

## Supplementary information

Wide-ranging barcoding aids discovery of one-third increase of species richness in presumably well-investigated moths

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Table S1. Diagnostic features of the putative new species recognized in this study. Characters given are short summaries of features that best distinguish them from their most similar relatives. Comprehensive diagnoses and descriptions, beyond the scope of this publication, will be published separately by L. Kaila (in prep). Number of morphologically examined specimens is indicated for each species in parentheses after the interim name.

Interim name for a putative species	Diagnostic characteristics
<i>Elachista</i> sp. 01MM (1)	Forewing: nearly unicolorous, shiny dark grey Male genitalia: large uncus, large gnathos, long and broad valva
<i>Elachista</i> sp. 02MM (2)	Forewing: narrow, shiny pale grey with costal and tornal spots opposite to each other Male genitalia: very large uncus lobes, very small spinose knob of the gnathos
<i>Elachista</i> sp. 03MM (2)	Forewing: dark grey, fascia extends to costa Male genitalia: very small gnathos
<i>Elachista</i> sp. 04MM (1)	Forewing: narrow, two white fasciae on grey ground colour Male genitalia: small uncus lobes, long saccus
<i>Elachista</i> sp. 05MM (5)	Forewing: unicolorous, creamy-coloured Male genitalia: narrowly bifurcate apex of phallus, distally rounded juxta lobes
<i>Elachista</i> sp. 06MM (12)	Forewing: uniquely narrow; pale yellow Male genitalia: broad gnathos, apex of phallus straight-cut
<i>Elachista</i> sp. 07MM (56)	Small, stout-bodied. Forewing: ground colour black; costal and tornal spots white, separate. Male genitalia: as <i>E. atricomella</i> . Female genitalia: posterior margin of sternum 7 strongly curved; spines of antrum very coarse
<i>Elachista</i> sp. 08MM (5)	Forewing: dark grey with three white markings, indistinct in male, distinct in female Male genitalia: very broad valva, elongate uncus; female: narrow ostium, short antrum
<i>Elachista</i> sp. 09MM (2)	Forewing: pale yellow, indistinct brown irroration Male genitalia: broad apex of phallus; broad digitate process. Female genitalia: entirely sclerotized papillae anales; specific shape of antrum
<i>Elachista</i> sp. 10MM (1)	Small. Forewing: ground colour pale brown; antenna: annulated with white rings Male genitalia: uncus lobes large and rounded; two cornuti of equal size
<i>Elachista</i> sp. 11MM (5)	Forewing: dark grey with three bright white markings Male genitalia: small uncus lobes, long and distally widened valva; apex of phallus not bifurcate Female genitalia: ostium deeply incised in sternum 7; antrum short
<i>Elachista</i> sp. 12MM (21)	Large. Forewing: dark grey with distinct white markings; shape elongate Male genitalia: valva narrow and long, not broadened distally; large cornutus Female genitalia: large and elongate antrum with coarse setae; inception of ductus seminalis close to antrum; base of ductus seminalis dilated
<i>Elachista</i> sp. 13MM (6)	Small. Forewing: unicolorous, mottled dark grey Male genitalia: valva not bent; small cornutus, small uncus lobes
<i>Elachista</i> sp. 14MM (15)	Large. Forewing: ground colour suffused, grey; costal and tornal spots confluent. Male genitalia: as <i>E. atricomella</i> . Female genitalia: posterior margin of sternum 7 straight
<i>Elachista</i> sp. 15MM (4)	Forewing: mottled pale grey with confluent costal and tornal spots, dark grey spot at dorsum Male genitalia: uncus lobes elongate; caecum absent
<i>Elachista</i> sp. 16MM (1)	Forewing: mottled dark grey with irregularly shaped pale median area Male genitalia: narrow phallus with one cornutus; uncus lobes proximate

Table S2. Presently named Eurosiberian species of *bifasciella* group (47 spp.). The area considered covers Palearctic region excluding Japan and Russia: Sakhalin and the Primorsk region. Himalaya is also excluded. From North Africa, also a part of the Palearctic region, no species of *E. bifasciella* group has been reported.

*Elachista adelpha* Kaila & Jalava, 1994  
*Elachista albicapilla* Höfner, 1918  
*Elachista albifrontella* (Hübner, (1817)  
*Elachista alpinella* Stainton, 1854  
*Elachista anserinella* Zeller, 1839  
*Elachista anserinelloides* Nel, 2003  
*Elachista apicipunctella* Stainton, 1849  
*Elachista argentifasciella* Höfner, 1898  
*Elachista atricomella* Stainton, 1849  
*Elachista baikalica* Kaila, 1992  
*Elachista bicingulella* Sruoga, 1992  
*Elachista bifasciella* Treitschke, 1833  
*Elachista canapennella* (Hübner, 1813)  
*Elachista compsa* Traugott-Olsen, 1974  
*Elachista deriventa* Kaila & Mutanen, 2008  
*Elachista diderichsiella* Hering, 1889  
*Elachista dimicatella* Rebel, 1903  
*Elachista elegans* Frey, 1859  
*Elachista eskoi* Kyrki & Karvonen, 1985  
*Elachista excelsicola* Braun, 1948  
*Elachista fuscofrontella* Sruoga, 1990  
*Elachista grandiferella* Sruoga, 1992  
*Elachista griseella* (Duponchel, 1843)  
*Elachista gruenewaldi* Parenti, 2002  
*Elachista herrichii* Frey, 1859  
*Elachista humilis* Zeller, 1850  
*Elachista irenae* Buszko, 1989  
*Elachista jaskai* Kaila, 1998  
*Elachista kilmunella* Stainton, 1849  
*Elachista krogeri* Svensson, 1976  
*Elachista lastrella* Chrétien, 1896  
*Elachista leifi* Kaila & Kerppola, 1992  
*Elachista luticomella* Zeller, 1839  
*Elachista maculicerusella* (Bruand, 1859)  
*Elachista maculosella* Chrétien, 1896  
*Elachista nielswolffi* Svensson, 1976  
*Elachista nobilella* Zeller, 1839  
*Elachista orstadii* Palm, 1943  
*Elachista poae* Stainton, 1855

*Elachista pomerana* Frey, 1870  
*Elachista rufocinerea* (Haworth, 1828)  
*Elachista stenopterella* Rebel, 1932  
*Elachista subnigrella* Douglas, 1853  
*Elachista sulcsiella* Savenkov, 2013  
*Elachista talgarella* Kaila, 1992  
*Elachista tanaella* Aarvik & Berggren, 2004  
*Elachista vonschantzi* Svensson, 1976  
*Elachista wieseriella* Huemer, 2000  
*Elachista zernyi* Hartig, 1941

Table S3. Specimen information.

