

The hymenopterous parasitoids of the lime leaf miner *Phyllonorycter issikii* (Kumata) (Lepidoptera: Gracillariidae) from its native and invaded regions in Asian Russia

AUTHORS: Oksana V. Kosheleva, Sergey A. Belokobylskij, Natalia I. Kirichenko

Table S2. The checklist of *Phyllonorycter issikii* parasitoids in the Palearctic.

No.	Species	Locality	Reference
EULOPHIDAE: Eulophinae			
1	<i>Cirrospilus diallus</i> Walker, 1838	Russia: Ulyanovsk Province Russia: Udmurtia Republic	[15–17,19,28] [21,22]
2	<i>C. elegantissimus</i> Westwood, 1832	Hungary Ukraine: Kiew Russia: Ulyanovsk Province	[29] [10] [17,19,28]
3	<i>Cirrospilus lyncus</i> Walker, 1838	Hungary Slovakia Russia: Udmurtia Republic Russia: Ulyanovsk Province Russia: Tyumen	[29] [25] [21,22] [15–17,19,28] [23]
4	<i>Cirrospilus pictus</i> (Nees, 1834)	Slovakia Ukraine: Kiew Russia: Moscow Province Russia: Udmurtia Republic Russia: Tyumen	[25] [10] [23] [21,22] [23]
5	<i>Cirrospilus viticola</i> (Rondani, 1877)	Hungary Russia: Ulyanovsk Province	[29] [15–17,19,28]
6	<i>Cirrospilus vittatus</i> Walker, 1838	Slovakia Russia: Udmurtia Republic	[25] [21,22]
7	<i>Cirrospilus ussuriensis</i> Kosheleva, sp. nov.	Russia: Primorsky Territory	Kosheleva et al. (present study)
8	<i>Cirrospilus</i> sp.	Japan: Hokkaido	[15]
9	<i>Dicladocerus</i> <i>westwoodii</i> Westwood, 1832	Russia: Udmurtia Republic	[21,22]
10	<i>Diglyphus pusztensis</i> (Erdős and Novicky, 1951)	Slovakia	[25]
11	<i>Elachertus fenestratus</i> Nees, 1834	Hungary Russia: Udmurtia Republic Russia: Novosibirsk Province	[29] [21,22] Kosheleva et al. (present study)
12	<i>E. inunctus</i> Nees, 1834	Japan: Hokkaido Slovakia Russia: Ulyanovsk Province Russia: Novosibirsk Province, Primorsky Territory	[9] [25] [28] Kosheleva et al. (present study)
13	<i>Elachertus</i> sp.	Ukraine: Kharkov Province Japan: Hokkaido	[24, 26] [9]

No.	Species	Locality	Reference
14	<i>Hyssopus geniculatus</i> (Hartig, 1838)	Russia: Moscow Province Russia: Nizhny Novgorod Russia: Udmurtia Republic Russia: Tatarstan Republic, Kazan Russia: Ulyanovsk Province Russia: Yekaterinburg	[27,24,23] [23] [21,22] [23] [15–17,19,28] [23]
15	<i>Hyssopus nigritulus</i> (Zetterstedt, 1838)	Russia: Tyumen Russia: Udmurtia Republic	[23] [21,22]
16	<i>Pnigalio agraules</i> (Walker, 1839)	Hungary Russia: Moscow Province	[29] [27,24,23]
17	<i>Pnigalio cristatus</i> (Ratzeburg, 1848)	Russia: Ulyanovsk Province	[28]
18	<i>Pnigalio gyamiensis</i> Myartseva and Kurashev, 1990	Russia: Ulyanovsk Province	[28]
19	<i>Pnigalio incompletus</i> (Bouček, 1971)	Bulgaria	[30]
20	<i>Pnigalio longulus</i> (Zetterstedt, 1838)	Slovakia	[25]
21	<i>Pnigalio mediterraneus</i> Ferriere and Delucchi, 1957	Ukraine: Kharkov Province	[24,26]
22	<i>Pnigalio nemati</i> (Westwood, 1838)	Udmurtia Republic	[21,22]
23	<i>Pnigalio pectinicornis</i> (Linnaeus, 1758)	Hungary Russia: Udmurtia Republic Russia: Tatarstan Republic, Kazan Russia: Yekaterinburg Russia: Tyumen Russia: Novosibirsk Province	[29] [21] [23] [23] [23] Kosheleva et al. (present study)
24	<i>Pnigalio soemius</i> (Walker, 1839)	Hungary Slovakia Ukraine: Kharkov Province Russia: Moscow Province Russia: Udmurtia Republic Russia: Ulyanovsk Province Russia: Novosibirsk Province	[29] [25] [24,26] [23] [21,22] [15–17,19,28] Kosheleva et al. (present study)
25	<i>Pnigalio</i> sp.	Ukraine: Kharkov Province Russia: Moscow Province Russia: Novosibirsk Province	[24,26] [11,24] [5,6]
26	<i>Pnigalio</i> sp. 1	Russia: Novosibirsk Province	Kosheleva et al. (present study)
27	<i>Sympiesis acalle</i> (Walker, 1848)	Bulgaria	[30]
28	<i>Sympiesis angustipennis</i> (Erdős, 1954)	Hungary	[29]
29	<i>Sympiesis dolichogaster</i>	Hungary Slovakia	[29] [25]

