanty-Mansi Autonomous Okrug-Yugra, YNAO – Yamalo-Nenets Autonomous Okrug, NP – natural park, spm. – specimen(s), * – species reported from the Tyumen Region for the first time.

Geographical coordinates of the collection sites

Yamalo-Nenets Autonomous Okrug:

1. Aksarka – vicinity of Aksarka village in Priuralsky district, 66°33'29.4"N, 67°47'10.8"E;
2. Gubkinsky – vicinity of Gubkinsky city, 64°25'54.8"N, 76°31'17.1"E;
3. Korotchaevo – Korotchaevo village in Purovsky district, 65°56'0.5"N, 78°11'42.3"E;
4. Krasnoselkup – vicinity of Krasnoselkup village in Krasnoselkupsky district, 65°42'2.8"N, 82°29'12.7"E;
5. Krasnyi Kamen` – Polar Ural, 38 km NW of Labytnangi, 9 km N of Kharp village, 141 km station, Slantsevaya mountain, 66°54'22.41"N, 65°44'23.80"E (Fig. 1);
6. Labytnangi – Labytnangi city, 66°39'22.26"N, 66°23'52.06"E;
7. Muravlenko – vicinity of Muravlenko city, 63°24'12.0"N, 74°44'11.1"E;
8. Muzhi – vicinity of Muzhi village in Shuryshkarsky district, 65°24'26.8"N, 64°42'17.1"E;
9. Novy Urengoy – Novy Urengoy city, 66°05'47.5"N, 76°39'07.5"E;
10. Noyabrsk – vicinity of Noyabrsk city, 63°10'02.0"N, 75°25'00.0"E;
11. Ratta – vicinity of Ratta village in Krasnoselkupsky district, 63°31'02.9"N, 83°51'04.2"E;
12. Salekhard – Salekhard city, 66°33'07.6"N, 66°33'58.3"E;
13. Teuteyaga – Teuteyaga (Teutey-Yaga) river in Yamalsky district, 66°32'00.0"N, 70°39'00.0"E;
14. Tolka – vicinity of Tolka village in Purovsky district, 63°23'53.3"N, 80°05'13.7"E;
15. Yuribey – near the Yuribey river, in South Yamal, 69°00'16.9"N, 70°23'52.4"E.

Khanty-Mansi Autonomous Okrug-Yugra:

16. Agan – vicinity of Agan village in Nizhnevartovsky district, 61°38'20.0"N, 75°05'02.2"E;
17. Agirish – vicinity of Agirish village in Sovietsky district, 61°55'00.0"N, 63°00'00.0"E;

18. Beloyarsky – Beloyarsky city, 63°43'1.1"N, 66°54'52.5"E;
19. Berezovo – Berezovo village in Berezovsky district, 63°56'16.3"N, 65°02'39.9"E;
20. Bolshetarkhovo – Bolshetarkhova village in Nizhnevartovsky district, 61°06'13.5"N, 77°10'41.9"E;
21. Khanty-Mansiysk – Khanty-Mansiysk city, 60°59'54.6"N, 69°01'41.7"E;
22. Komsomolsky – vicinity of Komsomolsky village in Oktyabrsky district, 62°15'52.1"N, 66°59'45.2"E;
23. Kondinskoe – vicinity of Kondinskoe village in Kondinsky district, 59°38'57.2"N, 67°24'42.8"E;
24. Malinovsky – vicinity of Malinovsky village in Sovietsky district, 61°11'00.0"N, 62°48'00.0"E;
25. Nefteyugansk – vicinity of Nefteyugansk city, 61°06'02.2"N, 72°36'01.9"E;
26. Numto – Numto lake in Beloyarsky district, 63°30'49.8"N, 71°20'21.3"E;
27. Oktyabrskoe – vicinity of Oktyabrskoe village in Oktyabrsky district, 62°27'28.3"N, 66°02'17.2"E;
28. Pasol – Pasol village (non-residential) in Nizhnevartovsky district, 60°51'01.9"N, 77°01'58.5"E;
29. Pokachi – vicinity of Pokachi city, 61°43'00.0"N, 75°22'00.0"E;
30. Pripolyarnyi – vicinity of Pripolyarnyi village Berezovsky district, 63°13'11.0"N, 60°14'05.0"E;



Figure 1. Polar Ural, 38 km NW of Labytnangi, 9 km N of Kharp village (photo by S. Knyazev).

31. Tayozhny – vicinity of Tayozhny village in Sovietsky district, 61°10'04.2"N, 62°40'51.3"E;
32. Tolya – river bank Tolya, near the Pripolyarnyi village in Berezovsky district, 63°12'4.5"N, 59°37'26.3"E;
33. Ust`-Balyk – Ust`-Balyk field on the border of the Surgutsky and Nefteyugansk districts, 61°04'18.7"N, 72°36'28.5"E;
34. Wah – Wah village in Nizhnevartovsky district, 61°06'00.0"N, 77°56'00.0"E;
35. Zelenoborsk – vicinity of Zelenoborsk village in Sovietsky district, 61°28'15.2"N, 64°02'40.0"E.

Tyumen Region (without Autonomous Okrugs):

36. Abalak – vicinity of Abalak village in Tobolsky district, 58°08'00.0"N, 68°35'00.0"E (Fig. 2);
37. Abatsky – vicinity of Abatskoe village in Abatsky district, 56°17'19.1"N, 70°28'14.7"E;
38. Abramova – Abramova village in Tobolsky district, 58°24'23.8"N, 68°25'40.4"E;
39. Andreevskoe – Andreevskoe lake, vicinity Tyumen city, 57°01'00.0"N, 65°49'00.0"E;
40. Babarynka – floodplain of Babarynka river within Tyumen city, 57°10'12.8"N, 65°29'09.3"E;
41. Baikalovo – vicinity of Baikalovo village in Tobolsky district, 57°47'00.0"N, 67°39'00.0"E;
42. Big Krasnoyar – vicinity of Bolshoy Krasnoyar village in Omutinsky district, 56°34'00.0"N, 67°42'00.0"E;
43. Big Kunchur – vicinity of Big Kunchur lake in Nizhnetavdinsky district, 57°16'38.9"N, 66°11'10.6"E;
44. Bogandinskoe – vicinity of Bogandinskoe village in Tyumensky district, 56°53'02.4"N, 65°52'07.4"E;
45. Chervishevo – vicinity of Chervishevo village in Tyumensky district, 56°56'00.0"N, 65°28'00.0"E;
46. Chernoe – vicinity of Chernoe village in Vagaisky district, 57°39'18.5"N, 69°10'24.5"E;
47. Derbyshi – vicinity of Derbyshi village in Tyumensky district, 57°07'36.7"N, 65°28'05.1"E;
48. Dubrovnoe – vicinity of Dubrovnoe village in Yarkovsky district, 57°08'52.9"N, 66°33'35.1"E;
49. Durynina – Durynina village in Tobolsky district, 58°20'17.7"N, 68°18'46.0"E;
50. Eco trail – Ecological trail within the Tobolsk city, 58°17'02.5"N, 68°28'14.3"E;
51. Embaevo – vicinity of Embaevo village in Tyumensky district, 57°09'00.0"N, 65°46'00.0"E;

52. Ermak's garden – Ermak's garden in the historical part of Tobolsk, 58°11'58.7"N, 68°15'24.9"E;

53. Golyshmanovo – Golyshmanovo railway station in Golyshmanovsky district, 56°23'22.6"N, 68°22'37.0"E;

54. Gulyai-Pole – vicinity of Gulyai-Pole village in Sladkovsky district, 55°21'04.6"N, 70°22'34.6"E;

55. Ivashkina – vicinity of Ivashkina village in Nizhnetavdinsky district, 57°34'53.5"N, 66°18'20.4"E;

56. Ingair – Ingair railway station in Tobolsky district, 58°36'26.2"N, 68°46'54.0"E (Fig. 3);

57. Ishim – Ishim city, 56°07'00.0"N, 69°30'00.0"E;

58. Istoshino – Istoshino village vicinities in Berdyuzhsky district, 55°57'57.48"N, 68°07'25.48"E;

59. Kalmakskoe – vicinity of Kalmakskoe village in Armizonsky district, 55°45'34.7"N, 67°59'08.8"E;

60. Kamenka – vicinity of Kamenka village in Tyumensky district, 57°16'09.1"N, 65°06'15.8"E (Fig. 4);



Figure 2. Vicinity of Abalak village in Tobolsky district (photo by P. Sitnikov).

61. Karasulskaya – Karasulskaya railway station in Ishimsky district, 56°16'59.7"N, 68°55'39.8"E;
62. Kazanskoe – Kazanskoe village in Kazanskiy district, 55°38'24.9"N, 69°13'36.3"E;
63. Komissarovo – vicinity of Komissarovo village in Zavodoukovsky district, 56°14'00.0"N, 66°50'00.0"E;
64. Knyazhevo – vicinity of Knyazhevo village in Tyumensky district, 57°12'35.5"N, 65°26'19.2"E;
65. Krugloye – Krugloye lake in Tyumensky district, 57°06'00.0"N, 65°55'00.0"E;
66. Kryukovskoe – vicinity of Kryukovskoe lake in Vagaysky district, 57°50'00.0"N, 69°08'00.0"E;
67. Kuchak – Kuchak lake in Nizhnetavdinsky district, 57°22'4.2"N, 66°04'21.5"E;
68. Kultybaika – vicinity of Kultybaika lake in Nizhnetavdinsky district, 57°25'26.5"N, 66°22'37.1"E;
69. Kushluk – vicinity of Kushluk village in Berdyuzhsky district, 55°32'35.8"N, 68°32'22.0"E;
70. Lesozavodsky – Lesozavodsky village in Nizhnetavdinsky district, 57°22'41.7"N, 65°33'54.4"E;
71. Lipovoe – Lipovoe lake vicinity in Tyumensky district, 57°15'43.1"N, 65°37'11.6"E;
72. Lukashinskoe – vicinity of Lukashinskoe lake in Tyumensky district, 57°18'00.0"N, 64°59'00.0"E;
73. Maika – Maika village vicinity in Abatsky district, 55°36'39.7"N, 70°30'21.0"E;
74. Malkovo – vicinity of Malkova village in Tyumensky district, 57°04'56.1"N, 65°40'11.3"E;
75. Maryino gorge – vicinity of NP Maryino gorge in Isetsky district, 56°27'10.7"N, 65°30'44.8"E (Fig. 5);
76. Maslyansky – vicinity of Maslyansky village in Sladkovsky district, 55°54'55.5"N, 70°09'5.0"E;
77. Mazurovo – vicinity of Mazurova village in Yarkovsky district, 57°52'00.0"N, 67°26'00.0"E;
78. Melioratorov – vicinity of Melioratorov village in suburbs of Tyumen city, 57°14'00.0"N, 65°39'00.0"E;
79. Missia – research station "Missia" in Uvatsky district, 58°43'14.7"N, 68°40'58.8"E (Fig. 6);
80. Moshkarinsky – Moshkarinsky reserve in Yalutorovsky district, 56°59'00.0"N, 66°35'00.0"E;
81. Motushi – Motushi village vicinity in Yarkovsky district, 57°07'50.6"N, 66°26'10.2"E;
82. Nadtsy – Nadtsy village vicinity in Tobolsky district, 58°37'39.8"N, 68°34'50.1"E;
83. Novoatyalovo – vicinity of Novoatyalovo village in Yalutorovsky district, 57°01'57.6"N, 66°39'33.5"E;

84. Omutinskoe – vicinity of Omutinskoe village in Omutinsky district, 56°29'00.0"N, 67°38'00.0"E;

85. Onokhino – vicinity of Onokhino village in Tyumensky district, 56°56'00.0"N, 65°33'00.0"E;

86. Ostropyatovo – vicinity of Ostropyatova village in Sladkovsky district, 55°39'18.1"N, 70°27'23.4"E;

87. Peña – Peña village vicinity in Tobolsky district, 58°39'53.1"N, 68°35'53.9"E;

88. Pesyanka – vicinity of Pesyanka village in Tyumensky district, 56°50'04.2"N, 65°45'02.9"E;

89. Rafailovo – Rafailovo village in Isetsky district, 56°25'00.0"N, 65°14'00.0"E;

90. Razhevo – vicinity of Razhevo village in Golyshmanovsky district, 56°09'51.5"N, 68°23'55.6"E;

91. Rechkina – vicinity of Rechkina village in Tyumensky district, 57°20'48.0"N, 64°55'21.0"E;

92. Reshetnikova – vicinity of Reshetnikova village in Tyumensky district, 57°14'50.4N, 65°24'06.1"E;

93. Salairka – Salairka village in Tyumensky district, 57°22'00.0"N, 65°00'00.0"E;

94. Sannikovo – Sannikovo village in Tobolsky district, 58°02'55.1"N, 68°36'05.6"E;



Figure 3. Ingair railway station in Tobolsky district (photo by D. Galich).



Figure 4. Vicinity of Kamenka village in Tyumensky district (photo by P. Sitnikov).



Figure 5. Vicinity of NP Maryino gorge in Isetsy district (photo by P. Sitnikov).

95. Shapkul – vicinity of Shapkul lake in Nizhnetavdinsky district, 57°24'51.4"N, 66°16'22.7"E;

96. Shashova – vicinity of Shashova village in Uporovsky district, 56°22'01.3"N, 66°20'35.8"E;

97. Sinitysynsky bor – Sinitysynsky Bor, coniferous forest in the vicinity Ishim city, 56°01'24.6"N, 69°28'51.8"E;

98. Siverga – vicinity of Siverga lake in Kazansky district, 55°28'04.7"N, 68°45'39.2"E;

99. Skiing lodge – Skiing lodge with in the Tobolsk city, 58°12'22.0"N, 68°17'34.7"E;

100. Sladkovo – vicinity of Sladkovo village in Sladkovsky district, 55°31'00.0"N, 70°22'00.0"E;

101. Sokolovka – Sokolovka village in Tobolsky district, 58°14'29.3"N, 68°21'32.0"E;

102. Stanichnoye – vicinity of Stanichnoye village in Sladkovsky district, 55°48'00.0"N, 70°11'00.0"E;

103. Staraya Shadrina – Staraya Shadrina village in Uporovsky district, 56°10'54.4"N, 65°51'37.1"E;

104. Sundunkul – Sundunkul lake vicinity in Nizhnetavdinsky district, 57°22'2.2"N, 65°45'12.2"E;

105. Tavolzhan – vicinity of Tavolzhan village in Sladkovsky district, 55°20'59.4"N, 70°10'07.2"E;

106. Tavolzhan (Island) – Tavolzhan Island in Sladkovsky district, 55°19'15.4"N, 70°06'55.6"E;

107. Tobolsk – Tobolsk city, 58°11'53.9"N, 68°14'17.6"E;

108. Travnoe – vicinity of Travnoe lake in Sladkovsky district, 55°44'53.2"N, 70°15'05.3"E;

109. Tyuleshov bor – vicinity of Tyuleshov bor village in Vikulovsky district, 56°41'23.4"N, 70°40'29.2"E;

110. Tyumen – Tyumen city, 57°09'00.0"N, 65°31'00.0"E;

111. Tyumen (forest nursery) – the outskirts of Tyumen, a former forest nursery, 57°09'51.3"N, 65°26'02.9"E;

112. Tyumen (E) – near the city of Tyumen, 30 km to the East, 57°09'00.0"N, 65°48'00.0"E;

113. Tyumen (SE) – near the city of Tyumen, 5 km to the Southeast, 57°02'00.0"N, 65°40'00.0"E;

114. Tyumen (NW) – near the city of Tyumen, 35 km to the Northwest, 57°15'50.7"N, 65°18'8.4"E;

115. Uporovo – Uporovo village in Uporovsky district, 56°18'43.9"N, 66°16'24.7"E;

116. Uspenka – vicinity of Uspenka village in Tyumensky district, 57°03'00.0"N, 65°03'00.0"E;

117. Vagai – Vagai village in Vagaysky district, 57°56'00.0"N, 69°01'00.0"E;



Figure 6. Research station "Missia" in Uvatsky district (photo by D. Galich).

118. Vedenyatskoe – vicinity of Vedenyatskon lake in Uporovskiy district, 56°11'49.2"N, 65°49'03.1"E;

119. Velizhany – vicinity of Velizhany village in Nizhnetavdinsky district, 57°33'24.2"N, 65°47'38.5"E;

120. Vinokurova – vicinity of Vinokurov village in Tobolsky district, 58°20'28.6"N, 68°20'27.7"E;

121. Vlasovo – Vlasovo lake in Sladkovsky district, 55°32'00.0"N, 70°23'00.0"E;

122. Volgina – formerly the village of Volgina, now the outskirts of Tobolsk city, 58°16'13.7"N, 68°14'06.1"E;

123. Yalutorovsk – Yalutorovsk city, 56°39'12.1"N, 66°17'12.2"E;

124. Yarkovo – vicinity of Yarkovo village in Yarkovsky district, 57°23'51.6"N, 67°05'12.4"E;

125. Yushkova – vicinity of Yushkova village in Vikulovsky district, 56°52'00.0"N, 70°32'00.0"E;

126. Zavalnoye cemetery – vicinity of Zavalnoye cemetery within Tobolsk city, 58°12'57.9"N, 68°15'16.8"E.

Schematic map of the collection sites in the Tyumen Region is shown on Suppl. material 1: Map 1.