Sample ID	Species	Seq. Length	Sex	Collectors	Collection Date	Country	Locality	Lat	Lon	Elev	Notes
MM17678	<i>Elachista abiskoella</i>	657[1n]		Erkki Laasonen, Leena Laasonen	01-Jul-2001	Finland	Laponia inarenensis, Inari	68,39	28,22		
MM18594	<i>Elachista abiskoella</i>	658		Bengt A. Bengtsson	02-Jul-2004	Sweden	To, Abisko, Oestra	68,30	18,70		
MM19891	<i>Elachista abiskoella</i>	658	M	Erkki Laasonen, Leena Laasonen		Finland	Laponia inarenensis, Inari	68,47	28,28		
MM20832	<i>Elachista albicapilla</i>	658	M	P. Huemer	06-Aug-1996	France	Alpes-Maritimes, Marguareis W-Hang, Navela	44,16	7,66	2150	
MM02662	<i>Elachista albifrontella</i>	657[1n]		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM06161	<i>Elachista albifrontella</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06514	<i>Elachista albifrontella</i>	658	M	Marko Mutanen, Nestori Mutanen	03-Jul-2007	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,05	24,88		
MM06598	<i>Elachista albifrontella</i>	658	F	Tomi Mutanen, Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	6.-7.7.2007	Finland	Karelia borealis, Ilomantsi	62,51	30,88		
MM12029	<i>Elachista albifrontella</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Nylandia, Hanko	59,84	23,24		
MM14235	<i>Elachista albifrontella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	29-Jun-2009	Finland	Aland Islands, Eckerö	60,24	19,59		
MM14309	<i>Elachista albifrontella</i>	658		family Marko Mutanen	30-Jun-2009	Finland	Aland Islands, Finstroem	60,23	19,83		
MM20887	<i>Elachista albifrontella</i>	658	M	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450	
MM20891	<i>Elachista albifrontella</i>	658	M	T. Nupponen, K. Nupponen	23-Jun-2000	Russia	Altai Krai, Altai Mts., Katun valley, 10 km SE Ust-Sema vill.	51,58	85,92	700	
MM03989	<i>Elachista alpinella</i>	639		Marko Mutanen	14-Jul-2006	Finland	Ostrobotnia borealis pars australis, Kiiminki	65,07	25,73		
MM06929	<i>Elachista alpinella</i>	658	M	Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	26-Jul-2007	Finland	Ostrobotnia borealis pars australis, Kiiminki	65,07	25,73		
MM10427	<i>Elachista alpinella</i>	658		Marko Mutanen	15-Jul-2004	Finland	Ostrobotnia borealis pars australis, Kiiminki	65,07	25,73		
MM12473	<i>Elachista alpinella</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80		
MM16180	<i>Elachista alpinella</i>	658	M	Jalava, Kullberg, Koponen	08-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17		L.Kaila prep. 1373
MM21196	<i>Elachista alpinella</i>	658		Marko Mutanen	10-Jul-2011	Finland	Regio kuusamoensis, Kuusamo	66,38	29,43		
MM18556	<i>Elachista anserinella</i>	658		Ingvar Svensson	06-Jun-2006	Sweden	Gotland, Loista	57,31	18,36		
MM19870	<i>Elachista anserinella</i>	407		N. Savenkov, I. Savenkov	09-Jun-2006	Sweden	Gotland, Silte	57,21	18,23		

MM21442	<i>Elachista anserinella</i>	658	M	N. Savenkov	17-May-2010	Bulgaria	Pirin, Sandanski Ploski	41,64	23,26	250	
MM02659	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM02660	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM06170	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06173	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06225	<i>Elachista apicipunctella</i>	658		Marko Mutanen	19-Jun-2007	Finland	Karelia australis, Joutseno	61,06	28,72		
MM06271	<i>Elachista apicipunctella</i>	658	M	Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	22.-23.6.2007	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73		
MM06272	<i>Elachista apicipunctella</i>	658	F	Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	22.-23.6.2007	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73		
MM08382	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Panu Vaelimaeki	17.-18.6.2005	Finland	Tavastia australis, Loppi	60,65	24,08		
MM09050	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Panu Vaelimaeki	2006	Finland	Karelia ladogensis, Simpele	61,42	29,32		
MM14139	<i>Elachista apicipunctella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen, Rosella Mutanen	19-Jun-2009	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73		
MM14208	<i>Elachista apicipunctella</i>	658		Marko Mutanen	24-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46		
MM14270	<i>Elachista apicipunctella</i>	658		family Marko Mutanen	30-Jun-2009	Finland	Aland Islands, Geta	60,33	19,91		
MM20930	<i>Elachista apicipunctella</i>	658	M	K. Nupponen	17-Jun-2002	Russia	Irkutsk, Irkutsk prov., Sludjanka village 2 km SE, Lake Baikal shope slope	51,67	103,7 2	500	
MM20935	<i>Elachista apicipunctella</i>	658	M	K. Nupponen	17-Jun-2002	Russia	Irkutsk, Irkutsk prov., Sludjanka village 2 km SE, Lake Baikal shope slope	51,67	103,7 2	500	
MM16223	<i>Elachista atricomella</i>	658	M	J. Tabell	ex larva em. 11-Jun-2008	Estonia	Vasalemma	59,24	24,29		Dactylis glomerata 19.V.2008
MM17256	<i>Elachista atricomella</i>	591		Aalto, Raesaenen	06-Jun-2006	Sweden	Oland, Graeborg	56,66	16,59		
MM17257	<i>Elachista atricomella</i>	658		Aalto, Raesaenen	06-Jun-2006	Sweden	Oland, Graeborg	56,66	16,59		
MM18546	<i>Elachista atricomella</i>	658		Ingvar Svensson	23-Jul-2008	Sweden	Gotland, Totta Blaehaell	57,53	18,11		
MM18547	<i>Elachista atricomella</i>	658		Ingvar Svensson	19-Jul-1999	Sweden	Gotland, Norrlanda	57,50	18,60		
MM19862	<i>Elachista atricomella</i>	658		Ingvar Svensson	11-Jul-2008	Sweden	Uppland, Haeveroe, Vaesternaes	59,70	18,70		
MM20022	<i>Elachista atricomella</i>	658	M	J. Tabell	08-Jun-2008	Estonia	Saaremaa, Vasalemma	59,24	24,28		
MM20023	<i>Elachista atricomella</i>	658	F	J. Tabell	15-Jun-2008	Estonia	Saaremaa, Vasalemma	59,24	24,28		
MM20918	<i>Elachista atricomella</i>	658	M	J. Junnilainen	09-May-2000	Estonia	Tallinn	59,40	24,70		
MM20937	<i>Elachista atricomella</i>	658	M	J. Junnilainen	21-Jun-2001	Bulgaria	Pirin, Popovi Livadi	41,53	23,61	1300	