No.	Species	Locality	Reference
30	Ashmead, 1888 <i>Sympiesis gordius</i> (Walker, 1848)	Russia: Udmurtia Republic Bulgaria Hungary Slovakia Ukraine: Kiew Ukraine: Kharkov Province Russia: Moscow Province Russia: Udmurtia Republic Russia: Tatarstan Republic, Kazan Russia: Ulyanovsk Province Russia: Tyumen Russia: Novosibirsk Province, Primorsky Territory	[21] [30] [29] [25] [10] [24,26] [23] [21,22] [23] [15–17,19,28] 23 Kosheleva et al. (present study)
31	<i>Sympiesis laevifrons</i> Kamijo, 1965	Russia: Primorskiy Territory	[12]; Kosheleva et al. (present study)
32	<i>Sympiesis sericeicornis</i> (Nees, 1834)	Japan: Hokkaido Croatia Bulgaria Hungary Slovakia Ukraine: Kiew Ukraine: Kharkov Province Russia: Moscow Province Russia: Nizhny Novgorod Russia: Udmurtia Republic Russia: Ulyanovsk Province Russia: Yekaterinburg Russia: Tyumen Japan: Hokkaido	[31] [13,29] [30] [29] [25] [10] [24,26] [23] [23] [21,22] [15–17,19,28] [23] [23] [31]
33	<i>Sympiesis</i> sp.	Russia: Moscow Province	[11,24]
EULOPHIDAE: Entedoninae			
34	<i>Achrysocharoides altilis</i> (Delucchi, 1954)	Russia: Nizhny Novgorod	[23]
35	<i>Achrysocharoides cilla</i> (Walker, 1839)	Hungary Russia: Primorskiy Territory	[29] Kosheleva et al. (present study)
36	<i>Achrysocharoides nagasawi</i> Kosheleva, sp. nov.	Russia: Primorskiy Territory	Kosheleva et al. (present study)
37	<i>Achrysocharoides carinatus</i> Kosheleva, sp. nov.	Russia: Primorskiy Territory	Kosheleva et al. (present study)
38	<i>Achrysocharoides</i> sp.	Russia: Tyumen Ukraine: Kharkov Province Japan	[23] [24,26] [9]
39	<i>Chrysocharis laomedon</i> (Walker, 1839)	Bulgaria Hungary Ukraine: Kiew Russia: Moscow Province Russia: Nizhny Novgorod Russia: Udmurtia Republic Russia: Ulyanovsk Province Russia: Yekaterinburg	[30] [29] [10] [27,23,24] [23] [21,22] [15–17,19,28] [23]

No.	Species	Locality	Reference
		Russia: Tyumen	[23]
		Russia: Novosibirsk Province,	Kosheleva et al.
		Primorskiy Territory	(present study)
		Japan: Hokkaido	[35]
40	<i>Chrysocharis nephereus</i> (Walker, 1839)	Slovakia	[25]
		Russia: Moscow Province	[23]
		Russia: Udmurtia Republic	[21,22]
		Russia: Kazan (Tatarstan Republic)	[23]
		Russia: Yekaterinburg	[23]
		Russia: Tyumen	[23]
41	<i>Chrysocharis pentheus</i> (Walker, 1839)	Bulgaria	[30]
42	<i>Chrysocharis phryne</i> (Walker, 1839)	Slovakia	[25]
		Russia: Udmurtia Republic	[21,22]
43	<i>Chrysocharis pubicornis</i> (Zetterstedt, 1838)	Slovakia	[25]
		Russia: Udmurtia Republic	[21,22]
		Russia: Ulyanovsk Province	[15–17,19,28]
44	<i>Chrysocharis ujiyei</i> Kamijo, 1977	Japan: Hokkaido	[9]
45	<i>Chrysocharis</i> sp.	Russia: Moscow Province	11,24
		Russia: Tyumen	[23]
		Russia: Novosibirsk Province	[5,6]
		Japan: Hokkaido	[9]
46	<i>Entedon</i> sp.	Slovakia	[25]
		Russia: Ulyanovsk Province	[15,17]
47	<i>Neochrysocharis cuprifrons</i> Erdos, 1954	Russia: Udmurtia Republic	[21,22]
48	<i>Neochrysocharis formosus</i> (Westwood, 1833)	Hungary	[29]
		Russia: Udmurtia Republic	[21,22]
49	<i>Omphale versicolor</i> (Nees, 1834)	Hungary	[24,25]
50	<i>Omphale</i> sp.	Russia: Tatarstan Republic, Kazan	[23]
51	<i>Pediobius cassidae</i> Erdos, 1958	Russia: Ulyanovsk Province	[17,19;28]
		Russia: Primorskiy Territory	Kosheleva et al.
			(present study)
52	<i>Pediobius metallicus</i> (Nees, 1834)	Slovakia	[25]
		Russia: Ulyanovsk Province	[17,19;28]
53	<i>Pediobius saulius</i> (Walker, 1839)	Bulgaria	[30]
		Hungary	[29]
		Slovakia	[25]
		Ukraine: Kharkov Province	[24,26]
		Russia: Udmurtia Republic	[22]
		Japan: Hokkaido	[33]
54	<i>Pleurotroppopsis japonica</i> (Kamijo, 1977)	Japan:Hokkaido	[32]
		Russia: Primorsky Territory	Kosheleva et al.
			(present study)
EULOPHIDAE: Tetrastichinae			
55	<i>Aprostocetus zoilus</i> (Walker, 1839)	Hungary	[29]
		Russia: Ulyanovsk Province	[14]
56	<i>Aprostocetus</i> sp.	Bulgaria	[30]
		Russia: Ulyanovsk Province	[15–17,19]