Results

Archiearinae

1. *Archiearis parthenias* (Linnaeus, 1761) – Shchuko, 1916:148 (*Brephos*, Tyumen); Mershalova, Polushkina, 1967:138 (*Brephos*, Tyumen); Bukhhalo et al., 2014:139 (Tobolsk). YNAO: Krasnyi Kamen`, 1-13.VII.2017 – 1 spm. V.O. Zurilina. TO: Abramova, 07.V.2019 – 1 spm. D.E. Galich; Andreevskoe, 25.IV.1980, 11.V.1991, 11.V.1992 – 5 spm. P.S. Sitnikov; Tyumen (SE), 29.IV.1981, 29.IV.1983 – 2 spm. P.S. Sitnikov.

2. *Archiearis notha* (Hübner, [1803]) – Bukhhalo et al., 2014:139 (Tobolsk). TO: Andreevskoe, 02.V.1997 – 1 spm. P.S. Sitnikov; Derbyshi, 09.V.1996 – 1 spm. P.S. Sitnikov; Skiing lodge, in the daytime, 11.VI.2006 – 1 spm. D.E. Galich; Tobolsk, 20.V.1931 – 1 spm. K.P. Samko.

3. *Leucobrephos middendorffii* (Ménétriés, 1858) – Müller et al., 2019: 520, 624 (Shuryskary).

Ennominae

4. *Cabera exanthemata* (Scopoli, 1763) – Tschetverikov, 1911:25 (*Deilinia* sp.? *exanthemata*, Yamalo-Nenets Autonomous Okrug); Korshunov, 1973b:183 (Duryrnina, Sokolovka, Tobolsk, Berezovo). YNAO: Gubkinsky, 9.VII.1999 – 1 spm. A.A. Sizov; Krasnoselkup, 11.VII.1989 – 1 spm. P.S. Sitnikov; Ratta, 17.VII.1989 – 1 spm. P.S. Sitnikov; Tolka, 14.VII.1989 – 1 spm. P.S. Sitnikov. KMAO: Beloyarsky, 13.VIII.1990 – 1 spm. P.S. Sitnikov. TO: Abatsky, 10.VII.2001 – 4 spm. A.A. Sizov; Andreevskoe, 18, 22, 23.VI. 9, 23, 30. VII, 22.VIII.1988 – 8 spm. P.S. Sitnikov, 25.VI.2000 – 1 spm. A.A. Sizov; Baikalovo, 5.VIII.1999 – 2 spm. A.A. Sizov; Big Krasnoyar, 18.VII.2001 – 1 spm. A.A. Sizov; Vinokurova, 4.VIII.1999 – 2 spm. A.A. Sizov; Ingair, 30.VI.1988, 15.VI.1991, 28.VI.1994 – 3 spm. P.S. Sitnikov; Kuchak, 29.VI. 1, 3, 10 VII.1998 – 8 spm. A.A. Sizov; Malkovo, 15.VIII.2001 – 1 spm. A.A. Sizov; Motushi, 1, 4.VII.1998 – 2 spm. P.S. Sitnikov; Nadtsy, 29-30.VI.1994 – 4 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 2 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1

spm. P.S. Sitnikov; Tyumen, 20.VI.1981, 11.VI. 3, 11, 18, 30.VII.1987 – 6 spm. P.S. Sitnikov; Chervishevo, 21, 26.VII.1987 – 2 spm. P.S. Sitnikov.

5. *Cabera pusaria* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Deilinia*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148 (*Deilinia*, Karasulskaya); NP Kondinsky Lakes, 2012:235 (Khanty-Mansi Autonomous Okrug-Yugra); Bukhkalov et al., 2014:140 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 3 spm. A.A. Sizov; Andreevskoe, 23.VII, 22, 23.VIII.1988 – 3 spm. P.S. Sitnikov, 25.VI.2000 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Velizhany, 16.VI.1998 – 1 spm. P.S. Sitnikov; Dubrovnoe, 05, 10.VII.1999 – 2 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 27.VI.1994 – 2 spm. P.S. Sitnikov; Ishim, 10.VII.2001 – 4 spm. A.A. Sizov; Kuchak, 1, 3, 18.VII.1998, 27.VI.1999 – 4 spm. A.A. Sizov; Lukashinskoe, 28.VI, 26.VII.1987 – 2 spm. P.S. Sitnikov; Mazurovo, 21.VI.1986 – 1 spm. P.S. Sitnikov; Motushi, 2.VII.1998 – 1 spm. P.S. Sitnikov; Nadtsy, 27.VI.1991 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 10.VI.1980, 14, 18.VI.1981, 7.IX.1986, 26.V, 11, 29.VI, 4.VII.1987 – 9 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Chervishevo, 18.VIII, 21, 26.VII.1987 – 3 spm., P.S. Sitnikov; Shashova, 10.VI.2020 – 3 spm. D.E. Galich.

6. *Lomographa bimaculata* (Fabricius, 1775) – Bukhkalov et al., 2014:140 (Tobolsk). **TO**: Andreevskoe, 27.V.1999 – 3 spm. A.A. Sizov; Vagai, 21.VI.2002 – 2 spm. A.A. Sizov; Onokhino, 10.VI.1996 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 9.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 18.VI.1981 – 1 spm. P.S. Sitnikov.

7. *Lomographa temerata* ([Denis et Schiffermüller], 1775) – Bukhkalov et al., 2014:140 (Tobolsk). **TO**: Onokhino, 10.VI.1996 – 2 spm. P.S. Sitnikov; Tyumen, 18.VI.1981 – 1 spm. 11.VI.1987 – 1 spm. P.S. Sitnikov; Tyumen (forest nursery), 18.V.1980 – 1 spm. P.S. Sitnikov.

8. *Odontopera bidentata* (Clerck, 1759) – Korshunov, 1973a:145 (*Gonodontis*, Khanty-Mansi Autonomous Okrug-Yugra). **TO**: Ingair, 30.VI.1998 – 3 spm. P.S. Sitnikov; Tyumen, 14.VI.1981, 6.VI.1987 – 2 spm. P.S. Sitnikov.

9. *Crocallis elinguarina* (Linnaeus, 1758) – Bukhkalov et al., 2014:140 (Missia, Tobolsk). **KMAO**: Bolshetarkhovo, 1.VIII.1985 – 1 spm. P.S. Sitnikov. **TO**: Ingair, 25.VII.1990 – 1 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 2 spm. P.S. Sitnikov.

10. *Petrophora chlorosata* (Scopoli, 1763) – Bukhkalov et al., 2014:140 (Missia, Tobolsk). **TO**: Tyumen (E), 23.V.1991 – 1 spm. P.S. Sitnikov.

11. *Epirranthis diversata* (Denis et Schiffermüller, 1775) – Tschugunov, 1917:2 (*Ploseria pulverata*, Berezovo), 1925:70 (*P. pulverata*, Berezovo); (Shchuko, 1916:148 (*E. pulverata*, Bogandinskoe (station))); Korshunov, 1973b:183 (*pulverata*, Berezovo). **TO**: Abramova, 7.V.2020 – 2 spm. D.E. Galich; Krugloye, 9.V.1980 – 2 spm. P.S. Sitnikov; Lesozavodsky, 7.V.2020 – 1 spm. P.S. Sitnikov.

12. *Selenia dentaria* (Fabricius, 1775) – Korshunov, 1973a:145 (*bilunaria*, Khanty-Mansi Autonomous Okrug-Yugra); Sizov, 2001:66 (Tyumen Region); Red book of the Tyumen Region, 2004:150 (Tyumen, Oktyabrskoe); Sitnikov et al., 2013:128 (Tyumen, Kryukovskoe). **YNAO**: Korotchaev, 14.VII.1999 – 2 spm. A.A. Sizov. **TO**: Ermak's garden, 24.VI.2007 – 1 spm. D.E. Galich.

13. *Selenia lunularia* (Hübner, [1788]) – Red book of the Tyumen Region, 2004:151 (Tyumen); Red book of the Tyumen Region, 2019 (Tyumen).

14. *Selenia tetralunaria* (Hufnagel, 1767) – Korshunov, 1973a:145 (Khanty-Mansi Autonomous Okrug-Yugra); Bukhkalov et al., 2014:140 (Tobolsk). **TO:** Abat-sky, 10.VII.2001 – 1 spm. A.A. Sizov; Kul'tybaika, 7.VII.1995 – 1 spm. P.S. Sitnikov; Tyumen, 26.VII.1999 – 2 spm. A.A. Sizov; Chervishevo, 21, 26.VII.1987 – 4 spm. P.S. Sitnikov.

15. *Cepphis advenaria* (Hübner, [1799] 1796) – Red book of the Tyumen Region, 2004:154 (Andreevskoe, Rafailovo, Yarkovo); Sitnikov et al., 2013:128 (Andreevskoe, Rafailovo, Yarkovo). **TO:** Vagai, 21.VI.2002 – 2 spm. A.A. Sizov.

16. *Plagodis dolabraria* (Linnaeus, 1758) – Korshunov, 1973a:145 (*Eurymene*, Khanty-Mansi Autonomous Okrug-Yugra); Sizov, 2001:66 (Tyumen Region); Bukhkalov et al., 2014:140 (Missia, Tobolsk). **TO:** Andreevskoe, 18, 22.VI, 22.VII.1988, 23.V.1991 – 5 spm. P.S. Sitnikov, 9.VIII.1998 – 1 spm. A.A. Sizov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 11.VI.1987 – 1 spm. P.S. Sitnikov.

17. *Plagodis pulveraria* (Linnaeus, 1758) – Korshunov, 1973b:183 (*Anagoga*, Berzovo). **YNAO:** Gubkinsky, 9.VII.1999 – 2 spm. A.A. Sizov; Muravlenko, 9.VII.1999 – 2 spm. A.A. Sizov. **KMAO:** Pokachil, 2.VII.1988 – 1 spm. A.V. Soromotin. **TO:** Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Moshkarinsky, 21.VI.1997 – 1 spm. P.S. Sitnikov.

18. *Pseudopanthera macularia* (Linnaeus, 1758) – Shchuko, 1916:148 (*Venilia*, Karasul'skaya); Bukhkalov et al., 2014:140 (Tobolsk). **TO:** Sinit'syn'sky bor, 10.VI.1997 – 2 spm. P.S. Sitnikov; Tyuleshov bor, 23.V.1997 – 2 spm. P.S. Sitnikov; Shashova, 17.VI.1997 – 1 spm. P.S. Sitnikov.

19. *Epione repandaria* (Hufnagel, 1767) – Shchuko, 1916:148 (*apiciaria*, Karasul'skaya); Bukhkalov et al., 2014:139 (Ermak's garden). **KMAO:** Tayozhny, 9.VIII.1999 – 1 spm. A.A. Sizov. **TO:** Abramova, 12.IX.2019 – 2 spm. D.E. Galich; Andreevskoe, 30.VII.1988 – 1 spm. P.S. Sitnikov, 30.VII, 15.VIII.1999 – 2 spm. A.A. Sizov; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Tyumen, 27.VIII.1986, 29.VII.1993 – 3 spm. P.S. Sitnikov; Chervishevo, 18.VIII.1981 – 1 spm. P.S. Sitnikov.

20. **Epione vespertaria* Linnaeus, 1767 – **KMAO:** Wah, 21.VIII.1987 – 1 spm. A.V. Soromotin; Tayozhny, 9.VIII.2002 – 1 spm. A.A. Sizov. **TO:** Andreevskoe, 23, 30.VII.1988 – 2 spm. P.S. Sitnikov, 30.VII.1999 – 1 spm. A.A. Sizov; Ingair, 22, 23.VII.1990 – 2 spm. P.S. Sitnikov; Kuchak, 15.VII.1998 – 1 spm. A.A. Sizov; Nadt'sy, 23.VIII.1986 – 1 spm. P.S. Sitnikov; Tyumen, 30.VII.1987 – 1 spm. P.S. Sitnikov, 26.VII.1999 – 1 spm. A.A. Sizov; Chervishevo, 21, 26.VII.1987 – 2 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 1 spm. A.A. Sizov.

21. *Apeira syringaria* (Linnaeus, 1758) – Red book of the Tyumen Region, 2004:152 (Ingair); Galich, 2013:39 (Ermak's garden, Tobolsk); Bukhkalov et al., 2014 (Ermak's garden, Tobolsk); Stolbov et al., 2017:87 (Tobolsk); Red book of the Tyumen Region, 2019 (Tobolsk).

22. **Opisthograptis luteolata* (Linnaeus, 1758) – **TO**: Abramova, 11.VII.2015 – 1 spm. D.E. Galich; Vagai, 21.VI.2002 – 5 spm. A.A. Sizov; Tyumen, 23.VI.1980, 18.VI.1981, 11.VI.1987 – 3 spm. P.S. Sitnikov.

23. *Ennomos autumnaria* (Werneburg, 1859) – Shchuko, 1916:148 (Karasulskaya); Bukhhalo et al., 2014:140 (Tobolsk). **TO**: Andreevskoe, 7, 22.VIII.1988 – 4 spm. P.S. Sitnikov, 15.VIII.1999 – 3 spm. A.A. Sizov; Ivashkina, 15.VIII.1993 – 1 spm. P.S. Sitnikov; Istoshino, 13-14.VIII.2016 – 1 female, S.A. Knyazev; Kuchak, 19.VIII.1999 – 2 spm. P.S. Sitnikov; Tyumen, 9.VIII.1976, 20, 23.VIII.1980, 28.VIII.1986 – 5 spm. P.S. Sitnikov.

24. *Ourapteryx sambucaria* (Linnaeus, 1758) – Lomakin et al., 2001:362 (Tyumen); Tolstikov, 2004:30 (Kuchak, Razhevo); Red book of the Tyumen Region, 2004:153 (Tyumen); Red book of the Tyumen Region, 2019 (Kuchak, Razhevo, Pesyanka, Tyumen); Tolstikov, Kuzmin, Stolbov, 2013:165 (Kuchak); Stolbov et al., 2017:87 (Andreevskoe, Pesyanka). **TO**: Abramova, 22.VII.2018 – 1 spm. D.E. Galich.

25. *Hylaea fasciaria* (Linnaeus, 1758) – Shchuko, 1916:148 (*Ellopiopsis prosapiaria*, Karasulskaya); Tschugunov, 1914:448 (*prosapiaria*, Khanty-Mansi Autonomous Okrug-Yugra). **KMAO**: Wah, 21.VIII.1987 – 1 spm. A.V. Soromotin; Pasol, 11, 14.VII.1987 – 2 spm. A.V. Soromotin. **TO**: Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov; Dubrovnoe, 4, 12.VII.1999 – 2 spm. P.S. Sitnikov; Kuchak, 30.VI, 1, 3.VII.1998, 15, 18.VII.1998 – 3 spm. A.A. Sizov; Motushi, 4, 9.VII.1998 – 4 spm. P.S. Sitnikov.

26. *Perconia strigillaria* (Hübner, 1787) – Tschugunov, 1914:448 (*Acidalia*, Khanty-Mansi Autonomous Okrug-Yugra).

27. **Charissa ambiguata* (Duponchel, 1830) – **TO**: Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov, 25.VII.2000 – 1 spm. A.A. Sizov; Dubrovnoe, 2.VII.1999 – 1 spm. P.S. Sitnikov; Kuchak, 11.VII.1998 – 1 spm. A.A. Sizov.

28. **Glacies coracina* (Esper, 1805) – **YNAO**: Krasnyi Kamen', 1-13.VII.2017 – 8 spm. V.O. Zurilina.

29. *Angerona prunaria* (Linnaeus, 1758) – Fridolin, 1936:253 (Berezovo); Mer-shalova, Polushkina, 1967:138 (Tyumen); Korshunov, 1973b:183 (Sokolovka, Tobolsk); NP Kondinsky Lakes, 2012:235 (Khanty-Mansi Autonomous Okrug-Yugra); Bukhhalo et al., 2014:141 (Tobolsk); Strelnikova, Moseevsky, 2018:44 (Yugansky reserve, Khanty-Mansi Autonomous Okrug-Yugra). **YNAO**: Ratta, 19.VII.1989 – 1 spm. P.S. Sitnikov; Tolka, 14.VII.1989 – 1 spm. P.S. Sitnikov. **KMAO**: Pasol, 11.VII.1987 – 1 spm. A.V. Soromotin. **TO**: Andreevskoe, 4, 18, 22.VI.1988 – 4 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 2 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 5 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 15.VI.1991 – 2 spm. P.S. Sitnikov; Kuchak, 26, 27, 30.VI, 13.VII.1998 – 6 spm. A.A. Sizov; Mazurovo, 10.VII, 30.VI.1980 – 3 spm. P.S. Sitnikov; Motushi, 4, 7.VII.1998 – 2 spm. P.S. Sitnikov; Nadtsy, 21.VI.1985 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Sladkovo, 14.VI.1990 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 10.VI.1989 – 2 spm. P.S. Sitnikov; Travnoe, 20.VI.1990 – 1 spm.

P.S. Sitnikov; Tyumen, 3, 23.VI.1980, 16, 18, 20.VI.1981, 11.VI.1987, 21.VI.1993 – 8 spm. P.S. Sitnikov; Chervishevo, 3.VII.1982 – 1 spm. P.S. Sitnikov; Shapkul, 4.VII.1997 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 4 spm. D.E. Galich; Yalutorovsk, 16.VI.1997 – 2 spm. P.S. Sitnikov.