MM20938	<i>Elachista atricomella</i>	658	M	J. Junnilainen	21-Jun-2001	Bulgaria	Pirin, Popovi Livadi	41,53	23,61	1300	
MM20940	<i>Elachista atricomella</i>	658	M	J-P. Kaitila	31-May-2002	Bulgaria	Kresna	41,72	23,16		
MM20942	<i>Elachista atricomella</i>	658	M	J-P. Kaitila	18-May-2003	Greece	Leptokaria 15 km W, Olympos	40,10	22,30	750	
MM20987	<i>Elachista atricomella</i>	658	M	J. Junnilainen	01-Jun-2008	Croatia	Platak	45,41	14,56	1000	
MM20988	<i>Elachista atricomella</i>	658	M	J. Junnilainen	01-Jun-2008	Croatia	Platak	45,41	14,56	1000	
MM20989	<i>Elachista atricomella</i>	658	M	J. Junnilainen	01-Jun-2008	Croatia	Platak	45,41	14,56	1000	
MM21386	<i>Elachista atricomella</i>	658	M	I. Richter	30-May-2003	Slovakia	Vysehrad	48,80	18,60		
MM21387	<i>Elachista atricomella</i>	658	M	Z. Tokar	03-Jun-2005	Slovenia	Pterijnski kras	45,57	13,91		
MM21444	<i>Elachista atricomella</i>	658	M	O. Karsholt	17-May-1994	Greece	Macedonia, Olympos mts.	40,05	22,25		
MM21445	<i>Elachista atricomella</i>	532	M	O. Karsholt	21-May-1994	Greece	Macedonia, Olympos mts.	40,05	22,25		
MM21447	<i>Elachista atricomella</i>	658	M	O. Karsholt	28-Aug-1991	Austria	Tirol, Kals	47,00	12,64	1100	
MM17656	<i>Elachista baikalica</i>	658		K. Nupponen, J. Kaitila, J. Junnilainen, M. Ahola	28-Jun-1996	Russia	Chelyabinsk, South Ural, Miass town, Ilmen State Reserve	55,01	60,10	350	
MM16162	<i>Elachista bifasciella</i>	658	M	J. Tabell	16-Jun-1905	Sweden	Skane, Roessjoeholm	56,20	13,20		L. Kaila prep. 1788
MM16163	<i>Elachista bifasciella</i>	627	F	J. Tabell	16-Jun-1905	Sweden	Skane, Roessjoeholm	56,20	13,20		
MM16164	<i>Elachista bifasciella</i>	658	F	J. Tabell	16-Jun-1905	Sweden	Skane, Roessjoeholm	56,20	13,20		
MM16165	<i>Elachista bifasciella</i>	658	F	J. Tabell	16-Jun-1905	Sweden	Skane, Roessjoeholm	56,20	13,20		
MM16167	<i>Elachista bifasciella</i>	658	M	P. Huemer	24-Jul-1995	Italy	South Tyrol, Ritten, Obergruenwald	46,55	11,42		
MM18548	<i>Elachista bifasciella</i>	658		Ingvar Svensson	ex larva 16.-18.5.2009	Sweden	Sk, Everoed	55,90	14,08		
MM18549	<i>Elachista bifasciella</i>	658		Ingvar Svensson	ex larva 16.-18.5.2009	Sweden	Sk, Everoed	55,90	14,08		
MM21664	<i>Elachista bifasciella</i>	658	F	L. Kaila, J. Tabell	26-May-2011	Switzerland	Linthal 3 km SW	46,88	8,96		
MM21665	<i>Elachista bifasciella</i>	658	F	L. Kaila, J. Tabell	24-May-2011	Switzerland	Linthal 3 km SW	46,88	8,96		
MM02669	<i>Elachista canapennella</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM02670	<i>Elachista canapennella</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM05360	<i>Elachista canapennella</i>	658		Marko Mutanen	-24.5.2006	Finland	Regio Aboensis, Turku	60,44	22,20		
MM05361	<i>Elachista canapennella</i>	637		Marko Mutanen	-24.5.2006	Finland	Regio Aboensis, Turku	60,44	22,20		
MM06187	<i>Elachista canapennella</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06302	<i>Elachista canapennella</i>	658	M	Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	27-Jun-2007	Finland	Laponia kemensis pars orientalis, Sodankylä	68,22	27,22		
MM06523	<i>Elachista canapennella</i>	658	F	Marko Mutanen, Nestori Mutanen	03-Jul-2007	Finland	Ostrobothnia borealis pars australis, Hailuoto	65,05	24,88		
MM06565	<i>Elachista canapennella</i>	658	M	Marko Mutanen, Anttoni Mutanen, Nestori Mutanen	03-Jul-2007	Finland	Ostrobothnia borealis pars australis, Hailuoto	65,00	24,69		