No.	Species	Locality	Reference
57	<i>Baryscapus nigroviolaceus</i> (Nees, 1834)	Slovakia	[25]
58	<i>Minotetrastichus frontalis</i> (Nees, 1834)	Bulgaria	[20]
		Hungary	[29]
		Slovakia	[25]
		Ukraine: Kiev	[10]
		Ukraine: Kharkov Province	[24,26]
		Russia: Nizhny Novgorod	[23]
		Russia: Tatarstan Republic, Kazan	[23]
		Russia: Udmurtia Republic	[21,22]
		Russia: Ulyanovsk Province	[14,15,17–19,28]
		Russia: Yekaterinburg	[23]
		Russia: Tyumen	[23]
		Russia: Novosibirsk Province	Kosheleva et al. (present study)
59	<i>Mischotetrastichus nadezhdae</i> (Kostjukov, 1977)	Russia: Primorskiy Territory	Kosheleva et al. (present study)
60	<i>Minotetrastichus platanellus</i> (Mercet, 1922)	Bulgaria	[30]
61	<i>Mischotetrastichus petiolatus</i> (Erdos, 1961)	Slovakia	[25]
		Russia: Moscow Province	[24,27]
		Russia: Udmurtia Republic	[21,22]
		Russia: Ulyanovsk Province	[19,28]
		Russia: Novosibirsk Province	Kosheleva et al. (present study)
		Japan: Hokkaido	[34]
62	<i>Oomyzus incertus</i> (Ratzeburg, 1844)	Slovakia	[25]
		Russia: Udmurtia Republic	[21,22]
		Russia: Ulyanovsk Province	[17,19,28]
63	<i>Oomyzus sokolowskii</i> (Kurdjumov, 1912)	Bulgaria	[30]
64	<i>Tetrastichus</i> sp.	Russia: Moscow Province	[11,24]
ICHNEUMONIDAE			
65	Ichneumonidae sp.	Bulgaria	[30]
66	<i>Eudelus simillimus</i> (Taschenberg, 1865)	Slovakia	[25]
BRACONIDAE			
67	Braconidae sp.	Hungary	[29]
		Russia: Moscow Province	[11,24]
68	<i>Colastes braconius</i> (Haliday, 1833)	Bulgaria	[30]
		Slovakia	[25]
		Russia: Novosibirsk Province	Kosheleva et al. (present study)
69	<i>Dolichogenidea dilecta</i> (Haliday, 1834)	Japan: Hokkaido	[9]
70	<i>Apanteles</i> sp.	Hungary	[29]
		Russia: Udmurtia Republic	[21]

No.	Species	Locality	Reference
71	<i>Pholetesor circumscriptus</i> (Nees 1834)	Russia: Ulyanovsk Province Slovakia Russia: Moscow Province Russia: Nizhny Novgorod Russia: Tatarstan Republic, Kazan Russia: Yekaterinburg Russia: Tyumen Japan: Hokkaido	[15,17] [25] [23] [23] [23] [23] [23] [9]
72	<i>Pholetesor exiguum</i> (Haliday, 1834)	Slovakia	[25]
73	<i>Pholetesor nataliae</i> Belokobylskij, sp. nov.	Russia: Primorsky Territory	Kosheleva et al. (present study)
74	<i>Pholetesor</i> sp.	Japan: Hokkaido	[9]
ENCYRTIDAE			
75	Encyrtidae sp.	Russia: Moscow Province	[23]
76	<i>Holcothorax</i> sp.	Japan: Hokkaido	[9]
PTEROMALIDAE			
77	Pteromalidae sp.	Russia: Moscow Province Russia: Ulyanovsk Province	[23] [17]
TRICHOGRAMMATIDAE			
78	Trichogrammatidae sp.	Russia: Moscow Province	[11,24]
PROCTOTRUPIDAE			
79	Proctotrupidae sp.	Russia: Moscow Province	[23]