30. *Hypoxystis pluviaria* (Fabricius, 1787) – Shchuko, 1916:148 (*Hypoplectis adpersaria*, Karasulskaya). **TO:** Abramova, 11.V.2020 – 1 spm. D.E. Galich; Andreevskoe, 9, 19, 21. V.1988, 17.V.1993 – 4 spm. P.S. Sitnikov, 27.V.1999 – 3 spm. A.A. Sizov; Vlasovo, 8.V.1997 – 1 spm. P.S. Sitnikov; Ermak's garden, 23.V.2006 – 2 spm. D.E. Galich; Tavolzhan, 10.V.1997 – 1 spm. P.S. Sitnikov; Tavolzhan (Island), 10.V.1997 – 1 spm. P.S. Sitnikov; Tyumen, 26.V.1987 – 1 spm. P.S. Sitnikov; Tyumen (E), 15.V.1991 – 1 spm. P.S. Sitnikov; Yushkova, 24.V.1997 – 1 spm. P.S. Sitnikov.

31. **Synopsia sociaria* (Hübner, [1799] 1796) – **TO:** Andreevskoe, 11, 13, 18, 22, 23.VI.1988, 13.VIII.1989 – 8 spm. P.S. Sitnikov.

32. *Megaspilates mundataria* (Stoll, 1782) – Lomakin et al., 2001:363 (*Aspilates*, Tyumen Region); Red book of the Tyumen Region, 2004:155 (Siverga, Kushluk, Tavolzhan (lake); Sitnikov et al., 2013:129 (Siverga, Kushluk, Tavolzhan (lake), Kalmakskoe).

33. *Aspilates (Napuca) taylorae* (Butler, 1893) – Lomakin et al., 2001:362 (*Semiaspilates*, Tolka, Ratta); Red book of the Tyumen Region, 2004:149 (*Semiaspilates*, Krasnoselkup, Tolka); Sitnikov et al., 2013:128 (Krasnoselkup, Tolka). **YNAO:** Krasnyi Kamen`, 28.VI.2017 – 1 male, 1 female, V.O. Zurilina.

34. *Aspilates (Napuca) forbesi* (Munroe, 1963) – Skou, Sihvonen 2015: 415, 500 (Krasnyi Kamen`); **YNAO:** Krasnyi Kamen`, 28.VI.2017 – 2 males, V.O. Zurilina.

35. *Aspilates (Napuca) orciferaria* Walker, 1863 – Skou, Sihvonen 2015: 414, 500 (Krasnyi Kamen`).

36. *Siona lineata* (Scopoli, 1763) – Shchuko, 1916:149 (*Scoria*, Yalutorovsk (station)); Korshunov, 1973b:184 (*Scoria*, Sokolovka, Tobolsk); Bukhhalo et al., 2014:141 (Tobolsk). **TO:** Abramova, 22.VI.2015 – 2 spm. D.E. Galich; Andreevskoe, 12.VI.1988 – 1 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Gulyai-Pole, 23.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 3.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 27.VI.1998, 27.VI.1999 – 2 spm. A.A. Sizov; Mazurovo, 29.VI.1979, 21.VI.1986, 26.VI.1988 – 3 spm. P.S. Sitnikov; Maslyansky, 13.VI.1990 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 12.VI.1989 – 1 spm. P.S. Sitnikov; Sinitynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Sladkovo, 18.VI.1990 – 1 spm. P.S. Sitnikov; Tyumen (NW), 8.VII.1988 – 1 spm. P.S. Sitnikov; Shashova, 17.VI.1997 – 2 spm. P.S. Sitnikov, 10.VI.2020 – 3 spm. D.E. Galich; Yalutorovsk, 16.VI.1996 – 1 spm. P.S. Sitnikov.

37. *Cleora cinctaria* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:149 (*Boarmia*, Golyshmanovo). **TO:** Abramova, 11.V.2020 – 1 spm. D.E. Galich; Andreevskoe, 21.V, 18.VI.1988, 29.VI.1991 – 4 spm. P.S. Sitnikov, 18.V.1998 – 1 spm. V.V. Sinitin; Lesozavodsky, 5, 7.V.2019 – 2 spm. P.S. Sitnikov; Missia, 7.VI.2006 – 2

spm. D.E. Galich; Tyumen, 6, 28.V, 10, 17.VI.1981, 26.V.1987, 3, 7.V.1988 – 10 spm. P.S. Sitnikov.

38. **Ascotis selenaria* ([Denis et Schiffermüller], 1775) – **TO**: Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich.

39. *Ectropis crepuscularia* ([Denis et Schiffermüller], 1775) Shchuko, 1916:149 (*Boarmia*, Golyshmanovo). **TO**: Andreevskoe, 18.V, 2.VI.1998 – 2 spm. V.V. Sinitin; Ermak's garden, 13.VII.2006 – 1 spm. D.E. Galich; Tyumen, 1.VI.1981 – 1 spm. P.S. Sitnikov; Uspenka, 19.VI.1998 – 1 spm. P.S. Sitnikov; Chervishevo, 18.VII.1981 – 1 spm. P.S. Sitnikov.

40. **Parectropis similaria* (Hufnagel, 1767) – **TO**: Dubrovnoe, 3, 8.VII.1999 – 2 spm. P.S. Sitnikov; Lukashinskoe, 28.VI.1987 – 1 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov.

41. *Aethalura punctulata* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:149 (*Boarmia punctularia*, Golyshmanovo). **KMAO**: Khanty-Mansiysk, 9.VI.1992 – 1 spm. P.S. Sitnikov. **TO**: Abramova, 11.V.2020 – 1 spm. D.E. Galich; Andreevskoe, 24.V.1987, 21.V, 4, 18.VI.1988 – 4 spm. P.S. Sitnikov; Tyumen, 31.V.1981 – 1 spm. P.S. Sitnikov; Tyumen (E), 17.V.1991 – 1 spm. P.S. Sitnikov; Tyumen (forest nursery), 18.V.1980 – 1 spm. P.S. Sitnikov.

42. *Arichanna melanaria* (Linnaeus, 1758) – Fridolin, 1936:253 (Berezovo); Korshunov, 1973b:183 (Tobolsk); Bukhhalo et al., 2014:141 (Tobolsk); Strelnikova, Moseevsky, 2018:44 (Khanty-Mansi Autonomous Okrug-Yugra). **KMAO**: Bolshe-tarkhovo, 1, 2.VIII.1985 – 2 spm. P.S. Sitnikov; Malinovsky, 8.VIII.2002 – 2 spm. A.A. Sizov; Pasol, 14.VII.1987 – 2 spm. A.V. Soromotin; Tayozhny, 11.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Abramova, 14.VII.2020 – 1 spm. D.E. Galich; Kulybaika, 22.VII.1993, 7.VII.1995, 7, 11.VII.1997 – 4 spm. P.S. Sitnikov; Kuchak, 11.VII.1998 – 1 spm. A.A. Sizov; Mazurovo, 18.VII.1980 – 1 spm. P.S. Sitnikov; Sannikovo, 4.VIII.1999 – 1 spm. A.A. Sizov; Chervishevo, 3.VIII.1981 – 1 spm. P.S. Sitnikov.

43. *Bupalus piniaria* (Linnaeus, 1758) – Tschugunov, 1914:448 (Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:149 (Yalutorovsk (station)); Sizov, 2001:64 (Tyumen Region), 2003:147 (Tyumen Region); Bukhhalo et al., 2014:141 (*piniarius*, Tobolsk). **KMAO**: Pokachil, 2.VII.1988 – 1 spm. A.V. Soromotin. **TO**: Abramova, 7.V.2019 – 1 spm. D.E. Galich; Andreevskoe, 4, 18, 22.VI.1988, 23.V.1991 – 7 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Vlasovo, 15.VI.1990 – 5 spm. P.S. Sitnikov; Kuchak, 26, 27.VI.1999 – 2 spm. A.A. Sizov; Mazurovo, 21.VI.1986 – 2 spm. P.S. Sitnikov; Staraya Shadrina, 10.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 11.VI.1987 – 3 spm. P.S. Sitnikov.

44. *Biston betularius* (Linnaeus, 1758) – Shchuko, 1916:149 (*Amphidasis*, Omutinskoe (station)); Korshunov, 1973b:184 (*Amphidasis*, Tobolsk); Mershalova, Polushkina, 1967:138 (Tyumen Region); Sizov, 2001:64 (Tyumen Region), 2003:147 (Tyumen Region); Bukhhalo et al., 2014:142 (Missia, Tobolsk). **TO**: Abramova, 11.VI.2016 – 5 spm. D.E. Galich; Andreevskoe, 9, 18.VII.1988, 23, 29.V.1991 – 5 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 3 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Ingair, 25.VII.1990 –

1 spm. P.S. Sitnikov; Kuchak, 3.VII.1998 – 1 spm. A.A. Sizov; Mazurovo, 27.VI.1988 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 11, 14, 16.VI.1981, 3.VI, 9.VII.1988 – 9 spm. P.S. Sitnikov.

45. *Biston strataria* (Hufnagel, 1767) – Bukhkalov et al., 2014:142 (Tobolsk, (steppe slope)).

46. *Lycia hirtaria* (Clerck, 1759) – Korshunov, 1973a:145 (*Biston*, Khanty-Mansi Autonomous Okrug-Yugra); (Bukhkalov et al., 2014:142 (Missia, Tobolsk). **TO**: Abramova, 7.V.2019 – 2 spm. D.E. Galich; Lesozavodsky, 5.V.2020 – 1 spm. P.S. Sitnikov; Mazurovo, 8.V.1981 – 1 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 2 spm. D.E. Galich; Reshetnikova, 3.V.1999 – 1 spm. V.V. Sinitsin; Tyumen, 6.V.1981, 24. IV.1983, 10, 12.V.1987, 11.VI.1987 – 5 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov, 3.V.1999 – 1 spm. V.V. Sinitsin.

47. **Lycia pomonaria* (Hübner, 1790) – **TO**: Lesozavodsky, 12.V.2020 – 1 spm. V.V. Sinitsin.

48. *Lycia zonaria* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:149 (*Biston*, Karasulskaya).

49. *Hypomecis roboraria* ([Denis et Schiffermüller], 1775) – Korshunov, 1973b:184 (*Boarmia*, Sokolovka); Bukhkalov et al., 2014:141 (Tobolsk). **TO**: Andreevskoe, 18, 22, 23. VI.1988 – 8 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 2, 4, 5.VII.1999 – 3 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 22.VII.1990, 15.VI.1991 – 3 spm. P.S. Sitnikov; Kulybaika, 3, 10, 11.VII.1997 – 3 spm. P.S. Sitnikov; Kuchak, 25, 30.VI, 3.VII.1998 – 12 spm. A.A. Sizov; Mazurovo, 5.VII.1980, 26.VI.1988 – 2 spm. P.S. Sitnikov; Missia, 9.VI.2009 – 1 spm. Motushi, 1, 4.VII.1998 – 2 spm. P.S. Sitnikov; Nadtsy, 30.VI.1994 – 1 spm. P.S. Sitnikov; Ermak's garden, 13.VII.2006 – 1 spm. D.E. Galich; Shashova, 10.VI.2020 – 3 spm. D.E. Galich.

50. **Hypomecis punctinalis* (Scopoli, 1763) – **TO**: Andreevskoe, 18, 22.VI.1988 – 2 spm. P.S. Sitnikov; Vedenyatskoe, 12.VI.1989 – 2 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Kuchak, 11.VII.1998, 26, 27.VI.1999 – 3 spm. A.A. Sizov; Missia, 10.VII.2006 – 1 spm. D.E. Galich; Onokhino, 10.VI.1996 – 2 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11, 12.VI.1989 – 3 spm. P.S. Sitnikov; Tavalzhan (Island), 26.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 24, 29.VI.1980, 11.VI.1987 – 4 spm. P.S. Sitnikov; Tyumen (E), 23, 29.V.1991 – 4 spm. P.S. Sitnikov.

51. *Ematurga atomaria* (Linnaeus, 1758) – Shchuko, 1916:149 (Yalutorovsk (station); Tschugunov, 1917:11 (*Hematurga*, Berezovo); 1925:70 (*Hematurga*, Berezovo); (Mershalova, Polushkina, 1967:138 (*Acidalia immorata*, Tyumen); Korshunov, 1973b:184 (Tobolsk, Sokolovka, Berezovo); Olshvang, 1992:46 (river floodplain Khadytayakhi); Bukhkalov et al., 2014:141 (*E. atomaria zetterstedtaria*, Tobolsk). **YNAO**: Krasnoselkup, 7, 11.VII.1989, 24.VI.1994 – 7 spm. P.S. Sitnikov; Muravlenko, 9.VII.1999 – 2 spm. A.A. Sizov; Tolka, 14.VII.1989 – 2 spm. P.S. Sitnikov. **KMAO**: Pripolyarnyi, 30.VI.1993 – 1 spm. P.S. Sitnikov. **TO**: Andreevskoe, 19, 24.V.1987, 22.V.1988 – 3 spm. P.S. Sitnikov; Vlasovo, 12.V.1997 – 1 spm. P.S.

Sitnikov; Volgina, 22.V.1997 – 1 spm. P.S. Sitnikov; Ishim, 30.VI.1988 – 1 spm. P.S. Sitnikov; Ishim, 10.VII.2001 – 6 spm. A.A. Sizov; Kulybaika, 11.VII.1996 – 1 spm. P.S. Sitnikov; Kuchak, 26.VI.1999 – 1 spm. A.A. Sizov; Lipovoe, 14.VI.1992 – 1 spm. P.S. Sitnikov; Mazurovo, 4.VII.1979, 26.VIII.1980, 21.VI.1986 – 3 spm. P.S. Sitnikov; Novoatyalovo, 26.VI.1996 – 1 spm. P.S. Sitnikov; Onokhino, 10.VI.1996 – 1 spm. P.S. Sitnikov; Ermak's garden, 24.VI.2007 – 1 spm. D.E. Galich; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Sladkovo, 14.VI.1990 – 1 spm. P.S. Sitnikov; Stanichnoye, 17.VI.1990 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Travnoe, 20.VI.1990 – 1 spm. P.S. Sitnikov; Tyumen, 11.VI.1987 – 1 spm. P.S. Sitnikov; Tyumen (E), 17.V, 15.VI.1991 – 2 spm. P.S. Sitnikov; Tyumen (forest nursery), 18, 26.V.1980 – 4 spm. P.S. Sitnikov; Yushkova, 24.V.1997 – 2 spm. P.S. Sitnikov.

52. **Deileptenia ribeata* (Clerck, 1759) – **TO**: Ingair, 16.VI.1991 – 1 spm. P.S. Sitnikov.

53. *Alcis deversata* (Staudinger, 1892) – Bukhhalo et al., 2014:141 (*bastelbergeri*, Tobolsk). **TO**: Ingair, 22, 23, 25, 28.VII.1990 – 6 spm. P.S. Sitnikov; Skiing lodge, 11.VI.2006 – 1 spm. D.E. Galich.

54. *Alcis jubata* (Thunberg, 1788) – Bukhhalo et al., 2014:141 (Tobolsk).

55. *Alcis repandata* (Linnaeus, 1761) – Sizov, 2001:66 (Tyumen Region); Bukhhalo et al., 2014:141 (Missia, Tobolsk). **TO**: Lukashinskoe, 28.VI.1987 – 1 spm. P.S. Sitnikov.

56. *Abraxas grossulariata* (Linnaeus, 1758) – Korshunov, 1973b:183 (Sokolovka, Tobolsk); Sizov, 2001:63, 2003:146 (Tyumen Region); Mershalova, Polushkina, 1967:138 (Knyazhevo); Bukhhalo et al., 2014:139-140 (Tobolsk). **TO**: Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich; Sladkovo, 28.VI.1990 – 2 spm. P.S. Sitnikov; Tyumen, 19.VII.1982 – 1 spm. P.S. Sitnikov.

57. *Abraxas sylvata* (Scopoli, 1763) – Korshunov, 1973b:183 (Tobolsk); Bukhhalo et al., 2014:140 (Abalak, Missia). **TO**: Andreevskoe, 9.VIII.1998 – 1 spm. A.A. Sizov; Mazurovo, 2.VII.1980 – 1 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich; Tyumen, 18.VI.1981 – 1 spm. P.S. Sitnikov; Tyumen (N), 23.VI.1988 – 1 spm. P.S. Sitnikov.

58. *Lomaspilis marginata* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Abrax*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148 (*Abrax*, Karasulskaya); Korshunov, 1973b: (*Abrax*, Tobolsk); Mershalova, Polushkina, 1967:138 (Tyumen); Bukhhalo et al., 2014:140 (Missia, Tobolsk). **YNAO**: Ratta, 17.VII.1989 – 1 spm. P.S. Sitnikov. **KMAO**: Pripolyarnyi, 29.VI.1993 – 1 spm. P.S. Sitnikov. **TO**: Andreevskoe, 22, 23.VI.1988 – 2 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 12.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 23.VII.1990 – 2 spm. P.S. Sitnikov; Kuchak, 29, 30.VI, 1, 3.VII.1998, 26.VI.1999 – 6 spm. A.A. Sizov; Lipovoe, 14.VI.1992 – 1 spm. P.S. Sitnikov; Mazurovo, 8.VII.1981, 26.VI.1988 – 2 spm. P.S. Sitnikov; Motushi, 4, 6.VII.1998 – 2 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Tyumen, 18.VI.1981, 26.V, 29.VI, 3.VII.1987, 3.VI.1988 – 6 spm.