MM09868	<i>Elachista canapennella</i>	658		Marko Mutanen	17-Jun-2008	Finland	Karelia australis, Joutseno	61,06	28,72		
MM13896	<i>Elachista canapennella</i>	658		Marko Mutanen	18-May-2009	Finland	Regio Aboensis, Turku	60,33	22,24		
MM13967	<i>Elachista canapennella</i>	658		Marko Mutanen	05-Jun-2009	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	23,81		
MM14269	<i>Elachista canapennella</i>	658		family Marko Mutanen	30-Jun-2009	Finland	Aland Islands, Geta	60,33	19,91		
MM14445	<i>Elachista canapennella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	09-Jul-2009	Finland	Ostrobothnia kajanensis, Ristijärvi	64,43	28,18		
MM14542	<i>Elachista canapennella</i>	658		Marko Mutanen	10-Jul-2009	Finland	Ostrobothnia borealis pars australis, Hailuoto	64,94	24,72		
MM16150	<i>Elachista canapennella</i>	658	M	J. Jalava, J. Kullberg	02-Jun-1995	Russia	Krasnoyarsk Krai, Krasnojarsk kr., Tanzybei	53,13	92,88		L. Kaila prep. 1838
MM16151	<i>Elachista canapennella</i>	658	M	J. Jalava, J. Kullberg	03-Jun-1995	Russia	Krasnoyarsk Krai, Krasnojarsk kr., Tanzybei	53,13	92,88		L. Kaila prep. 1839
MM16153	<i>Elachista canapennella</i>	658	M	J. Jalava, J. Kullberg	05-Jun-1995	Russia	Krasnoyarsk Krai, Krasnojarsk kr., Tanzybei	53,13	92,88		
MM18826	<i>Elachista canapennella</i>	658		Marko Mutanen	28.-31.7.2003	Finland	Nylandia, Kirkkonummi	59,93	24,32		
MM20905	<i>Elachista canapennella</i>	658	M	K. Nupponen	11-Jul-2003	Russia	Sverdlovskaya, Sverdlovsk district, North Ural, near Kytlym village, Kosvinskij Kamen	59,52	59,11	600	L. Kaila Prep. 4079
MM21092	<i>Elachista canapennella</i>	658		Tomi Mutanen	7.-8.8.2011	Finland	Regio aboensis, Salo	60,34	23,11		
MM10317	<i>Elachista compsa</i>	658		Tomi Mutanen	02-Jul-2008	Finland	Regio kuusamoensis, Kuusamo	66,31	29,45		
MM10423	<i>Elachista compsa</i>	658		Marko Mutanen	27-Jun-2005	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73		
MM10424	<i>Elachista compsa</i>	658		Marko Mutanen	27-Jun-2005	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73		
MM12148	<i>Elachista compsa</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Nylandia, Hanko	59,84	23,24		
MM12149	<i>Elachista compsa</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Nylandia, Hanko	59,84	23,24		
MM18827	<i>Elachista compsa</i>	658		Marko Mutanen	17-Jun-2008	Finland	Savonia australis, Joutseno	61,06	28,72		
MM20043	<i>Elachista compsa</i>	658	M	J. Tabell	larva 2009, em. 2010	Finland	Tavastia australis, Hartola	61,59	25,94		
MM04316	<i>Elachista deriventa</i>	621		Marko Mutanen, Panu Vaelimaeki	18-Jun-2005	Finland	Tavastia australis, Loppi	60,67	24,22		
MM14008	<i>Elachista deriventa</i>	658		Marko Mutanen	13.-14.6.2009	Finland	Karelia borealis, Tuupovaara	62,38	30,91		
MM14009	<i>Elachista deriventa</i>	658		Marko Mutanen	13.-14.6.2009	Finland	Karelia borealis, Tuupovaara	62,38	30,91		
MM14010	<i>Elachista deriventa</i>	658		Marko Mutanen	13.-14.6.2009	Finland	Karelia borealis, Tuupovaara	62,38	30,91		
MM14011	<i>Elachista deriventa</i>	658		Marko Mutanen	13.-14.6.2009	Finland	Karelia borealis, Tuupovaara	62,38	30,91		
MM14012	<i>Elachista deriventa</i>	658		Marko Mutanen	13.-14.6.2009	Finland	Karelia borealis, Tuupovaara	62,38	30,91		



MM15197	Elachista deriventa	658		Ali Karhu	11-Sep-2010	Finland	Karelia borealis, Liperi	62,49	29,13	larca on Calamagrostis sp., no voucher GP 4652 JT
MM16310	Elachista deriventa	658	M	J. Tabell	17-Jun-2008	Finland	Tavastia australis, Hartola	61,43	25,91	
MM05677	Elachista diderichsiella	658	M	Petri Hirvonen, Panu Vaelimaeki	03-Jul-2007	Finland	Lapland, Lapponia inarensis, Utsjoki	69,40	25,83	
MM05678	Elachista diderichsiella	658	F	Petri Hirvonen, Panu Vaelimaeki	03-Jul-2007	Finland	Lapland, Lapponia inarensis, Utsjoki	69,52	25,87	
MM06224	Elachista diderichsiella	658		Marko Mutanen	19-Jun-2007	Finland	Karelia australis, Joutseno	61,06	28,72	
MM08330	Elachista diderichsiella	658		Marko Mutanen	5.-12.7.2006	Finland	Ostrobothnia borealis pars borealis, Tornio	65,90	24,45	
MM09219	Elachista diderichsiella	658		Petri Hirvonen, Marko Mutanen	May 2009	Finland	Ostrobothnia borealis pars borealis, Tornio	65,79	24,23	
MM09240	Elachista diderichsiella	658	M	Petri Hirvonen, Marko Mutanen	ex larva 2009	Finland	Ostrobothnia borealis pars borealis, Tornio	65,79	24,23	
MM09241	Elachista diderichsiella	658	M	Petri Hirvonen, Marko Mutanen	ex larva 2009	Finland	Ostrobothnia borealis pars borealis, Tornio	65,79	24,23	
MM15491	Elachista diderichsiella	657[1n]	M	Jalava, Kullberg, Koponen	12-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 1372
MM16191	Elachista diderichsiella	658	M	A. Albrecht	04-Jun-1990	Estonia	Paernu r., Nigula, Salupeaksi	58,30	24,40	L. Kaila prep. 2711
MM16192	Elachista diderichsiella	658	M	A. Albrecht	04-Jun-1990	Estonia	Paernu r., Nigula, Salupeaksi	58,30	24,40	L. Kaila prep. 451
MM16193	Elachista diderichsiella	658	M	K. Mikkola	13-Jul-2003	Norway	Fn, Berlevaeg, Guldofjord	70,80	29,00	L. Kaila prep. 3730
MM16194	Elachista diderichsiella	658	M	K. Mikkola	13-Jul-2003	Norway	Fn, Berlevaeg, Guldofjord	70,80	29,00	
MM16195	Elachista diderichsiella	658	M	K. Mikkola	13-Jul-2003	Norway	Fn, Berlevaeg, Guldofjord	70,80	29,00	
MM16197	Elachista diderichsiella	658	M	Jalava, Kullberg, Koponen	08-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 1958
MM16198	Elachista diderichsiella	658	M	Jalava, Kullberg, Koponen	09-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 1370
MM16199	Elachista diderichsiella	658	M	Jalava, Kullberg, Koponen	10-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 1957
MM16200	Elachista diderichsiella	633	M	Jalava, Kullberg, Koponen	11-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 1956
MM16315	Elachista diderichsiella	658	F	R. Siloaho	01-Jul-2008	Finland	Lapland, Lapponia inarensis, Utsjoki	69,95	27,29	
MM16316	Elachista diderichsiella	658	F	J. Tabell	ex larva 31.5.2007	Finland	Karelia australis, Joutseno	61,07	28,70	Milium effusum 11.V.2007
MM17965	Elachista diderichsiella	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Lapponia inarensis, Utsjoki	69,43	26,01	
MM17966	Elachista diderichsiella	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Lapponia inarensis, Utsjoki	69,43	26,01	
MM17967	Elachista diderichsiella	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Lapponia inarensis, Utsjoki	69,43	26,01	