P.S. Sitnikov; Tyumen (forest nursery), 6.VI.1980 – 1 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 1 spm. A.A. Sizov.

59. *Lomaspileis opis* Butler, 1878 – Bukhkalov et al., 2014:140 (*opis nigrita*, Missia). **TO:** Dubrovnoe, 8.VII.1999 – 1 spm. P.S. Sitnikov; Kuchak, 27.VI.1999 – 2 spm. A.A. Sizov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Tyumen, 3.VI.1988 – 1 spm. P.S. Sitnikov.

60. *Heliomata glarearia* ([Denis et Schiffermüller], 1775) – Lomakin et al., 2001:362 (*Semiothisa*, Tyuleshov bor, Shashova); Red book of the Tyumen Region, 2004:147 (Tyuleshov bor, Shashova); Sitnikov et al., 2013:128 (Tyuleshov bor, Shashova).

61. *Isturgia arenacearia* ([Denis et Schiffermüller], 1775) – **TO:** Sinitzynsky bor, 10.VI.1997 – 2 spm. P.S. Sitnikov.

62. *Isturgia murinaria* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:149 (*Eubolia*, Yalutorovsk (station); Mershalova, Polushkina 1967:138 (*Tephрина*, Tyumen, Ishim, Kazanskoe). **TO:** Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov.

63. *Narraga fasciolaria* (Hufnagel, 1767) – Shchuko, 1916:149 (*Fidonia*, Golyshmanovo); Red book of the Tyumen Region, 2004:148 (Golyshmanovo, Tavolzhan, Kushluk); Sitnikov et al., 2013). **TO:** Andreevskoe, 25.VI.2000 – 2 spm. A.A. Sizov.

64. *Macaria alternata* (Denis et Schiffermüller, 1775) – Shchuko, 1916:148 (*Semiothisa alternaria*, Karasulskaya); Bukhkalov et al., 2014:141 (Tobolsk). **YNAO:** Krasnoselkup, 7, 8, 10, 11.VII.1989 – 5 spm. P.S. Sitnikov. **TO:** Andreevskoe, 18, 22, 23.VI, 23.VII.1988 – 4 spm. P.S. Sitnikov, 9.VIII.1998 – 1 spm. A.A. Sizov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 18.VII.1998 – 1 spm. A.A. Sizov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Ermak's garden, 21.VI.2005 – 1 spm. D.E. Galich; Sinitzynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 14.VI.1981, 11.VI.1987 – 2 spm. P.S. Sitnikov.

65. *Macaria liturata* (Clerck, 1759) – Tschugunov, 1914:448 (*Semiothisa*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148-149 (*Semiothisa*, Karasulskaya); Korshunov, 1973b:183 (Duryynina); Bukhkalov et al., 2014:141 (Missia, Tobolsk). **YNAO:** Ratta, 24.VII.1989 – 1 spm. P.S. Sitnikov. **KMAO:** Pokachil, 2.VII.1988 – 1 spm. A.V. Soromotin. **TO:** Andreevskoe, 18, 23.VI.1988, 29.V.1991 – 4 spm. P.S. Sitnikov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Dubrovnoe, 5.VII.1998, 4.VII.1999 – 3 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 23.VII.1990 – 2 spm. P.S. Sitnikov; Kul'tybaika, 9.VII.1994, 3.VII.1995, 11.VII.1996 – 3 spm. P.S. Sitnikov; Kuchak, 1, 3, 10, 18.VII.1998 – 5 spm. A.A. Sizov; Mazurovo, 27.VI.1980, 21.VI.1986 – 2 spm. P.S. Sitnikov; Motushi, 1, 6.VII.1998 – 2 spm. P.S. Sitnikov; Staraya Shadrina, 9.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 16.VI.1981 – 1 spm. P.S. Sitnikov, 26.VII.1999 – 1 spm. A.A. Sizov.

66. *Macaria notata* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Semiothisa*, Khanty-Mansi Autonomous Okrug-Yugra); Bukhkalov et al., 2014:140-141 (Missia, Tobolsk). **YNAO:** Ratta, 24.VII.1989 – 1 spm. P.S. Sitnikov. **TO:** Andreevskoe, 18.VI.1988 – 1 spm. P.S. Sitnikov, 9.VIII.1998 – 2 spm. A.A. Sizov; Vlasovo,

15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 3.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 22.VII.1990 – 2 spm. P.S. Sitnikov; Kuchak, 30.VI, 1, 3, 18.VII.1998, 26.VI.1999 – 6 spm. A.A. Sizov; Mazurovo, 29.VI.1980, 26.VI.1988, 21.VI.1986 – 3 spm. P.S. Sitnikov; Motushi, 29.VI.1998 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 18.VI.1981, 11.VI, 30.VII.1987, 19.VI.1998 – 4 spm. P.S. Sitnikov, 12.VI.1999 – 1 spm. A.A. Sizov; Uspenka, 19.VI.1998 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

67. *Macaria signaria* (Hübner, 1809) – Tschugunov, 1914:448 (*Semiothisa*, Khanty-Mansi Autonomous Okrug-Yugra); Korshunov, 1973b:183 (Durytnina). **YNAO**: Ratta, 19.VII.1989 – 1 spm. P.S. Sitnikov. **TO**: Ingair, 30.VI.1988, 27.VI.1994 – 2 spm. P.S. Sitnikov.

68. **Macaria artesiaria* ([Denis et Schiffermüller], 1775) – **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Ingair, 22.VII.1990 – 1 spm. P.S. Sitnikov; Kuchak, 13.VII.1998 – 1 spm. A.A. Sizov; Tyumen, 30.VII.1987 – 1 spm. P.S. Sitnikov, 27.VII.1989 – 1 spm. P.S. Sitnikov.

69. *Macaria brunneata* (Thunberg, 1784) – Tschugunov, 1914:448 (*Thamnonoma*, Khanty-Mansi Autonomous Okrug-Yugra) 1917:11 (*Thamnonoma*, Berezovo); 1925:70 (*Thamnonoma*, Berezovo). **YNAO**: Aksarka, 26.VIII.1999 – 2 spm. A.A. Sizov; Krasnyi Kamen', 17.VII.2012 – 1 male, S.A. Knyazev; Krasnoselkup, 7, 10.VII.1989 – 2 spm. P.S. Sitnikov; Muzhi, 6.VII.1991 – 1 spm. P.S. Sitnikov; Ratta, 24, 26.VII.1989 – 2 spm. P.S. Sitnikov. **KMAO**: Pasol, 14.VII.1987 – 2 spm. A.V. Soromotin. **TO**: Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995, 11.VII.1996 – 2 spm. P.S. Sitnikov; Kuchak, 1, 3.VII.1998 – 9 spm. A.A. Sizov; Motushi, 29.VI, 6.VII.1998 – 2 spm. P.S. Sitnikov.

70. *Macaria fusca* (Thunberg, 1792) – Tschugunov, 1917:18 (*Pygmaena*, Obdorsk (currently Salekhard), 1925:70 (*P. fusca ab. destrigata*, Obdorsk (currently Salekhard); Olshvang 1992:46 (*Pygmaena*, river floodplain Khadytayakhi). **YNAO**: Krasnyi Kamen', 11-16.VII.2012 – 7 males, 2 females, S.A. Knyazev.

71. **Macaria loricaria* (Eversmann, 1837) – **YNAO**: Labytnangi, 9-10.VII.2012 – 2 males, S.A. Knyazev; Ratta, 30.VII.1987 – 1 spm. P.S. Sitnikov.

72. *Macaria wauaria* (Linnaeus, 1758) – Tschugunov, 1925:70 (*Thamnonoma*, Kondinskoe); Bukhhalo et al., 2014:141 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Big Krasnoyar, 18, 19.VII.2001 – 2 spm. A.A. Sizov; Kulybaika, 3.VII.1997 – 1 spm. P.S. Sitnikov; Kuchak, 3, 8, 10, 18.VII.1998 – 5 spm. A.A. Sizov; Tavolzhan, 25.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 10.VI.1977 – 1 spm. P.S. Sitnikov; Chervishevo, 21.VII.1987 – 1 spm. P.S. Sitnikov.

73. *Chiasmia clathrata* (Linnaeus, 1758) – Shchuko, 1916:149 (*Phasiane*, Yalutorovsk (station); Mershalova, Polushkina, 1967:138 (Tyumen Region); Korshunov, 1973b:184 (Tobolsk); Bukhhalo et al., 2014:141 (Tobolsk). **KMAO**: Pripolyarnyi, 30.VI.1993 – 1 spm. P.S. Sitnikov. **TO**: Andreevskoe, 23.V.1991 – 1 spm. P.S. Sitnikov; Velizhany, 16.VI.1998 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 3.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988,

23.VII.1990, 15.VI.1991, 27.VI.1994 – 4 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995 – 1 spm. P.S. Sitnikov; Kuchak, 27.VI, 1, 3, 10, 11, 15, 18.VII.1998 – 7 spm. A.A. Sizov; Motushi, 4.VII.1998 – 2 spm. P.S. Sitnikov; Moshkarinsky, 24.VI.1996 – 1 spm. P.S. Sitnikov; Ostropyatovo, 27.VI.1990 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 2 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyuleshov bor, 23.V.1997 – 2 spm. P.S. Sitnikov; Tyumen, 18.V.1981, 11, 30.VII.1987 – 3 spm. P.S. Sitnikov; Tyumen (E), 15.VI.1991 – 1 spm. P.S. Sitnikov; Tyumen (forest nursery), 26, 30.V.1980 – 2 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 1 spm. A.A. Sizov; Yushkova, 24.V.1997 – 1 spm. P.S. Sitnikov.

Geometrinae

74. *Pseudoterpna pruinata* (Hufnagel, 1767) – Sitnikov et al., 2004:281 (Tyumen); Red book of the Tyumen Region, 2004 (annex):463.

75. *Geometra papilionaria* (Linnaeus, 1758) – Shchuko, 1916:148 (Tyumen); Tschugunov 1917:11 (Berezovo), 1925:70 (Berezovo); Mershalova, Polushkina, 1967:138 (*Hipparchus*, Tyumen); Korshunov, 1973a:145 (Khanty-Mansi Autonomous Okrug-Yugra), 1973b:182 (vicinity Tobolsk); Bukhhalo et al., 2014:139 (Tobolsk). **KMAO**: Tayozhny, 10.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Andreevskoe, 28.VI.1988, 9, 23.VII.1988 – 3 spm. P.S. Sitnikov; Dubrovnoe, 5.VII.1998, 3.VII.1999 – 2 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995 – 1 spm., P.S. Sitnikov; Ingair, 30.VI.1988, 23.VII.1990, 15.VI.1991 – 3 spm., P.S. Sitnikov; Kuchak, 26, 27.VI, 18.VII.1998 – 3 spm. A.A. Sizov; Mazurovo, 10.VII.1982 – 1 spm. P.S. Sitnikov; Motushi, 1, 4.VII.1998 – 1 spm. P.S. Sitnikov; Nadtsy, 29.VI.1994 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Sladkovo, 28.VI.1990 – 1 spm. P.S. Sitnikov; Tyumen, 3.VII.1987 – 1 spm. P.S. Sitnikov; Chervishevo, 21.VII.1987 – 2 spm. P.S. Sitnikov.

76. *Thetidia smaragdaria* (Fabricius, 1787) – Bukhhalo et al., 2014:139 (Tobolsk). **TO**: Andreevskoe, 18, 22.VI, 22.VIII.1988 – 3 spm. P.S. Sitnikov, 24.VIII.1998, 13.VII.2002 – 3 spm. A.A. Sizov; Ingair, 15.VI.1991 – 1 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 2 spm. D.E. Galich; Sladkovo, 28.VI.1990 – 2 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

77. **Hemistola chrysoprasaria* (Esper, 1795) – **TO**: Andreevskoe, 22.VI, 9.VII.1988 – 3 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Tavolzhnan, 26.VII.1996 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Nadtsy, 29.VI.1994 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov.

78. *Jodis lactearia* (Linnaeus, 1758) – Tschugunov, 1914:447 (*Thalera*, Khanty-Mansi Autonomous Okrug-Yugra); Korshunov, 1973a:145 (*Thalera*, Khanty-Mansi Autonomous Okrug-Yugra). **TO**: Mazurovo, 21.VI.1986 – 1 spm. P.S. Sitnikov.

79. **Jodis putata* (Linnaeus, 1758) – **TO**: Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov.

80. **Hemithea aestivaria* (Hübner, 1789) – **TO**: Big Krasnoyar, 19.VII.2001 – 1 spm. A.A. Sizov; Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich.

81. *Thalera fimbrialis* (Scopoli, 1763) – Shchuko, 1916:148 (Ishim); Bukhkalov et al., 2014:139 (Tobolsk, Missia). **TO**: Abatsky, 10.VII.2001 – 2 spm. A.A. Sizov; Abramova, 07.IX.2018, 12.VII.2020. – 2 spm. D.E. Galich; Andreevskoe, 9.VII.1988 – 2 spm. P.S. Sitnikov; Mazurovo, 5, 7.VII.1980 – 2 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 2 spm. D.E. Galich; Tyumen, 26.VII.1999 – 1 spm. A.A. Sizov.

82. *Chlorissa viridata* (Linnaeus, 1758) – Bukhkalov et al., 2014:139 (Tobolsk). **TO**: Andreevskoe, 4, 18.VI.1988 – 2 spm. P.S. Sitnikov; Babarynka, 31.V.1997 – 1 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 13.VII.1999 – 1 spm. P.S. Sitnikov; Mazurovo, 5.VII.1980 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 9, 11.VI.1989 – 3 spm. P.S. Sitnikov; Tyumen, 18.VI.1981 – 1 spm. P.S. Sitnikov, 20.VI.1999 – 1 spm. A.A. Sizov; Shashova, 10.VI, 04.VIII.2020 – 2 spm. D.E. Galich.

Larentiinae

83. *Schistostege nubilaria* (Hübner, [1799]) – Korshunov, 1973b:182 (Tobolsk).

84. **Carsia sororiata* (Hübner, 1808) – **YNAO**: Aksarka, 25-30.VIII, 5.IX.1999 – 11 spm. A.A. Sizov; Krasnyi Kamen', 11-20.VII.2012 – 3 males, 1 female, S.A. Knyazev; Ratta, 26.VII.1989 – 1 spm. P.S. Sitnikov. **KMAO**: Agirish, 12.VIII.2002 – 3 spm. A.A. Sizov; Malinovskiy, 8.VIII.2002 – 2 spm. A.A. Sizov; Tayozhny, 11.VIII.2002 – 3 spm. A.A. Sizov; Wah, 21.VIII.1987 – 1 spm. A.V. Soromotin; Zelenoborsk, 13.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov; Kultybaika, 10.VII.1997 – 2 spm. P.S. Sitnikov; Kuchak, 15, 18.VII.1998 – 2 spm. A.A. Sizov; Sannikovo, 4.VIII.1999 – 1 spm. A.A. Sizov.

85. *Aplocera praeformata* (Hübner, 1826) – Korshunov, 1973b:182 (*Anaitis*, Sokolovka, Tobolsk); (Bukhkalov et al., 2014:139 (Missia, Tobolsk)).

86. **Lithostege farinata* (Hufnagel, 1767) – **TO**: Andreevskoe, 18.VI.1988, 23.VII.1992 – 2 spm. P.S. Sitnikov; Babarynka, 31.V.1997 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 2.VII.1999 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 2 spm. P.S. Sitnikov; Sladkovo, 28.VI.1990 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 11, 29.VI.1987 – 2 spm. P.S. Sitnikov; Yalutorovsk, 26.VI.1996, 16.VI.1997 – 3 spm. P.S. Sitnikov.

87. *Acasis appensata* (Eversmann, 1842) – Sizov, 2001:64 (Yamalo-Nenets Autonomous Okrug).

88. *Lobophora halterata* (Hufnagel, 1767) – Bukhkalov et al., 2014:139 (Tobolsk). **TO**: Andreevskoe, 19.V.1987, 4, 18.VI.1988 – 3 spm. P.S. Sitnikov, 18.V, 2.VI.1998 – 4 spm. V.V. Sinitsin; Tavolzhany, 9.V.1997 – 1 spm. P.S. Sitnikov; Tyumen, 26.V.1987, 3.VI.1988 – 4 spm. P.S. Sitnikov; Tyumen (E), 15, 17, 23, 29.V.1991 – 4 spm. P.S. Sitnikov.

89. **Pterapherapteryx sexalata* (Retzius, 1783) – **TO**: Abramova, 10.VII.2020 – 1 spm. D.E. Galich; Andreevskoe, 18.VII.1988 – 1 spm. P.S. Sitnikov; Big Krasnoyarsk, 18.VII.2001 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 10, 11, 15.VII.1998, 27.VI.1999 – 4 spm. A.A. Sizov.

90. *Trichopteryx carpinata* (Borkhausen, 1794) – Shchuko, 1916:148 (*Lobophora*, Karasulskaya); Bukhhalo et al., 2014:139 (Tobolsk). **TO**: Abramova, 11.V.2020 – 1 spm. D.E. Galich; Andreevskoe, 18.V.1998 – 1 spm. V.V. Sinitsin; Lesozavodsky, 5.V.2020 – 3 spm. P.S. Sitnikov; Tyumen, 6.V.1981, 12, 17.V.1987 – 3 spm. P.S. Sitnikov.

91. *Scotopteryx bipunctaria* (Denis et Schiffermüller, 1775) – Shchuko, 1916:148 (*Ortholitha*, Karasulskaya).

92. *Scotopteryx chenopodiata* (Linnaeus, 1758) – Shchuko, 1916:148 (*Ortholitha limitata*, Karasulskaya); (Korshunov, 1973b (*Ortholitha*, Durykina, Tobolsk); (Bukhhalo et al., 2014:138 (Tobolsk). **KMAO**: Komsomolsky, 23.VII.1998 – 1 spm. P.S. Sitnikov. **TO**: Abramova, 12.VII.2020 – 1 spm. D.E. Galich; Andreevskoe, 12.VII.1987, 9, 23.VII.1988 – 3 spm. P.S. Sitnikov; Big Krasnoyarsk, 18.VII.2001 – 1 spm. A.A. Sizov; Ingair, 23.VII.1990 – 1 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov; Kultybaika, 16.VII.1993, 8.VII.1994, 7.VII.1995, 3.VII.1997 – 6 spm. P.S. Sitnikov; Kuchak, 3, 11, 13.VII.1998 – 5 spm. A.A. Sizov; Mazurovo, 1, 11.VII.1980 – 2 spm. P.S. Sitnikov; Maryino gorge, 19.VII, 22.VIII.2019 – 2 spm. D.E. Galich; Melioratorov, 15.VII.1993 – 1 spm. P.S. Sitnikov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Nadtsy, 25.VIII.1986 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 2 spm. P.S. Sitnikov; Tavalzhan, 25.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 3, 11.VII.1987 – 2 spm. P.S. Sitnikov; Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 2 spm. A.A. Sizov.

93. *Scotopteryx luridata* (Hufnagel, 1767) – **TO**: Vasilenko, 2003:307 (Salairka).

94. **Scotopteryx mucronata* (Scopoli, 1763) – **TO**: Rechkina, 25.VI.1988 – 1 spm. O.G. Krevskaya.

95. *Euphyia unangulata* (Haworth, 1810) – Shchuko, 1916:148 (*Larentia*, Bogandinskoe); Bukhhalo et al., 2014:138 (Tobolsk). **TO**: Andreevskoe, 22.VIII.1988 – 1 spm. P.S. Sitnikov, 9.VIII.1998 – 1 spm. A.A. Sizov; Ingair, 27.VI.1994 – 1 spm. P.S. Sitnikov; Kultybaika, 8.VII.1994 – 1 spm. P.S. Sitnikov; Kuchak, 3, 11.VII.1998, 26.VI.1999 – 3 spm. A.A. Sizov; Mazurovo, 26.VI.1979 – 1 spm. P.S. Sitnikov; Tyumen, 15.VIII.1987 – 1 spm. P.S. Sitnikov.

96. *Spargania luctuata* ([Denis et Schiffermüller], 1775) – Tschugunov, 1914:448 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); 1917:2 (*Larentia*, Berezovo), 1925:70 (*Larentia*, Berezovo); Kolosov, 1933:51 (*Larentia lugubrata*, Yamalo-Nenets Autonomous Okrug); Bukhhalo et al., 2014:138 (*luctuata borealis*, Tobolsk). **YNAO**: Aksarka, 4.VII.1991 – 1 spm. P.S. Sitnikov; Korotchaev, 14.VII.1999 – 1 spm. A.A. Sizov; Krasnoselkup, 7.VII.1989, 24.VI.1994 – 2 spm. P.S. Sitnikov. **KMAO**: Pripolnyarnyi, 29.VI.1993 – 1 spm. P.S. Sitnikov. **TO**: Ingair, 30.VI.1988, 15.VI.1991 – 2 spm. P.S. Sitnikov; Tyumen, 20.VI.1981 – 1 spm. P.S. Sitnikov.

97. *Phibalapteryx virgata* (Hufnagel, 1767) – Shchuko, 1916:148 (*Mesotype*, Karasulskaya). **TO**: Andreevskoe, 4, 18.VI, 9, 22.VII.1988, 22.VII.1998, 17.V.1993 – 6 spm. P.S. Sitnikov.

98. **Orthonama vittata* (Borkhausen, 1794) – **TO**: Andreevskoe, 18.VI, 22.VII, 13.VIII.1988 – 3 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 3.VIII.1981 – 1 spm. P.S. Sitnikov; Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov.

99. *Psychophora sabini* Kirby, 1824 – Lomakin et al., 2001:362 (*Teuteyaga*); Red book of the Tyumen Region, 2004:142 (*Teuteyaga*); Red book of the Yamalo-Nenets Autonomous Okrug, 2010 (annex):224 (*Teuteyaga*); Sitnikov et al., 2013:126 (Yamalo-Nenets Autonomous Okrug).

100. **Xanthorhoe abrasaria* (Herrich-Schäffer, 1855) – **YNAO**: Krasnyi Kamen', 11-13.VII.2012 – 4 spm. S.A. Knyazev. **KMAO**: Agan, 15.VII.1988 – 1 spm. P.S. Sitnikov.

101. *Xanthorhoe biriviata* (Borkhausen, 1794) – Korshunov, 1973b:182 (*Cidaria*, Berezovo); Sizov, 2001:66 (Tyumen Region). **TO**: Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov.

102. *Xanthorhoe decoloraria* (Esper, 1806) – Tschetverikov, 1911:24 (*Larentia munitata*, Yamalo-Nenets Autonomous Okrug); Olshvang, 1992:46 (*munitata*, Yamalo-Nenets Autonomous Okrug). **YNAO**: Aksarka, 4.VII.1991 – 1 spm. P.S. Sitnikov; Krasnyi Kamen', 10-12.VII.2012 – 4 spm. S.A. Knyazev; Labytnangi, 9-10.VII.2012 – 2 spm. S.A. Knyazev; Ratta, 24.VII.1989 – 1 spm. P.S. Sitnikov.

103. **Xanthorhoe designata* (Hufnagel, 1767) – **TO**: Andreevskoe, 24.VIII.1998 – 1 spm. A.A. Sizov; Kuchak, 1, 3.VII.1998 – 3 spm. A.A. Sizov; Maryino gorge, 22.VIII.2019 – 1 spm. D.E. Galich; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov.

104. **Xanthorhoe fluctuata* (Linnaeus, 1758) – **TO**: Vlasovo, 15.VII.1990 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 23.VII.1990 – 2 spm. P.S. Sitnikov; Ermak's garden, 18.VII.2007 – 1 spm. D.E. Galich; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tavalzhan, 25.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 31.V, 1.VI.1981, 11.VI.1987, 22.V.1988 – 4 spm. P.S. Sitnikov, 20.VI, 26.VII.1999 – 2 spm. A.A. Sizov.

105. *Xanthorhoe ferrugata* (Clerck, 1759) – Tschugunov, 1925:70 (*Larentia unidentaria*, Yamalo-Nenets Autonomous Okrug); Korshunov, 1973b:182 (*Cidaria*, Berezovo); NP Kondinsky Lakes, 2012:235 (Khanty-Mansi Autonomous Okrug-Yugra). **YNAO**: Muzhi, 6.VII.1991 – 1 spm. P.S. Sitnikov; Noyabrsk, 8.VII.1999 – 1 spm. A.A. Sizov. **TO**: Andreevskoe, 18.VI, 23.VII, 22.VIII.1988 – 3 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 5.VIII.1998, 9.VII.1999 – 2 spm. P.S. Sitnikov; Ingair, 22, 23.VII.1990 – 2 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov; Kuchak, 1, 3, 13, 15.VII.1998, 27.VI.1999 – 7 spm. A.A. Sizov; Missia, 10.VII.2007 – 1 spm. D.E. Galich; Motushi, 4.VII.1998 – 2 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 26.V, 3, 18.VII.1987, 19.VI.1998 – 4 spm. P.S. Sitnikov, 21.VIII.2000 – 3 spm. A.A.

Sizov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Yalutorovsk, 16.VI.1997 – 1 spm. P.S. Sitnikov.

106. *Xanthorhoe montanata* ([Denis et Schiffermüller], 1775) – Tschugunov, 1914:448 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra), 1925:70 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148 (*Larentia*, Bogandinskoe); Korshunov, 1973b:182 (*Cidaria*, Berezovo); Bukhhalo et al., 2014:138 (Tobolsk). **KMAO**: Pripolyarnyi, 29.VI.1993 – 2 spm. P.S. Sitnikov; Tolya, 9.VII.1993 – 1 spm. P.S. Sitnikov; Ust'-Balyk, 9, 13, 17.VII.1986 – 5 spm. P.S. Sitnikov. **TO**: Ingair, 30.VI.1988, 15.VI.1991, 27.VI.1994 – 3 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995 – 1 spm. P.S. Sitnikov; Kuchak, 10.VII.1998 – 1 spm. A.A. Sizov; Mazurovo, 7.VII.1982 – 1 spm. P.S. Sitnikov; Missia, 10.VII.2006 – 1 spm. D.E. Galich; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Nadtsy, 27.VI.1991 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov.

107. *Xanthorhoe pseudoannotinata* Vasilenko, 2007 – Vasilenko, 2007:1019 (Oktyabrskoe).

108. **Xanthorhoe quadrifasciaria* (Clerck, 1759) – **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995 – 1 spm. P.S. Sitnikov; Chervishevo, 21.VII.1987 – 1 spm. P.S. Sitnikov; Ermak's garden, 13.VII.2006 – 1 spm. D.E. Galich; Tyumen, 25.VII.2000 – 1 spm. A.A. Sizov; Shashova, 17.VI.1997 – 1 spm. P.S. Sitnikov; Yalutorovsk, 16.VI.1997 – 1 spm. P.S. Sitnikov.

109. *Xanthorhoe sajanaria* (Prout, 1914) – Sizov, 2001: Red book of the Tyumen Region, 2004 (annex):463.

110. **Xanthorhoe spadicearia* ([Denis et Schiffermüller], 1775) – **TO**: Tyumen, 26.V, 11.VI.1987 – 2 spm. P.S. Sitnikov.

111. **Catarhoe cuculata* (Hufnagel, 1767) – **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 23, 30.VII.1988 – 2 spm. P.S. Sitnikov; Ingair, 28.VI.1994 – 1 spm. P.S. Sitnikov; Nadtsy, 30.VI.1994 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

112. *Catarhoe rubidata* ([Denis et Schiffermüller], 1775) – Red book of the Tyumen Region, 2004:143 (Andreevskoe). **TO**: Missia, 07.VI.2006 – 1 spm. D.E. Galich.

113. *Camtogramma bilineata* (Linnaeus, 1758) – Korshunov, 1973b:183 (Durytnina, Tobolsk); Sizov, 2001:66 (Tyumen Region). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Big Krasnoyar, 19.VII.2001 – 1 spm. A.A. Sizov; Mazurovo, 26.VI, 7.VII.1980 – 2 spm. P.S. Sitnikov; Rechkina, 19.VIII.1989 – 1 spm. O.G. Krevskaya.

114. **Costaconvexa polygrammata* (Borkhausen, 1794) – **TO**: Istoshino, 13-14.VIII.2016 – 1 female, S.A. Knyazev.

115. *Epirrhoe alternata* (Müller, 1764) – Shchuko, 1916:148 (*Larentia sociata*, Bogandinskoe); Olshvang, 1992:46 (river floodplain Khadytayakhi (Yamalo-Nenets Autonomous Okrug). **YNAO**: Aksarka, 4.VII.1991 – 1 spm. P.S. Sitnikov. **KMAO**: Malinovsky, 8.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Abatsky, 10.VII.2001 – 2 spm. A.A. Sizov; Andreevskoe, 18.VI, 9, 23, 30.VII, 7, 13.VIII.1988, 23.VII.1992 – 7 spm.

P.S. Sitnikov, 9.VIII.1998, 13.VII.2002 – 3 spm. A.A. Sizov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Big Kunchur, 26.VI.2002 – 1 spm. A.A. Sizov; Istoshino, 13-14.VIII.2016 – 1 female, S.A. Knyazev; Kryukovskoe, 26.VII.2019 – 1 spm. P.S. Sitnikov; Kuchak, 1, 10, 15.VII.1998 – 3 spm. P.S. Sitnikov; Lipovoe, 14.VI.1992 – 1 spm. P.S. Sitnikov; Mazurovo, 26.VI.1988 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 11, 29.VI, 15.VIII.1987 – 3 spm. P.S. Sitnikov, 26.VII.1999 – 2 spm. A.A. Sizov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Tyumen (forest nursery), 18.V.1980 – 1 spm. P.S. Sitnikov; Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov; Chernoe, 2.VIII.1999 – 1 spm. A.A. Sizov.

116. *Epirrhoe galiata* ([Denis et Schiffermüller], 1775) – Korshunov, 1973b:183 (*Cidaria*, Sokolovka, Tobolsk).

117. **Epirrhoe hastulata* (Hübner, 1790) – **TO**: Dubrovnoe, 9.VII.1999 – 1 spm. P.S. Sitnikov.

118. **Epirrhoe tartuensis* Möls, 1965 – **TO**: Andreevskoe, 9.VII.1988 – 2 spm. P.S. Sitnikov; 10.VI.2006 – 1 spm. D.E. Galich.

119. *Epirrhoe tristata* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); 1925:70 (*Larentia*, Berezovo); Shchuko, 1916:148 (*Larentia*, Bogandinskoe (station). **TO**: Andreevskoe, 22.V, 18, 22.VI.1988, 23.VII.1988, 30.VII.1998 – 5 spm. P.S. Sitnikov, 25.VI.2000 – 1 spm. A.A. Sizov; Istoshino, 13-14.VIII.2016 – 1 male, S.A. Knyazev; Tyuleshov bor, 23.V.1997 – 2 spm. P.S. Sitnikov; Shashova, 16.VI.2020 – 1 spm. D.E. Galich; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov.

120. **Earophila badiata* ([Denis et Schiffermüller], 1775) – **TO**: Lesozavodsky, 5.V.2020 – 1 spm. P.S. Sitnikov; Ermak's garden, 18.VII.2007 – 1 spm. (larva) D.E. Galich; Tobolsk, 19.VII.2007 – 1 spm. (larva) D.E. Galich.

121. **Mesoleuca albicillata* (Linnaeus, 1758) – **YNAO**: Krasnoselkup, 10, 11.VII.1989 – 2 spm. P.S. Sitnikov. **TO**: Ingair, 15.VI.1991 – 1 spm. P.S. Sitnikov; Kuchak, 3.VII.1998 – 1 spm. A.A. Sizov; Nadtsy, 27.VI.1991, 29.VI.1994 – 2 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov, 10.VII.2001 – 1 spm. A.A. Sizov; Staraya Shadrina, 11, 13.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 8.VII.2002 – 1 spm. A.A. Sizov; Yarkovo, 6.VII.1997 – 1 spm. P.S. Sitnikov.

122. *Pelurga comitata* (Linnaeus, 1758) – Shchuko, 1916:148 (*Larentia*, Bogandinskoe); Korshunov, 1973b:183 (*Larentia*, Durytnina, Tobolsk); (Bukhhalo et al., 2014:138 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 9, 23.VII, 13.VIII.1988 – 4 spm. P.S. Sitnikov, 9, 24.VIII.1998 – 2 spm. A.A. Sizov; Dubrovnoe, 7.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 24.VI.1990 – 1 spm. P.S. Sitnikov; Kul'tybaika, 16.VII.1993, 8.VII.1994 – 3 spm. P.S. Sitnikov; Kuchak, 10, 13, 15, 18.VII.1998 – 6 spm. A.A. Sizov; Nadtsy, 25.VIII.1986, 29.VI.1994 – 2 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov; Tavol'zhan, 25, 26.VII.1996 – 5 spm. P.S. Sitnikov; Tyumen, 18.VII.1987, 27.VII.1992, 30.VII, 12.VIII.1999 – 5 spm. P.S. Sitnikov; Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov.

123. **Larentia clavaria* (Haworth, 1809) – **TO**: 13.VII.2006 – 1 spm. D.E. Galich.

124. *Entephria caesiata* ([Denis et Schiffermüller], 1775) – Tschugunov, 1917:11 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Olshvang, 1992:46 (river floodplain Khadytayakhi); Bukhhalo et al., 2014:138 (Tobolsk). **YNAO**: Krasnyi Kamen', 10-18.VII.2012 – 2 spm. S.A. Knyazev; Labytnangi, 9-10.VII.2012 – 1 male, S.A. Knyazev. **KMAO**: Aksarka, 26, 27, 30, 31.VIII.1999 – 5 spm. A.A. Sizov; Novy Urengoy, 15.VII.1999 – 10 spm. A.A. Sizov; Ratta, 24, 27.VII.1989 – 2 spm. P.S. Sitnikov.

125. *Entephria polata* (Duponchel, 1830) – Tschetverikov, 1911:24 (*Larentia*, Yamalo-Nenets Autonomous Okrug); Tschugunov, 1917:18 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra), 1925:70 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Kolosov, 1933:51 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Olshvang, 1992:46 (river floodplain Khadytayakhi). **YNAO**: Krasnyi Kamen', 10-12.VII.2012 – 1 male, 2 females, S.A. Knyazev; Yuribey, 26, 29.VII.1995 – 2 spm. E.I. Kohegov.

126. *Entephria transsibirica* Vasilenko, 1990 – Vasilenko, 2002:691 (*polata* (previously described as a subspecies), Yamalo-Nenets Autonomous Okrug).