MM17968	<i>Elachista diderichiella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Laponia inarenensis, Utsjoki	69,43	26,01	
MM17969	<i>Elachista diderichiella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Laponia inarenensis, Utsjoki	69,43	26,01	
MM17970	<i>Elachista diderichiella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	11-Jul-2010	Finland	Laponia inarenensis, Utsjoki	69,43	26,01	
MM20881	<i>Elachista diderichiella</i>	658	F	T. Nupponen, K. Nupponen	08-Jul-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450
MM20890	<i>Elachista diderichiella</i>	657[1n]	M	T. Nupponen, K. Nupponen	05-Jul-2000	Russia	Altai Krai, Altai Mts., Chuja valley 5 km SE Aktash village	50,25	87,67	1500
MM20903	<i>Elachista diderichiella</i>	658	F	K. Nupponen	11-Jul-2003	Russia	Sverdlovskaya, Sverdlovsk district, North Ural, near Kytlym village, Kosvinskij Kamen	59,52	59,11	600
MM20925	<i>Elachista diderichiella</i>	658	F	Timo Nupponen, Kari Nupponen	14-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Labytnangi	66,66	65,66	50
MM20936	<i>Elachista diderichiella</i>	658	M	K. Nupponen	17-Jun-2002	Russia	Irkutsk, Irkutsk prov., Sludjanka village 2 km SE, Lake Baikal shope slope	51,67	103,72	500
MM20976	<i>Elachista diderichiella</i>	658	M	Timo Nupponen, Kari Nupponen	10-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Krasnyi Kamen	66,93	65,66	200
MM21424	<i>Elachista diderichiella</i>	658	M	G. Stahls	11-Jun-1990	Russia	Altai Krai, Gorno-Altai, Artybash	51,70	87,20	
MM16159	<i>Elachista dimicatella</i>	425	M	Kullberg, Lievonen	3.-5.6.2003	Ukraine	Ivano-Frankovsk, Burkyt, Verchovna distr.	47,90	24,73	
MM16160	<i>Elachista dimicatella</i>	658	M	Kullberg, Lievonen	24.-26.6.2003	Ukraine	Ivano-Frankovsk, Mt. Chivchen, Verchovna distr.	47,86	24,71	L. Kaila prep. 4827
MM16161	<i>Elachista dimicatella</i>	658	M	Kullberg, Lievonen	24.-26.6.2003	Ukraine	Ivano-Frankovsk, Mt. Chivchen, Verchovna distr.	47,86	24,71	L. Kaila prep. 4853
MM10509	<i>Elachista elegans</i>	658	M	Esko Saarela	ex larva 2009	Finland	Tavastia australis, Tampere	61,54	23,80	mining early, dark forest
MM10510	<i>Elachista elegans</i>	658	F	Esko Saarela		Finland	Tavastia australis, Tampere	61,54	23,80	ex larva 2009, mining early, dark forest
MM10511	<i>Elachista elegans</i>	658	F	Esko Saarela	ex larva 2009	Finland	Tavastia australis, Tampere	61,54	23,80	mining early, dark forest
MM10512	<i>Elachista elegans</i>	658	M	Esko Saarela	14-Jul-2009	Finland	Tavastia australis, Pälkäne	61,31	26,07	late flight time, light forest
MM10514	<i>Elachista elegans</i>	658	M	Leo Sippola	15-Jul-2009	Finland	Tavastia australis, Pälkäne	61,31	26,07	late flight time, light forest
MM10515	<i>Elachista elegans</i>	658	M	Leo Sippola	18-Jul-2009	Finland	Tavastia australis, Pälkäne	61,31	26,07	late flight time, light forest