127. *Hydriomena furcata* (Thunberg, 1784) – Shchuko, 1916:148 (*Larentia sordidata*, Bogandinskoe). **TO**: Andreevskoe, 8.VIII.1998 – 1 spm. A.A. Sizov; Ingair, 23.VII.1990 – 1 spm. P.S. Sitnikov; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Nadtsy, 25.VIII.1986 – 1 spm. P.S. Sitnikov; Tyumen, 20.VIII.1980 – 1 spm. P.S. Sitnikov; Chervishevo, 16.VIII.1981 – 1 spm. P.S. Sitnikov.

128. *Hydriomena impluviata* ([Denis et Schiffermüller], 1775) – Sizov, 2001:64 (*coerulata*, Yamalo-Nenets Autonomous Okrug).

129. **Heterothera serraria* (Lienig, 1846) – **TO**: Velizhany, 16.VI.1998 – 3 spm. P.S. Sitnikov.

130. **Thera obeliscata* (Hübner, 1787) – **TO**: Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Kulytbaika, 7.VII.1995, 11.VII.1997 – 2 spm. P.S. Sitnikov; Kuchak, 8, 10, 11, 13, 15, 18.VII.1998 – 12 spm. A.A. Sizov; Chervishevo, 8.VIII.1981, 21, 26.VII.1987 – 3 spm. P.S. Sitnikov.

131. *Thera variata* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:148 (*Larentia*, Bogandinskoe); Tschugunov, 1925:70 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra). **TO**: Vagai, 21.VI.2002 – 2 spm. A.A. Sizov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov.

132. *Plemyria rubiginata* (Denis et Schiffermüller, 1775) – Korshunov, 1973b:182 (*Cidaria bicolorata*, Sokolovka). **KMAO**: Pripolyarnyi, 10.VIII.1991 – 1 spm. P.S. Sitnikov. **TO**: Abramova, 4.VI.2009 – 1 spm. D.E. Galich; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Tyumen, 26.VII.1999 – 2 spm. A.A. Sizov; Chervishevo, 3.VIII.1981, 26.VII.1989 – 3 spm. P.S. Sitnikov.

133. *Electrophaes corylata* (Thunberg, 1792) – Shchuko, 1916:148 (*Larentia*, Bogandinskoe). **TO**: Andreevskoe, 18.VI.1988 – 1 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 3 spm. P.S. Sitnikov; Kuchak, 1, 8.VII.1998, 26, 27.VI.1999 – 4

spm. A.A. Sizov; Mazurovo, 26.VI.1988 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 8, 14.VI.1981 – 2 spm. P.S. Sitnikov, 12.VI.1999 – 1 spm. A.A. Sizov.

134. **Eulithis achatinellaria* (Oberthür, 1880) – **TO**: Abramova, 8.IX.2018 – 1 spm. D.E. Galich; Ermak's garden, 18.VII.2007 – 1 spm. D.E. Galich; Istoshino, 13-14.VIII.2016 – 1 female, S.A. Knyazev; Missia, 9.VI.2006 – 1 spm. D.E. Galich.

135. *Eulithis mellinata* (Fabricius, 1787) – Bukhkalov et al., 2014:138 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Big Krasnoyarsk, 19.VII.2001 – 3 spm. A.A. Sizov; Tyumen, 10.VI.1979, 3.VII.1987 – 2 spm. P.S. Sitnikov.

136. *Eulithis populata* (Linnaeus, 1758) – Tschugunov, 1925:70 (*Lygris*, Khanty-Mansi Autonomous Okrug-Yugra); Korshunov, 1973b:182 (*Larentia*, Tobolsk); NP Kondinsky Lakes, 2012:235 (Khanty-Mansi Autonomous Okrug-Yugra); Bukhkalov et al., 2014:138 (Tobolsk). **YNAO**: Aksarka, 25, 26, 28.VIII, 5.IX.1999 – 5 spm. A.A. Sizov; Krasnyi Kamen', 10-17.VII.2012 – 8 males, S.A. Knyazev. **KMAO**: Beloyarsky, 13.VIII.1990 – 1 spm. P.S. Sitnikov; Bolshetarkhovo, 3.VIII.1985 – 1 spm. P.S. Sitnikov; Wah, 21.VIII.1987 – spm. A.V. Soromotin; Malinovsky, 8.VIII.2002 – 1 spm. A.A. Sizov; Tayozhny, 9.VIII.2002 – 2 spm. A.A. Sizov. **TO**: Ingair, 24.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 8.VII.1999 – 1 spm. P.S. Sitnikov.

137. **Eulithis prunata* (Linnaeus, 1758) – **YNAO**: Krasnyi Kamen', 16-18.VII.2012 – 3 males, S.A. Knyazev. **KMAO**: Tayozhny, 9.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 30.VII.1999 – 1 spm. A.A. Sizov; Tyumen, 11.VII.1987 – 1 spm. P.S. Sitnikov, 26.VII.1999 – 1 spm. A.A. Sizov.

138. *Eulithis pyropata* (Hübner, 1809) – Bukhkalov et al., 2014:138 (Tobolsk). **TO**: Andreevskoe, 23.VII.1988 – 2 spm. P.S. Sitnikov; Kuchak, 8.VII.1998 – 1 spm. A.A. Sizov.

139. *Eulithis testata* (Linnaeus, 1761) – Shchuko, 1916:148 (*Lygris*, Bogandinskoe). **KMAO**: Zelenoborsk, 13.VIII.2002 – 1 spm. A.A. Sizov; Numto, 26.VIII.1990 – 1 spm. P.S. Sitnikov; Tayozhny, 9, 10.VIII.2002 – 3 spm. A.A. Sizov. **TO**: Andreevskoe, 30.VII, 22.VIII.1988 – 2 spm. P.S. Sitnikov, 9, 24.VIII.1998, 15.VIII.1999 – 24 spm. A.A. Sizov; Ingair, 24.VI.1990 – 1 spm. P.S. Sitnikov; Kulybaika, 16.VII.1993 – 1 spm. P.S. Sitnikov; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Tyumen, 27.VIII.1986, 30.VIII.1987 – 2 spm. P.S. Sitnikov.

140. **Gandaritis pyrallata* ([Denis et Schiffermüller], 1775) – **KMAO**: Pripolyarnyi, 9.VII.1993 – 1 spm. P.S. Sitnikov. **TO**: Andreevskoe, 9, 23.VII.1988 – 3 spm. P.S. Sitnikov; Chervishevo, 21.VII.1987 – 1 spm. P.S. Sitnikov; Ingair, 22.VII.1990 – 1 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995 – 1 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich.

141. **Ecliptopera capitata* (Herrich-Schäffer, 1839) – **TO**: Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov.

142. *Ecliptopera silaceata* ([Denis et Schiffermüller], 1775) – Sitnikov et al., 2004:282 (*Diactinia*, Ingair); Red book Tyumen Region, 2004 (annex):463 (*Diactinia*, Tyumen Region).

143. **Eustroma reticulata* ([Denis et Schiffermüller], 1775) – **KMAO**: Pripol'yarnyi, 29.VI.1993 – 1 spm. P.S. Sitnikov. **TO**: Chervishevo, 26.VII.1987 – 2 spm. P.S. Sitnikov.

144. *Dysstroma citrata* (Linnaeus, 1758) – Tschugunov, 1925:70 (*Larentia truncata*, Khanty-Mansi Autonomous Okrug-Yugra); Vnukovsky, 1927:118 (*Cidaria citrata ab. immanata*, Khanty-Mansi Autonomous Okrug-Yugra); Kolosov, 1933:51 (*Larentia immanata*, Yamalo-Nenets Autonomous Okrug); Korshunov, 1973b:182 (*Cidaria*, Sokolovka, Tobolsk); Olshvang, 1992:46 (*Chloroclysta*, river floodplain Khadytayakhi); Bukhhalo et al., 2014:138 (Tobolsk). **YNAO**: Aksarka, 26.VIII.1999 – 1 spm. A.A. Sizov. **TO**: Andreevskoe, 9, 24.VIII.1998, 30.VII.1999 – 4 spm. A.A. Sizov.

145. **Dysstroma infuscata* (Tengström, 1869) – **YNAO**: Krasnyi Kamen', 10-12.VII.2012 – 2 females, S.A. Knyazev.

146. *Dysstroma truncata* (Hufnagel, 1767) – Shchuko, 1916:148 (*Larentia*, Karasulskaya); NP Kondinsky Lakes, 2012:235 (Khanty-Mansi Autonomous Okrug-Yugra). **YNAO**: Krasnyi Kamen', 10-12.VII.2012 – 1 male, S.A. Knyazev; Ratta, 17, 24, 27.VII.1989 – 4 spm. P.S. Sitnikov. **KMAO**: Bolshetarkhovo, 3, 10, 21.VIII.1985 – 3 spm. P.S. Sitnikov; Pasol, 14.VII.1987 – 1 spm. A.V. Soromotin; Tayozhny, 19.VIII.2002 – 1 spm. A.A. Sizov. **TO**: Andreevskoe, 22.VII.1988 – 1 spm. P.S. Sitnikov; Ingair, 25.VII.1990 – 1 spm. P.S. Sitnikov; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Nadtsy, 25.VIII.1986 – 1 spm. P.S. Sitnikov; Tyumen, 15.VIII.1987 – 1 spm. P.S. Sitnikov; Chervishevo, 3.VIII.1981, 21.VII.1987 – 2 spm. P.S. Sitnikov.

147. **Colostygia aptata* (Hübner, 1813) – **KMAO**: Nefteyugansk, 17.VII.1986 – 1 spm. P.S. Sitnikov. **TO**: Ingair, 22.VII.1990 – 1 spm. P.S. Sitnikov; Tyumen, 16.VI.1981 – 1 spm. P.S. Sitnikov.

148. **Colostygia pectinataria* (Knoch, 1781) – **TO**: Kulytbaika, 5.VII.1996 – 1 spm. P.S. Sitnikov.

149. **Cosmorhoe ocellata* (Linnaeus, 1758) – **TO**: Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov, 25.VII.2000 – 1 spm. A.A. Sizov; Dubrovnoe, 2.VII.1999 – 1 spm. P.S. Sitnikov; Tyumen, 8.VII.2002 – 1 spm. A.A. Sizov.

150. *Lampropteryx suffumata* ([Denis et Schiffermüller], 1775) – Olshvang, 1992:46 (river floodplain Khadytayakhi); Bukhhalo et al., 2014:138 (Tobolsk). **YNAO**: Krasnyi Kamen', 1-13.VII.2017 – 4 spm, V.O. Zurilina. **TO**: Lesozavodsky, 20.VIII.1980 – 1 spm. V.V. Sinitsin; Onokhino, 10.VI.1996 – 1 spm. P.S. Sitnikov.

151. *Baptريا tibiale* (Esper, 1804) (Sizov, 2001) – Bukhhalo et al., 2014:138 (Tobolsk). **KMAO**: Nefteyugansk, 9.VII.1986 – 1 spm. P.S. Sitnikov. **TO**: Kuchak, 18.VII.1998 – 1 spm. A.A. Sizov.

152. *Hydria undulata* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Eucosmia*, Khanty-Mansi Autonomous Okrug-Yugra); Korshunov, 1973b:182 (*Eucosmia*, Durytnina, Tobolsk); Bukhhalo et al., 2014:138 (Tobolsk). **TO**: Abramova, 22.VII.2018

– 1 spm. D.E. Galich; Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Ingair, 29.VI.1988 – 1 spm. P.S. Sitnikov; Kultybaika, 11.VII.1996, 11.VII.1997 – 3 spm. P.S. Sitnikov; Mazurovo, 1.VII.1982 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 20.VI.1981 – 1 spm. P.S. Sitnikov.

153. *Rheumaptera hastata* (Linnaeus, 1758) – Tschugunov, 1914:448 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148 (*Larentia*, Bogandinskoe); Korshunov, 1973b:183 (*Larentia*, Durykina, Tobolsk); Olshvang, 1992:46 (river floodplain Khadytayakhi). **YNAO**: Aksarka, 4.VII.1991 – 1 spm. P.S. Sitnikov; Krasnoselkup, 23.VI.1994 – 1 spm. P.S. Sitnikov; Krasnyi Kamen', 19.VII.2012 – 1 spm. S.A. Knyazev; Muravlenko, 9.VII.1999 – 1 spm. A.A. Sizov; Ratta, 17, 19.VII.1989 – 2 spm. P.S. Sitnikov. **KMAO**: Pasol, 14.VII.1987 – 1 spm. A.V. Soromotin; Pripolyarnyi, 29.VI.1993 – 2 spm. P.S. Sitnikov. **TO**: Dubrovnoe, 2.VII.1999 – 1 spm. P.S. Sitnikov; Mazurovo, 21.VI.1986 – 2 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 2 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Yushkova, 24.V.1997 – 2 spm. P.S. Sitnikov.

154. *Rheumaptera subhastata* (Nolcken, 1870) – Tschetverikov, 1927:25 (*Larentia hastata* ab. *subhastata*, Yamalo-Nenets Autonomous Okrug); Kolosov, 1933:51 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra); Olshvang, 1992:46 (river floodplain Khadytayakhi). **YNAO**: Krasnoselkup, 22.VI.1994 – 1 spm. P.S. Sitnikov; Krasnyi Kamen', 19.VII.2012 – 1 spm. S.A. Knyazev.

155. **Epirrita autumnata* (Borkhausen, 1794) – **YNAO**: Aksarka, 31.VIII, 5.IX.1999, 11, 16.IX.2002 – 4 spm. A.A. Sizov; Salekhard, 7.IX.2002 – 2 spm. A.A. Sizov. **KMAO**: Numto, 26.VIII.1990 – 1 spm. P.S. Sitnikov. **TO**: Tyumen, 13.IX.1986 – 2 spm. P.S. Sitnikov; 21.VIII.2000 – 1 spm. A.A. Sizov; Eco trail, 21.VII.2016 – 1 spm. D.E. Galich.

156. *Asthena albulata* (Hufnagel, 1767) – Sitnikov et al., 2004:282 (Peña); Red book of the Tyumen Region, 2004 (annex):463 (Tyumen Region).

157. *Hydrelia flammeolaria* (Hufnagel, 1767) – Tschugunov, 1914:448 (*Larentia luteata*, Khanty-Mansi Autonomous Okrug-Yugra). **TO**: Kuchak, 10.VII.1998, 26.VI.1999 – 3 spm. A.A. Sizov; Motushi, 6.VII.1998 – 1 spm. P.S. Sitnikov; Tyumen, 16.VI.1981 – 1 spm. P.S. Sitnikov.

158. *Hydrelia sylvata* ([Denis et Schiffermüller], 1775) – Sitnikov et al., 2004:282 (*testaceata*, Ingair); Red book of the Tyumen Region, 2004 (annex):463 (*testaceata*, Tyumen Region).

159. **Mesotype parallelolineata* (Retzius, 1783) – **TO**: Andreevskoe, 9, 13, 24.VIII.1998 – 5 spm. A.A. Sizov; Kuchak, 19.VIII.1999 – 1 spm. P.S. Sitnikov; Missia, 9.IX.2006 – 1 spm. D.E. Galich; Nadtsy, 25.VIII.1986 – 1 spm. P.S. Sitnikov; Chervishevo, 11, 16.VIII.1981 – 2 spm. P.S. Sitnikov; Istoshino, 13.VIII.2016 – 3 spm. S.A. Knyazev.

160. *Mesotype didymata* (Linnaeus 1758) – Tschugunov, 1925:70 (*Larentia*, Khanty-Mansi Autonomous Okrug-Yugra).

161. *Gagitodes sagittata* (Fabricius, 1787) – Sizov, 2001:66 (*Perizoma*, Tyumen Region); Red book of the Tyumen Region, 2004:146 (*Perizoma*, Ingair, Peña); Sitnikov et al., 2013:127 (*Perizoma*, Ingair, Peña). **TO**: Kuchak, 3.VII.1998 – 1 spm. A.A. Sizov.

162. **Perizoma albulata* ([Denis et Schiffermüller], 1775) – **TO**: Abramova, 17.VII.2020 – 1 spm. D.E. Galich; Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 15.VI.1991 – 2 spm. P.S. Sitnikov; Kulybaika, 7.VII.1995, 11.VII.1997 – 2 spm. P.S. Sitnikov; Kuchak, 1, 10, 14, 18.VII.1998 – 6 spm. A.A. Sizov; Mazurovo, 29.VI.1982 – 1 spm. P.S. Sitnikov; Tavolzhnan, 26.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 11, 29.VI, 3.VII.1987 – 3 spm. P.S. Sitnikov; Chervishevo, 26.VII.1987 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 3 spm. D.E. Galich.

163. **Perizoma alchemillata* (Linnaeus, 1758) – **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Big Krasnoyar, 18-19.VII.2001 – 2 spm. A.A. Sizov; Kuchak, 10-11.VII.1998 – 3 spm. A.A. Sizov; Ermak's garden, 18.VII.2007 – 1 spm. D.E. Galich; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov.

164. **Perizoma blandiata* ([Denis et Schiffermüller], 1775) – **TO**: Abramova, 17.VII.2020 – 1 spm. D.E. Galich; Missia, 10.VII.2006 – 1 spm. D.E. Galich.

165. *Perizoma flavofasciata* (Thunberg, 1792) – Bukhhalo et al., 2014:138 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 2 spm. A.A. Sizov; Andreevskoe, 25.VI.2000, 13.VII.2002 – 5 spm. A.A. Sizov; Vagai, 21.VI.2002 – 4 spm. A.A. Sizov; Kazanskoe, 8.VII.1994 – 1 spm. P.S. Sitnikov; 13.VII.2001 – 1 spm. A.A. Sizov.

166. **Perizoma hydrata* (Treitschke, 1829) – **TO**: Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

167. **Chloroclystis v-ata* (Haworth, 1809) – **TO**: Andreevskoe, 25.VI.2000 – 1 spm. A.A. Sizov; Missia, 9.VI.2006 – 1 spm. D.E. Galich.

168. **Pasiphila debiliata* (Hübner, [1817]) – **KMAO**: Malinovsky, 8.VIII.2002 – 1 spm. A.A. Sizov; Tayozhny, 10.VIII.2002 – 1 spm. A.A. Sizov.

169. **Pasiphila rectangulata* (Linnaeus, 1758) – **TO**: Andreevskoe, 13.VII.2002 – 4 spm. A.A. Sizov; Big Krasnoyar, 18.VII.2001 – 1 spm. A.A. Sizov.

170. **Eupithecia absinthiata* (Clerck, 1759) – **TO**: Andreevskoe, 9, 22, 23.VII.1988 – 3 spm. P.S. Sitnikov, 25.VI.2000, 13.VII.2002 – 4 spm. A.A. Sizov; Dubrovnoe, 8.VII.1999 – 1 spm. P.S. Sitnikov (earlier this species was defined as *Eupithecia goosensciata*); Ingair, 23.VII.1990 – 1 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov; Tavolzhnan, 26.VII.1996 – 2 spm. P.S. Sitnikov; Tyumen, 3.VII.1987 – 1 spm. P.S. Sitnikov, 25.VII.2000, 8.VII.2002 – 2 spm. A.A. Sizov.

171. *Eupithecia actaeata* Walderdorff, 1869 – Sizov, 2001:64 (Tyumen Region), 2002:151 (Kuchak).

172. *Eupithecia addictata* Dietze, 1908 – Sizov, 2002:151 (Abatsky, Big Krasnoyar). **TO**: Skiing lodge, 23.VI.2006 – 1 spm. D.E. Galich.

173. *Eupithecia analoga* Djakonov, 1926 – Sizov, 2001:64 (*europaea*, Yamalo-Nenets Autonomous Okrug), 2002:152 (*europaea*, Gubkinsky); Vasilenko, 2003:307 (*europaea*, Gubkinsky).

174. **Eupithecia assimilata* Doubleday, 1856 – **TO:** Andreevskoe, 13.VII.2002 – 2 spm. A.A. Sizov; Motushi, 6.VII.1998 – 1 spm. P.S. Sitnikov.
175. *Eupithecia biornata* Christoph, 1867 – Sitnikov et al., 2004:282-283 (Sladkovo, Tavolzhian); Red book of the Tyumen Region, 2004 (annex):463 (Tyumen Region). **TO:** Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov.
176. **Eupithecia carpophilata* Staudinger, 1897 – **TO:** Kryukovskoe, 26.VII.2019 – 1 spm. P.S. Sitnikov.
177. **Eupithecia centaureata* ([Denis et Schiffermüller], 1775) – **TO:** Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 22.VIII.1988 – 1 spm. P.S. Sitnikov.
178. **Eupithecia denotata* (Hübner, [1813]) – **TO:** Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov.
179. **Eupithecia egenaria* Herrich-Schäffer, 1848 – **TO:** Tyumen, 11.VI.1987 – 1 spm. P.S. Sitnikov.
180. *Eupithecia expallidata* Doubleday, 1856 – Sizov, 2001:64 (Tyumen Region), 2002:152 (Tyumen).
181. *Eupithecia extensaria* (Freyer, 1845) – Sizov, 2001:64 (Yamalo-Nenets Autonomous Okrug), 2002:151 (Gubkinsky).
182. *Eupithecia extraversaria* (Herrich-Schäffer, 1852) – Sizov, 2002:151 (Kazanskoe).
183. **Eupithecia gelidata* Möschler, 1860 ssp. *hyperboreata* Staudinger, 1861 – **YNAO:** Gubkinsky, 9.VII.1999 – 1 spm. A.A. Sizov; Tolka, 14.VII.1989 – 1 spm. P.S. Sitnikov. **TO:** Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov.
184. **Eupithecia icterata* (Villers, 1789) – **TO:** Andreevskoe, 9, 23.VII.1988 – 3 spm. P.S. Sitnikov, 25.VI.2000, 13.VII.2002 – 5 spm. A.A. Sizov; Ingair, 24.VI, 22, 23.VII.1990 – 4 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 3 spm. A.A. Sizov; Kryukovskoe, 26.VII.2019 – 1 spm. P.S. Sitnikov; Kuchak, 18.VII.1998 – 2 spm. A.A. Sizov; Tyumen, 29.VI.1987 – 1 spm. P.S. Sitnikov, 26.VII.1999 – 1 spm. A.A. Sizov.
185. *Eupithecia innotata* (Hufnagel, 1767) – Bukhhalo et al., 2014:139 (Tobolsk). **TO:** Andreevskoe, 2.VI.1998 – 1 spm. V.V. Sinitsin.
186. **Eupithecia lanceata* (Hübner, 1825) – **TO:** Lesozavodsky, 5.V.2020 – 1 spm. P.S. Sitnikov; Tyumen, 10.V.1987 – 1 spm. P.S. Sitnikov.
187. **Eupithecia lariciata* (Freyer, 1842) – **YNAO:** Ratta, 24.VII.1989 – 1 spm. P.S. Sitnikov.
188. **Eupithecia linariata* ([Denis et Schiffermüller], 1775) – **TO:** Andreevskoe, 13.VII.2002 – 4 spm. A.A. Sizov; Dubrovnoe, 5.VII.1998, 4, 9.VII.1999 – 3 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov; Kuchak, 10.VII.1998 – 1 spm. A.A. Sizov; Maryino gorge, 22.VIII.2019 – 1 spm. D.E. Galich; Tyumen, 26.VII.1999 – 2 spm. A.A. Sizov.
189. **Eupithecia millefoliata* Rössler, 1866 – **TO:** Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov; Ingair, 23.VII.1990 – 1 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 1 spm. A.A. Sizov; Mazurovo, 22.VI.1988 – 1 spm. P.S. Sitnikov; Sladkovo, 18.VI.1990 – 1 spm. P.S. Sitnikov; Tyumen, 29.VI.1987 – 1 spm. P.S. Sitnikov, 3.VII.2002 – 2 spm. A.A. Sizov.

190. *Eupithecia pimpinellata* (Hübner, [1813]) – Sizov, 2002:152 (Kuchak, Tyumen).

191. *Eupithecia plumbeolata* (Haworth, 1809) – Bukhhalo et al., 2014:138 (Tobolsk). **TO**: Andreevskoe, 22.VIII.1988 – 1 spm. P.S. Sitnikov; Kuchak, 3.VII.1998 – 1 spm. A.A. Sizov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Ermak's garden, 18.VII.2007 – 1 spm. D.E. Galich; Tyumen, 3.VII.1987 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 3 spm. D.E. Galich.

192. **Eupithecia pusillata* ([Denis et Schiffermüller], 1775) – **TO**: Andreevskoe, 23.VII.1983 – 2 spm. P.S. Sitnikov; Chervishevo, 21, 26.VII.1987 – 2 spm. P.S. Sitnikov.

193. *Eupithecia satyrata* (Hübner, 1813) – Sizov, 2001:64 (*rivosulata*, Yamalo-Nenets Autonomous Okrug), 2002:151 (*rivosulata*, Gubkinsky); Sitnikov et al., 2004:282 (*rivosulata*, Gubkinsky); Red book of the Tyumen Region, 2004 (annex):463 (*rivosulata*, Yamalo-Nenets Autonomous Okrug). **YNAO**: Krasnoselkup, 7, 10.VII.1989 – 3 spm. P.S. Sitnikov. **TO**: Andreevskoe, 23.VIII.1988 – 1 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Big Kunchur, 26.VI.2002 – 1 spm. A.A. Sizov; Ermak's garden, 18.VII.2007 – 1 spm. D.E. Galich; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen, 11.VI.1987 – 1 spm. P.S. Sitnikov.

194. *Eupithecia selinata* Herrich-Schäffer, 1861 – Sizov, 2002:151 (Big Krasnoyar). **TO**: Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

195. **Eupithecia simpliciata* (Haworth, 1809) – **TO**: Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Tyumen, 27.VIII.1986 – 1 spm. P.S. Sitnikov.

196. *Eupithecia sinuosaria* (Eversmann, 1848) – Shchuko, 1916:148 (*Tephroclystia*, Bogandinskoe). **TO**: Tobolsk, 5.VIII.1999 – 1 spm. A.A. Sizov; Tyumen, 12.VI.1980, 20.VI.1981, 1.VII.1986, 18, 30.VII.1987, 23.VI.1998 – 6 spm. P.S. Sitnikov.

197. *Eupithecia suboxydata* Staudinger, 1897 – Sizov, 2002:152 (Kazanskoe).

198. **Eupithecia subfuscata* (Haworth, 1809) – **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Vagai, 21.VI.2002 – 2 spm. A.A. Sizov; Kazanskoe, 13.VII.2001 – 2 spm. A.A. Sizov; Maslyansky, 13.VI.1990 – 1 spm. P.S. Sitnikov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Tyumen, 26, 31.V, 3, 6, 11.VI, 3.VII.1987 – 7 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Yalutorovsk, 16.VI.1997 – 1 spm. P.S. Sitnikov.

199. *Eupithecia subumbrata* ([Denis et Schiffermüller], 1775) – Sizov, 2001:64 (Tyumen Region), 2002:151 (Kuchak). **TO**: Shashova, 10.VI.2020 – 2 spm. D.E. Galich.

200. *Eupithecia succenturiata* (Linnaeus, 1758) – Bukhhalo et al., 2014:139 (*Eupithecia succenturiata exalbidata*, Tobolsk). **TO**: Abramova, 17.VII.2020 – 2 spm. D.E. Galich; Andreevskoe, 23.VII.1988 – 2 spm. P.S. Sitnikov, 25.VI.2000, 13.VII.2002 – 5 spm. A.A. Sizov; Big Krasnoyar, 18.VII.2001 – 4 spm. A.A. Sizov; Vagai, 21.VI.2002 – 2 spm. A.A. Sizov; Ingair, 30.VI.1988, 22-23.VII.1990 – 3 spm. P.S. Sitnikov; Kazanskoe, 13.VII.2001 – 5 spm. A.A. Sizov; Komissarovo, 31.VII.2001

– 1 spm. A.A. Sizov; Mazurovo, 22, 26.VI.1988 – 4 spm. P.S. Sitnikov; Motushi, 2, 4.VII.1998 – 2 spm. P.S. Sitnikov; Nadtsy, 29-30.VI.1994 – 2 spm. P.S. Sitnikov; Tyumen, 3.VII.1987 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 1 spm. D.E. Galich.

201. **Eupithecia tantillaria* Boisduval, 1840 – **TO**: Andreevskoe, 24.VIII.1998 – 1 spm. A.A. Sizov; Velizhany, 16.VI.1998 – 2 spm. P.S. Sitnikov.

202. *Eupithecia thalictrata* (Püngeler, 1902) – Sizov, 2001:64 (Tyumen Region), 2002:151 (Kuchak).

203. *Eupithecia tripunctaria* Herrich-Schäffer, 1852 – Sizov, 2001:64 (Yamalo-Nenets Autonomous Okrug), 2002:151 (Gubkinsky); Sitnikov et al., 2004:282 (Gubkinsky); Red book of the Tyumen Region, 2004 (annex):463 (Yamalo-Nenets Autonomous Okrug).

204. **Eupithecia venosata* (Fabricius, 1787) – **TO**: Mazurovo, 26.VI.1988 – 1 spm. P.S. Sitnikov.

205. *Eupithecia virgaureata* Doubleday, 1861 – Sizov, 2001:64 (Tyumen Region), 2002:151 (Kuchak).

206. **Eupithecia vulgata* (Haworth, 1809) – **TO**: Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Vagai, 21.VI.2002 – 4 spm. A.A. Sizov; Mazurovo, 22.VI.1988 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 31.V, 9.VI.1981, 11.VI.1987 – 3 spm. P.S. Sitnikov, 26.VII.1999 – 1 spm. A.A. Sizov; Yalutorovsk, 16.VI.1997 – 2 spm. P.S. Sitnikov.

207. *Melanthia mandschuricata* (Bremer, 1864) – Vasilenko, 2003:307 (*Meso-leuca*, Oktyabrskoe); Lomakin et al., 2001:362 (Nadtsy); Red book of the Tyumen Region, 2004:145 (Nadtsy); Sitnikov et al., 2013:127 (Nadtsy).

208. *Melanthia procellata* ([Denis et Schiffermüller], 1775) – Sitnikov et al., 2004:282 (Dubrovnoe, Ingair, Kulybaika); Red book of the Tyumen Region, 2004 (annex):463 (Tyumen Region). **TO**: Andreevskoe, 13.VII.2002 – 1 spm. A.A. Sizov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov.

209. *Horisme aemulata* (Hübner, 1813) – Lomakin et al., 2001:362 (Ingair, Nadtsy); Red book of the Tyumen Region, 2004:144 (Ingair, Nadtsy); Sitnikov et al., 2013:127 (Ingair, Nadtsy).

210. **Horisme tersata* ([Denis et Schiffermüller], 1775) – **TO**: Andreevskoe, 18, 22.VI.1988 – 2 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Vagai, 21.VI.2002 – 1 spm. A.A. Sizov; Ingair, 16.VI.1991 – 1 spm. P.S. Sitnikov; Nadtsy, 29.VI.1994 – 1 spm. P.S. Sitnikov.

211. **Horisme vitalbata* (Denis et Schiffermüller, 1775) – **TO**: Andreevskoe, 4, 18.VI.1988, 23.VI.1998 – 3 spm. P.S. Sitnikov.

212. **Anticollix sparsata* (Treitschke, 1828) – **KMAO**: Nefteyugansk, 17.VII.1986 – 1 spm. P.S. Sitnikov. **TO**: Kuchak, 18.VII.1998 – 1 spm. A.A. Sizov; Nadtsy, 30.VI.1994 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VII.2001 – 1 spm. A.A. Sizov; Sladkovo, 28.VI.1990 – 1 spm. P.S. Sitnikov.

213. **Lythria cruentaria* (Hufnagel, 1767) – **TO**: Andreevskoe, 11.VIII.1987, 22.V.1998 – 2 spm. P.S. Sitnikov; Dubrovnoe, 8, 12.VII.1999 – 2 spm. P.S. Sitnikov;

Embaevo, 13.VIII.1999 – 1 spm. P.S. Sitnikov; Sundunkul, 26.VI.1997 – 1 spm. P.S. Sitnikov; Tyumen (SE), 9.V.1982 – 2 spm. P.S. Sitnikov; Uporovo, 9.VI.1989 – 1 spm. P.S. Sitnikov.

214. *Lythria purpuraria* (Linnaeus, 1758) – Shchuko, 1916:148 (Karasulskaya). **TO:** Andreevskoe, 24.VIII.1998 – 1 spm. A.A. Sizov; Vlasovo, 8.V.1997 – 1 spm. P.S. Sitnikov; Gulyai-Pole, 23.VI.1990 – 1 spm. P.S. Sitnikov; Kamenka, 18.VI.1991 – 1 spm. no collector specified; Maika, 29.VI.1990 – 1 spm. P.S. Sitnikov; Motushi, 6.VII.1998 – 1 spm. P.S. Sitnikov; Salairka, 28.VII.1998 – 1 spm. P.S. Sitnikov; Tavolzhan, 25.VII.1996 – 3 spm. P.S. Sitnikov; Tavolzhan (Island), 19.VI.1990 – 2 spm. P.S. Sitnikov.

Sterrhinae

215. *Rhodostrophia vibicaria* (Linnaeus, 1758) – Shchuko, 1916:148 (Karasulskaya); Bukhkalov et al., 2014:137 (Tobolsk). **TO:** Andreevskoe, 18, 22, 23.VI.1988, 23.V.1991, 18.VI.1998 – 5 spm. P.S. Sitnikov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Dubrovnoe, 6.VII.1999 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 30.VI. 1, 11.VII.1998 – 5 spm. A.A. Sizov; Mazurovo, 22.VI.1988, 26.VI.1998 – 2 spm. P.S. Sitnikov; Maryino gorge, 19.VII.2019 – 1 spm. D.E. Galich; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 2 spm. P.S. Sitnikov; Tyumen (NW), 8.VII.1988 – 1 spm. P.S. Sitnikov.

216. *Idaea aureolaria* ([Denis et Schiffermüller], 1775) – Shchuko, 1916:148 (*Acidalia trilineata*, Karasulskaya). **TO:** Velizhany, 16.VI.1998 – 4 spm. P.S. Sitnikov; Travnoe, 20.VI.1990 – 1 spm. P.S. Sitnikov; Shashova, 17.VI.1997 – 1 spm. P.S. Sitnikov.