MM21158	<i>Elachista elegans</i>	658		Marko Mutanen, Anttoni Mutanen, Nestori Mutanen	29.-30.7.2011	Finland	Savonia australis, Imatra	61,16	28,75	
MM23191	<i>Elachista elegans</i>	658		Marko Mutanen	27-Jul-2005	Finland	Regio aboensis, Dragsfjärd, Taalintehdas	60,02	22,43	
MM08409	<i>Elachista eskoi</i>	658		Marko Mutanen	2003	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM08410	<i>Elachista eskoi</i>	658		Marko Mutanen	2003	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM10428	<i>Elachista eskoi</i>	658		Marko Mutanen	30-Jun-2005	Finland	Ostrobothnia borealis pars australis, Oulu	64,98	25,31	
MM10429	<i>Elachista eskoi</i>	658		Marko Mutanen	30-Jun-2005	Finland	Ostrobothnia borealis pars australis, Oulu	64,98	25,31	
MM10430	<i>Elachista eskoi</i>	658		Marko Mutanen	3.-4.7.2003	Finland	Regio kuusamoensis, Kuusamo	66,32	29,23	
MM14159	<i>Elachista eskoi</i>	658		Marko Mutanen	23-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,99	25,41	
MM14160	<i>Elachista eskoi</i>	658		Marko Mutanen	23-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,99	25,41	
MM20025	<i>Elachista eskoi</i>	658	M	J. Tabell	16-Jun-2007	Finland	Kymenlaakso, Karelia australis, Virolahti	60,52	27,70	
MM20026	<i>Elachista eskoi</i>	658	M	J. Tabell	17-Jun-2007	Finland	Kymenlaakso, Karelia australis, Virolahti	60,52	27,70	
MM20027	<i>Elachista eskoi</i>	658	M	J. Tabell	17-Jun-2007	Finland	Kymenlaakso, Karelia australis, Virolahti	60,52	27,70	
MM21208	<i>Elachista eskoi</i>	658		Matti Ahola	23-Jun-2009	Finland	Ostrobothnia media, Reisjärvi	63,59	23,02	
MM21216	<i>Elachista eskoi</i>	658	M	Marko Mutanen, Anttoni Mutanen, Nestori Mutanen	23-Jun-2011	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,12	25,83	
MM21253	<i>Elachista eskoi</i>	658		Marko Mutanen	30-Jun-2005	Finland	Ostrobothnia borealis pars australis, Oulu	65,02	25,41	
MM00685	<i>Elachista excelsicola</i>	612		Tomi Mutanen	28-Jun-2006	Finland	Obb, Ranua	65,88	26,34	
MM03441	<i>Elachista excelsicola</i>	658		Marko Mutanen	6.-8.7.2006	Finland	Lapland, Lapponia enontekiensis, Enontekiö	69,00	20,74	
MM03983	<i>Elachista excelsicola</i>	670		Marko Mutanen	29-Jun-2006	Finland	Oba, Kiiminki	65,07	25,73	gen.studied, identification not confirmed
MM04313	<i>Elachista excelsicola</i>	612		Petri Hirvonen	02-Jul-2006	Finland	Le, Enontekiö	69,00	20,74	
MM05881	<i>Elachista excelsicola</i>	658	F	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Lapponia inarensis, Inari	68,43	27,39	
MM05884	<i>Elachista excelsicola</i>	612	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2007	Finland	Li, Inari	68,72	27,69	
MM05885	<i>Elachista excelsicola</i>	658	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2007	Finland	Lapponia inarensis, Inari	68,72	27,69	
MM05886	<i>Elachista excelsicola</i>	658	F	Erkki M. Laasonen, Leena Laasonen	03-Jul-2007	Finland	Lapponia inarensis, Inari	68,72	27,69	
MM05936	<i>Elachista excelsicola</i>	658	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarensis, Inari	68,44	27,39	
MM05938	<i>Elachista excelsicola</i>	658	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarensis, Inari	68,44	27,39	

MM08590	<i>Elachista excelsicola</i>	658	M	Marko Mutanen	23-Jun-2008	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM10426	<i>Elachista excelsicola</i>	658		Marko Mutanen	21-Jun-2005	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM15562	<i>Elachista excelsicola</i>	658	M	Marko Mutanen	08-Jul-1997	Finland	Regio kuusamoensis, Kuusamo	66,32	29,23	
MM15564	<i>Elachista excelsicola</i>	571	M	Tomi Mutanen	21-Jun-1995	Finland	Ostrobothnia borealis pars borealis, Tornio	65,86	24,37	
MM16219	<i>Elachista excelsicola</i>	658	M	R. Siloaho	30-Jun-2009	Finland	Lapponia inarenensis, Saariselkä	68,39	27,24	GP 4458 JT
MM17655	<i>Elachista excelsicola</i>	658		Jari Kaitila	20-Jul-2000	Finland	Lapponia inarenensis, Utsjoki	69,74	27,00	
MM17971	<i>Elachista excelsicola</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	year 2010	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,72	
MM18589	<i>Elachista excelsicola</i>	658		Bengt A. Bengtsson	03-Jul-2004	Sweden	To, Abisko, Nissunsnakk	68,25	18,90	
MM19855	<i>Elachista excelsicola</i>	658		T. Mutanen	03-Jul-1995	Finland	Lapland, Lapponia kemensis pars orientalis, Pelkosenniemi	67,14	27,69	
MM19893	<i>Elachista excelsicola</i>	658	F	Erkki Laasonen, Leena Laasonen		Finland	Lapponia inarenensis, Inari	69,80	26,29	
MM20907	<i>Elachista excelsicola</i>	658	M	Jalava, Tammaru	10-Jul-1997	Russia	Magadan, Magadanskaya Oblast, nr. Gulu village, biological station, Kontakt	61,85	147,67	850
MM20922	<i>Elachista excelsicola</i>	658	M	Timo Nupponen, Kari Nupponen	12-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Krasnyi Kamen	66,93	65,66	200
MM20923	<i>Elachista excelsicola</i>	658	M	Timo Nupponen, Kari Nupponen	12-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Krasnyi Kamen	66,93	65,66	200
MM20924	<i>Elachista excelsicola</i>	658	M	Timo Nupponen, Kari Nupponen	10-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Krasnyi Kamen	66,93	65,66	200
MM21183	<i>Elachista excelsicola</i>	658		Marko Mutanen, Anttoni Mutanen, Nestori Mutanen	28-Jun-2011	Finland	Ostrobothnia kajanensis, Kuhmo	63,91	29,84	
MM21202	<i>Elachista excelsicola</i>	658		Marko Mutanen	27-Jun-2011	Finland	Regio kuusamoensis, Kuusamo	66,36	29,60	
MM22226	<i>Elachista excelsicola</i>	633	M	Jalava, Kullberg, Koponen	02-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,55	65,10	400
MM22607	<i>Elachista excelsicola</i>	658	M	J.-P. Kaitila	12-Jul-2008	Finland	Lapponia enontekiensis, Enontekiö, Toshkaljoki	69,16	21,58	
MM22608	<i>Elachista excelsicola</i>	658	M	J.-P. Kaitila	11-Jul-2008	Finland	Lapponia enontekiensis, Enontekiö, Toshkaljoki	69,16	21,58	
MM16175	<i>Elachista fuscofrontella</i>	658	M	A. Albrecht	07-Jun-1990	Estonia	Tartu, Jaervselja, Saki	58,31	27,29	
MM21451	<i>Elachista fuscofrontella</i>	658	M	K. Nupponen	09-May-2005	Russia	Orenburg, South Ural, Pokrovka village 20 km S, Schibendy valley	50,68	54,45	200
MM20939	<i>Elachista griseella</i>	658	M	J-P. Kaitila	27-Apr-2002	Cyprus	Kypros, Pano Panagia	34,91	32,63	L. Kaila Prep. 3991