217. *Idaea aversata* (Linnaeus, 1758) – Shchuko, 1916:148 (*Acidalia*, Karasulskaya); Bukhkalov et al., 2014:137 (Tobolsk). **TO:** Abatsky, 10.VII.2001 – 8 spm. A.A. Sizov; Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov; Big Krasnoyar, 18.VII.2001 – 1 spm. A.A. Sizov; Kuchak, 24, 30.VI, 1, 13, 15, 18.VII.1998 – 8 spm. A.A. Sizov; Nadtsy, 25.VIII.1986, 27.VI.1991, 30.VI.1994 – 3 spm. P.S. Sitnikov; Tyumen, 27.VIII.1986, 3.VII.1987, 12.VIII.1999 – 3 spm. P.S. Sitnikov.

218. **Idaea biselata* (Hufnagel, 1767) – **KMAO:** Malinovsky, 8.VIII.2002 – 2 spm. A.A. Sizov; Tayozhny, 9, 10.VIII.2002 – 3 spm. A.A. Sizov. **TO:** Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov, 30.VII.1999, 13.VII.2002 – 2 spm. A.A. Sizov; Big Krasnoyar, 18, 19.VII.2001 – 5 spm. A.A. Sizov; Vinokurova, 4.VIII.1999 – 1 spm. A.A. Sizov; Ingair, 24.VI, 22, 25.VII.1990 – 3 spm. P.S. Sitnikov; Komissarovo, 31.VII.2001 – 1 spm. A.A. Sizov; Kuchak, 10, 18.VII.1998 – 2 spm. A.A. Sizov; Tyumen, 26.VII.1999 – 1 spm. A.A. Sizov.

219. **Idaea descitaria* (Christoph, 1893) – **TO:** Andreevskoe, 21.VI.1998 – 1 spm. A.A. Sizov; Vlasovo, 19.VI.1990 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyumen, 9.VI.1980 – 1 spm. P.S. Sitnikov, 12.VI.1999, 3.VII.2002 – 2 spm. A.A. Sizov.

220. *Idaea dimidiata* (Hufnagel, 1767) – Sizov, 2001:64 (*Sterrha*, Tyumen Region); Bukhkalov et al., 2014:137 (Tobolsk). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Andreevskoe, 30.VIII.1999, 13.VII.2002 – 5 spm. A.A. Sizov; Big Krasnoyar, 18-19.VII.2001 – 2 spm. A.A. Sizov; Komissarovo, 31.VII.2001 – 1 spm., A.A. Sizov; Kuchak, 1, 3, 10, 11, 18.VII.1998 – 5 spm. A.A. Sizov.

221. *Idaea emarginata* (Linnaeus, 1758) – Sizov, 2001:64 (*Sterrha*, Tyumen Region); Bukhkalov et al., 2014:137 (Tobolsk).

222. *Idaea mancipiata* Staudinger, 1871 – Sitnikov et al., 2004:281 (*Sterrha*, Tavolzhian); Red book of the Tyumen Region, 2004:463 (*Sterrha*, Tyumen Region).

223. *Idaea muricata* (Hufnagel, 1767) – Bukhkalov et al., 2014:137 (Tobolsk). **TO**: Andreevskoe, 13.VII.2002 – 2 spm. A.A. Sizov; Dubrovnoe, 8.VII.1999 – 1 spm. P.S. Sitnikov; Kulybaika, 7.VII.1997 – 1 spm. P.S. Sitnikov; Kuchak, 3.VII.1998 – 1 spm. A.A. Sizov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Tobolsk, 7.VII.2009 – 1 spm. D.E. Galich.

224. *Idaea ochrata* (Scopoli, 1763) – Mershalova, Polushkina, 1967:138 (*Sterrha*, Tyumen).

225. **Idaea pallidata* ([Denis et Schiffermüller], 1775) – **TO**: Kuchak, 27.VI.1999 – 1 spm. A.A. Sizov; Staraya Shadrina, 11.VI.1989 – 2 spm. P.S. Sitnikov; Tyuleshobor, 23.V.1997 – 1 spm. P.S. Sitnikov; Tyumen, 11.VI.1987 – 1 spm. P.S. Sitnikov.

226. *Idaea serpentata* (Hufnagel, 1767) – Korshunov, 1973b:182 (*Ptychopoda*, Sokolovka). **TO**: Abatsky, 10.VII.2001 – 1 spm. A.A. Sizov; Dubrovnoe, 3, 7.VII.1999 – 2 spm. P.S. Sitnikov; Zavalnoye cemetery, 22.VI.2007 – 1 spm. D.E. Galich; Kuchak, 8, 11, 18.VII.1998 – 6 spm, A.A. Sizov; Mazurovo, 3.VII.1981 – 1 spm. P.S. Sitnikov; Maika, 29.VI.1999 – 1 spm. P.S. Sitnikov; Motushi, 2.VII.1998 – 1 spm. P.S. Sitnikov; Ostropyatovo, 27.VI.1990 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov.

227. *Idaea straminata* (Borkhausen, 1794) – Sizov, 2001:64 (*Scopula inornata*, Tyumen Region).

228. **Idaea sylvestriaria* (Hübner, 1799) – **TO**: Abramova, 17.VII.2020 – 1 spm. D.E. Galich; Andreevskoe, 23.VII.1988 – 1 spm. P.S. Sitnikov, 25.VI.2000 – 1 spm. A.A. Sizov; Dubrovnoe, 5.VII.1998, 2.VII.1999 – 2 spm. P.S. Sitnikov; Ingair, 16.VI.1991 – 1 spm. P.S. Sitnikov; Kulybaika, 7.VII.1996 – 1 spm. P.S. Sitnikov; Kuchak, 11.VII.1998 – 1 spm. A.A. Sizov.

229. *Holarctias rufinaria* (Staudinger, 1861) – Olshvang, 1992:46 (river floodplain Khadytayakhi); Hausmann, 2004 (Krasnyi Kamen'). **YNAO**: Krasnyi Kamen', 1-13.VII.2017 – 3 males, V.O. Zurilina.

230. *Scopula cajanderi* (Herz, 1904) – Hausmann, 2004: (Krasnyi Kamen'). **YNAO**: Krasnyi Kamen', 12.VII.2012 – 1 male, 1 female, S.A. Knyazev.

231. *Scopula corrivalaria* (Kretschmar, 1862) – Bukhkalov et al., 2014:137 (Tobolsk). **TO**: Andreevskoe, 09, 22.VII.1988 – 2 spm. P.S. Sitnikov, 25.VI.2000 – 2 spm. A.A. Sizov; Dubrovnoe, 5.VII.1998 – 2 spm. P.S. Sitnikov; Kuchak, 10.VII.1998 – 1 spm. A.A. Sizov.

232. **Scopula floslactata* (Haworth, 1809) – **TO:** Andreevskoe, 11, 18.VI.1988, 23.V.1991 – 3 spm. P.S. Sitnikov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 27.VI.1999 – 1 spm. A.A. Sizov; Skiing lodge, 11.VI.2006 – 1 spm. D.E. Galich; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Uspenka, 19.VI.1998 – 1 spm. P.S. Sitnikov.

233. *Scopula frigidaria* (Möschler, 1860) – Sizov, 2001:66 (Yamalo-Nenets Autonomous Okrug); Sitnikov et al., 2004:282 (Muravlenko); Red book of the Tyumen Region, 2004:463 (Yamalo-Nenets Autonomous Okrug).

234. *Scopula immorata* (Linnaeus, 1758) – Mershalova, Polushkina, 1967:138 (Tyumen). **TO:** Andreevskoe, 4.VI, 18, 22.VII.1988, 23, 29.V.1991 – 5 spm. P.S. Sitnikov; Vagai, 21.VI.2002 – 2 spm. A.A. Sizov; Vlasovo, 15.VI.1990 – 3 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak, 1.VII.1998, 26.VI.1999 – 2 spm. A.A. Sizov; Lipovoe, 14.VI.1992 – 1 spm. P.S. Sitnikov; 26.VI.1980, 21.VI.1986 – 4 spm. P.S. Sitnikov; Nadtsy, 29.VI.1994 – 1 spm. P.S. Sitnikov; Onokhino, 10.VI.1996 – 1 spm. P.S. Sitnikov; Sinitsynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tyumen (NW), 8.VII.1988 – 1 spm. P.S. Sitnikov; Shashova, 10.VI.2020 – 3 spm. D.E. Galich; Yalutorovsk, 16.VI.1996 – 1 spm. P.S. Sitnikov.

235. **Scopula immutata* (Linnaeus, 1758) – **TO:** Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988, 22.VII.1990 – 2 spm. P.S. Sitnikov; Kuchak, 11, 15, 18.VII.1998 – 6 spm. A.A. Sizov; Peña, 1.VII.1994 – 1 spm. P.S. Sitnikov; Sladkovo, 28.VI.1990 – 1 spm. P.S. Sitnikov.

236. **Scopula incanata* (Linnaeus, 1758) – **TO:** Andreevskoe, 23.VI.1988 – 1 spm. P.S. Sitnikov, 25.VI.2000 – 1 spm. A.A. Sizov; Kulytbaika, 11.VII.1997 – 1 spm. P.S. Sitnikov.

237. *Scopula nemoraria* (Hübner, [1799]) – Tschugunov, 1914:447 (*Acidalia*, near the Saima river (Khanty-Mansi Autonomous Okrug-Yugra). **TO:** Kulytbaika, 8.VIII.1994 – 1 spm. P.S. Sitnikov; Big Kunchur, 26.VI.2002 – 2 spm. A.A. Sizov; Kuchak, 1.VII.1998 – 1 spm. A.A. Sizov; Sladkovo, 28.VI.1990 – 1 spm. P.S. Sitnikov; Tyumen, 20.VI.1999 – 1 spm. A.A. Sizov.

238. *Scopula ornata* (Scopoli, 1763) – Sitnikov et al., 2004:281 (Andreevskoe); Red book of the Tyumen Region, 2004:463.

239. *Scopula rubiginata* (Hufnagel, 1767) – Shchuko, 1916:148 (*Acidalia*, Karasulskaya). **TO:** Andreevskoe, 4, 18.VI, 22-23.VII.1988 – 4 spm. P.S. Sitnikov, 13.VII.2002 – 1 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 2 spm. P.S. Sitnikov; Dubrovnoe, 4.VII.1999 – 1 spm. P.S. Sitnikov; Rechkina, 14-15.VIII.1989 – 2 spm. O.G. Krevskaya; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov; Tavolzhan, 26.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen (NW), 8.VII.1988 – 1 spm. P.S. Sitnikov.

240. *Scopula ternata* (Schrank, 1802) – Korshunov, 1973b:182 (*Cidaria*, Durytnina); (Olshvang, 1992:46 (river floodplain Khadytayakhi). **TO:** Andreevskoe, 22.VI.1988 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 1 spm. P.S. Sitnikov; Kuchak,

1, 3, 15, 24, 26, 27.VII.1998 – 9 spm. A.A. Sizov; Motushi, 2, 4, 6.VII.1998 – 3 spm. P.S. Sitnikov; Nadtsy, 29.VI.1994 – 2 spm. P.S. Sitnikov; Novoatyalovo, 26.VI.1996 – 1 spm. P.S. Sitnikov; Peña, 1.VII.1994 – 4 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 3 spm. P.S. Sitnikov; Tavolzhan (Island), 26.VII.1998 – 1 spm. P.S. Sitnikov.

241. **Scopula umbelaria* (Hübner, 1798) – **TO**: Andreevskoe, 4, 18.VI.1988, 18.VI.1988 – 3 spm. P.S. Sitnikov; Sinitysynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Tyuleshov bor, 23.V.1997 – 1 spm. P.S. Sitnikov; Tyumen (NW), 8.VII.1988 – 1 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov.

242. *Scopula virginalis* (Fourcroy, 1785) – Sizov, 2001:64 (*caricaria*, Tyumen Region); Sitnikov et al., 2004:281 (*caricaria*, Kuchak); Red book of the Tyumen Region, 2004:463 (*caricaria*, Tyumen Region). **TO**: Missia, 10.VII.2006 – 1 spm. D.E. Galich.

243. **Scopula virgulata* ([Denis et Schiffermüller], 1775) – **TO**: Andreevskoe, 22.VI, 9, 22.VII.1988 – 4 spm. P.S. Sitnikov; Dubrovnoe, 5.VII.1998 – 1 spm. P.S. Sitnikov; Motushi, 4.VII.1998 – 1 spm. P.S. Sitnikov.

244. **Cyclophora albipunctata* (Hufnagel, 1767) – **TO**: Shashova, 4.VIII.2020 – 1 spm. D.E. Galich.

245. *Cyclophora pendularia* (Clerck, 1759) – Olshvang, 1992:46 (river floodplain Khadytayakhi). **YNAO**: Krasnoselkup, 11.VII.1989 – 1 spm. P.S. Sitnikov. **KMAO**: Numto, 30.VIII.1990 – 1 spm. P.S. Sitnikov. **TO**: Andreevskoe, 9.VII.1988 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Ingair, 30.VI.1988 – 2 spm. P.S. Sitnikov; Onokhino, 10.VI.1996 – 1 spm. P.S. Sitnikov; Staraya Shadrina, 11.VI.1989 – 1 spm. P.S. Sitnikov.

246. *Timandra comae* Schmidt, 1931 – Tschugunov, 1914 (*amata*, Khanty-Mansi Autonomous Okrug-Yugra); Shchuko, 1916:148 (*amata*, Karasulskaya); Bukhkalov et al., 2014:137-138 (*T. griseata* = *Calothysanis amata*, Tobolsk, Missia). **TO**: Abramova, 8.IX.2018 – 2 spm. D.E. Galich; Andreevskoe, 4, 18.VI, 22-23, 30.VII, 22.VIII.1988 – 6 spm. P.S. Sitnikov, 9, 24.VIII.1998 – 3 spm. A.A. Sizov; Vedenyatskoe, 12.VI.1989 – 1 spm. P.S. Sitnikov; Vlasovo, 15.VI.1990 – 1 spm. P.S. Sitnikov; Kuchak, 13.VII.1998 – 1 spm. A.A. Sizov; Maryino gorge, 22.VIII.2019 – 1 spm. D.E. Galich; Nadtsy, 29.VI.1994 – 1 spm. P.S. Sitnikov; Sinitysynsky bor, 10.VI.1997 – 1 spm. P.S. Sitnikov; Sladkovo, 20.VII.1996 – 1 spm. P.S. Sitnikov; Tavolzhan, 26.VII.1996 – 1 spm. P.S. Sitnikov; Tyumen, 27.VIII.1986, 14.VII.1993 – 2 spm. P.S. Sitnikov; Tyumen (E), 29.V.1991 – 1 spm. P.S. Sitnikov; Chervishevo, 21.VII.1988 – 1 spm. P.S. Sitnikov; Yalutorovsk, 16.VI.1996 – 1 spm. P.S. Sitnikov.

247. *Timandra rectistrigaria* (Eversmann, 1851) – Lomakin et al., 2001:362 (Pripolyarnyi); Hausmann, 2004 (Krasnyi Kamen`); Red book of the Tyumen Region, 2004: 141 (Pripolyarnyi); Sitnikov et al., 2013:126 (Pripolyarnyi). **YNAO**: Krasnyi Kamen`, 28.VI.2017 – 1 male, V.O. Zurilina.

A list of questionable and erroneous species

Yezognophos dilucidaria ([Denis et Schiffermüller], 1775) – Mershalova, Polushkina, 1967:138 (*Gnophos dilucidaria*, TO). Misidentification.

Psodos alpinata (Scopoli, 1763) – Olshvang, 1992:46 (river floodplain Khadytayakhi). Probably misidentification of *Glacies coracina* (Esper, 1805).

Aspitates insigna (Alphéraky, 1883) – Shuhov, 1914:25 (*Aspilates insigus* (?), Khanty-Mansi Autonomous Okrug-Yugra). Misidentification.

Schistostege decussata ([Denis et Schiffermüller], 1775) – Shchuko, 1916:148 (*Siona decussata*, Karasulskaya). Misidentification.

Nothocasis sertata (Hübner, [1817]) – Bukhhalo et al., 2014:139 (Tobolsk). Misidentification.

Xanthorhoe incursata (Hübner 1813 ["1796"]) – Shuhov, 1914:25 (*Lorentia incursata* (?), Khanty-Mansi Autonomous Okrug-Yugra). Misidentification.

Eupithecia pauxillaria Boisduval, 1840 – Korshunov, 1973b:183 (*Eupithecia euphrasia*, Tobolsk). Misidentification.

Horisme radicularia (de La Harpe, 1855) – Sitnikov et al., 2004:282 (*Horisme laurinata*, Ingair); Red book of the Tyumen Region, 2004 (annex):463 (*laurinata*, Tyumen Region). Probably misidentification of *Horisme tersata* ([Denis et Schiffermüller], 1775).

Scopula herzii Vasilenko, 2000 – Sizov, 2001:64 (vicinity of Noyabrsk). Misidentification of *Scopula frigidaria* (Möschler, 1860).

Lythria plumularia (Freyer, 1831) – Tschugunov, 1917:18 (Khanty-Mansi Autonomous Okrug-Yugra). Probably a misidentification of the dark form of *Lythria cruentaria* (Hufnagel, 1767).

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Supplementary material 1

Map 1. Schematic map of the collection sites of Geometrid moths in the Tyumen Region (including Autonomous Okrugs)

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Data type: Image

Explanation note: Schematic map of the collection sites of Geometrid moths in the Tyumen Region (including Autonomous Okrugs). Yamalo-Nenets Autonomous Okrug – 1-15 collection sites; Khanty-Mansi Autonomous Okrug-Yugra – 16-35 collection sites; Tyumen Region (without Autonomous Okrugs) – 36-126 collection sites.

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