MM16138	<i>Elachista herrichii</i>	658	M	K. Nupponen	20-May-2004	Russia	Orenburg, South Ural, Guberlinsky Mts., Orsk 40 km W, near Guberlja village	51,25	58,08	340	L. Kaila prep. 4846
MM16139	<i>Elachista herrichii</i>	658	M	K. Nupponen	20-May-2004	Russia	Orenburg, South Ural, Guberlinsky Mts., Orsk 40 km W, near Guberlja village	51,25	58,08	340	L. Kaila prep. 4394
MM16141	<i>Elachista herrichii</i>	658	M	Timo Nupponen, Kari Nupponen	28-May-1998	Russia	Chelyabinsk, South Ural, Mednogorsk 20 km S, near Kidriasovo village	51,21	57,61	350	L. Kaila prep. 3334
MM16142	<i>Elachista herrichii</i>	658	M	K. Nupponen	11-May-2005	Russia	Orenburg, South Ural, Pokrovka village 20 km S, Schibendy valley	50,68	54,45	200	L. Kaila prep. 4838
MM16143	<i>Elachista herrichii</i>	658	M	Yu. Budashkin	24-Jul-1996	Ukraine	Krym, Karadagh	44,90	35,20		
MM00863	<i>Elachista humilis</i>	658		Marko Mutanen	20.-21.6.2006	Finland	Aland Islands, Kökar	59,94	20,90		
MM02663	<i>Elachista humilis</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80		
MM06168	<i>Elachista humilis</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06171	<i>Elachista humilis</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64		
MM06222	<i>Elachista humilis</i>	658		Marko Mutanen	19-Jun-2007	Finland	Karelia australis, Joutseno	61,06	28,72		
MM08064	<i>Elachista humilis</i>	658		Marko Mutanen, Panu Vaelimaeki	3.-17.7.2006	Finland	Lapponia kemensis pars occidentalis, Kolari	67,28	23,75		
MM08065	<i>Elachista humilis</i>	658		Marko Mutanen, Panu Vaelimaeki	3.-17.7.2006	Finland	Lapponia kemensis pars occidentalis, Kolari	67,28	23,75		
MM08660	<i>Elachista humilis</i>	658		Marko Mutanen	19-Jul-2008	Finland	Aland Islands, Lemland	60,01	20,13		
MM09744	<i>Elachista humilis</i>	649		Marko Mutanen, Meelika Mutanen, Atsalea Mutanen, Sylvia Mutanen	22-Jul-2008	Finland	Aland Islands, Eckerö	60,28	19,58		
MM09867	<i>Elachista humilis</i>	658		Marko Mutanen	17-Jun-2008	Finland	Karelia australis, Joutseno	61,06	28,72		
MM14237	<i>Elachista humilis</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	29-Jun-2009	Finland	Aland Islands, Eckerö	60,24	19,59		
MM14238	<i>Elachista humilis</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	29-Jun-2009	Finland	Aland Islands, Eckerö	60,24	19,59		
MM14460	<i>Elachista humilis</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	09-Jul-2009	Finland	Ostrobothnia kajanensis, Ristijärvi	64,39	28,20		
MM15298	<i>Elachista humilis</i>	658	M	A. Albrecht	31-May-1990	Estonia	Saaremaa, Loopollu	58,40	41416,00		
MM15560	<i>Elachista humilis</i>	642	F	Marko Mutanen	11.-12.7.2000	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,70	27,65		
MM16117	<i>Elachista humilis</i>	658	M	E. Laasonen	13.-15.7.2002	Sweden	Skane, Lund	55,70	13,10		
MM16118	<i>Elachista humilis</i>	619	M	E. Laasonen	07-Jul-2002	Sweden	Skane, Lund	55,70	13,10		

MM17392	<i>Elachista humilis</i>	658		Juhani Itaemies	22-Jun-2003	Finland	Satakunda, Eurajoki	61,19	21,42	<i>Deschampsia caespitosa</i>
MM17942	<i>Elachista humilis</i>	658		Sami Haapala	22-Jun-2009	Finland	Savonia australis, Lappeenranta	61,06	28,72	
MM17943	<i>Elachista humilis</i>	658		Sami Haapala	23-Jun-2009	Finland	Karelia lagodensis, Parikkala	61,55	29,57	
MM20239	<i>Elachista humilis</i>	658	M	J. Tabell	17-Jul-2011	Austria	Niederlpi	47,68	15,37	
MM20921	<i>Elachista humilis</i>	658	M	K. Nupponen, J. Junnilainen	23-Jul-1997	Poland	Tatra mnts., Bobrowiec, Mnichy Chocholowskie	49,24	19,79	1450
MM20928	<i>Elachista humilis</i>	655[3n]	M	K. Nupponen, J. Junnilainen	23-Jul-1997	Poland	Tatra mnts., Bobrowiec, Mnichy Chocholowskie	49,24	19,79	1450
MM22597	<i>Elachista humilis</i>	658	M	J. Kullberg., T. Lievonen	25-Aug-2003	Ukraine	Ivano-Frankovsk, Verkhovyna, Mt. Chiven	47,86	24,71	1675
MM16147	<i>Elachista irenae</i>	658	M	K. Nupponen, J. Junnilainen	28-Jul-1997	Poland	Tatra Mts, Komiński Wierch	49,24	19,83	
MM16149	<i>Elachista irenae</i>	658	M	K. Nupponen, J. Junnilainen	30-Jul-1997	Poland	Tatra Mts, Komiński Wierch	49,24	19,83	
MM00687	<i>Elachista kilmunella</i>	658		Tomi Mutanen	28-Jun-2006	Finland	Lapland, Ostrobothnia borealis pars borealis, Ranua	65,88	26,34	
MM03901	<i>Elachista kilmunella</i>	658		Marko Mutanen	27-Jun-2006	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,39	26,91	
MM03902	<i>Elachista kilmunella</i>	658		Marko Mutanen	27-Jun-2006	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,39	26,91	
MM04003	<i>Elachista kilmunella</i>	658		Marko Mutanen	13.-14.6.2006	Finland	North Karelia, Karelia borealis, Kesälahti	61,79	29,71	
MM05876	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Lapponia inarenensis, Inari	68,43	27,39	
MM05877	<i>Elachista kilmunella</i>	658	F	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Lapponia inarenensis, Inari	68,43	27,39	
MM05878	<i>Elachista kilmunella</i>	637	M	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Li, Inari	68,43	27,39	
MM05879	<i>Elachista kilmunella</i>	613	F	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Li, Inari	68,43	27,39	
MM05880	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	05-Jul-2007	Finland	Lapponia inarenensis, Inari	68,43	27,39	
MM05882	<i>Elachista kilmunella</i>	670	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2007	Finland	Li, Inari	68,72	27,69	
MM05928	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2008	Finland	Ostrobothnia borealis pars borealis, Kemnmaa	65,89	24,63	
MM05929	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2008	Finland	Ostrobothnia borealis pars borealis, Kemnmaa	65,89	24,63	
MM05930	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	03-Jul-2008	Finland	Ostrobothnia borealis pars borealis, Kemnmaa	65,89	24,63	
MM05931	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarenensis, Inari	68,44	27,39	
MM05932	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarenensis, Inari	68,44	27,39	
MM05935	<i>Elachista kilmunella</i>	658	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarenensis, Inari	68,44	27,39	

MM05937	Elachista kilmunella	632	M	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Laponia inarensis, Inari	68,44	27,39	
MM06594	Elachista kilmunella	658	M	Tomi Mutanen, Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	6.-7.7.2007	Finland	Karelia borealis, Ilomantsi	62,51	30,88	
MM09242	Elachista kilmunella	658	M	Petri Hirvonen	07-Jul-2009	Finland	Regio kuusamoensis, Kuusamo	66,14	23,90	
MM09251	Elachista kilmunella	658	M	Petri Hirvonen	07-Jul-2009	Finland	Regio kuusamoensis, Kuusamo	66,14	23,90	
MM15563	Elachista kilmunella	658	M	Marko Mutanen	24-Jun-2004	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM16190	Elachista kilmunella	658	M	Jalava, Kullberg, Koponen	08-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17	L. Kaila prep. 2091
MM16207	Elachista kilmunella	658	M	J. Tabell	18-Jun-2006	Finland	Tavastia australis, Hartola	61,59	26,02	GP 4253 JT
MM16208	Elachista kilmunella	658	M	J. Tabell	30-Jun-2006	Finland	Tavastia australis, Hartola	61,59	26,02	GP 3907 JT
MM17963	Elachista kilmunella	658		family Marko Mutanen	30-Jun-2010	Finland	Ostrobothnia kajanensis, Kuhmo	63,91	29,83	
MM18579	Elachista kilmunella	658		Ingvar Svensson	01-Jul-2002	Sweden	Jaemtland, Storlidfjaellet	64,77	13,93	
MM18580	Elachista kilmunella	658		Ingvar Svensson	01-Jul-2002	Sweden	Jaemtland, Storlidfjaellet	64,77	13,93	
MM19892	Elachista kilmunella	658	M	Erkki Laasonen, Leena Laasonen		Finland	Lapland, Laponia inarensis, Utsjoki	69,81	27,17	
MM20004	Elachista kilmunella	658	M	J. Tabell	17-Jun-2006	Finland	Tavastia australis, Hartola	61,60	26,03	GP 3908 JT
MM20005	Elachista kilmunella	658	M	J. Tabell	12-Jun-2009	Finland	Tavastia australis, Hartola	61,60	26,03	
MM21201	Elachista kilmunella	657[1n]		Marko Mutanen	27-Jun-2011	Finland	Regio kuusamoensis, Kuusamo	66,36	29,60	
MM21337	Elachista kilmunella	658	M	J. Junnilainen	01-Jul-2008	Finland	Kuusamo	66,40	29,40	
MM14194	Elachista krogeri	658		Panu Vaelimaeki	22-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM14195	Elachista krogeri	658		Panu Vaelimaeki	22-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM14196	Elachista krogeri	623		Panu Vaelimaeki	22-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM14202	Elachista krogeri	658		MarkoMutanen	24-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM14203	Elachista krogeri	658		MarkoMutanen	24-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM14204	Elachista krogeri	658		MarkoMutanen	24-Jun-2009	Finland	Ostrobothnia borealis pars australis, Oulu	64,94	25,46	
MM16155	Elachista krogeri	658	M	Jalava, Kullberg, Koponen	12-Jul-1994	Russia	Ob Delta, Labytnangi	66,70	66,58	L. Kaila prep. 1368
MM16157	Elachista krogeri	658	M	Jalava, Kullberg, Koponen	12-Jul-1994	Russia	Ob Delta, Labytnangi	66,70	66,58	L. Kaila prep. 1205
MM16158	Elachista krogeri	658	M	Jalava, Kullberg, Koponen	07-Jul-1994	Russia	Ob Delta, Labytnangi	66,70	66,58	L. Kaila prep. 1206
MM20920	Elachista krogeri	654	M	Timo Nupponen, Kari Nupponen	14-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Labytnangi	66,66	65,66	50 L. Kaila Prep. 3631

MM20926	<i>Elachista krogeri</i>	595[1n]	M	Timo Nupponen, Kari Nupponen	14-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Labytnangi	66,66	65,66	50	
MM20927	<i>Elachista krogeri</i>	596[2n]	M	Timo Nupponen, Kari Nupponen	14-Jul-1999	Russia	Tyumenskaya, Tjumen district, Polar-Ural, Labytnangi	66,66	65,66	50	
BC ZSM Lep 53220	<i>Elachista lastrella</i>	658	F	Dr. Theo Gruenewald	22-May-2010	Germany	Bavaria, Oberpfalz, Regensburg, Nittendorf	49,03	11,96	400	
MM03980	<i>Elachista leifi</i>	658		Marko Mutanen	29-Jun-2006	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,39	26,91		
MM05943	<i>Elachista leifi</i>	619	F	Erkki M. Laasonen, Leena Laasonen	14-Jul-2008	Finland	Lapponia inarensis, Inari	68,95	28,46		
MM10425	<i>Elachista leifi</i>	658		Marko Mutanen	30-Jun-2000	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,70	27,65		
MM16249	<i>Elachista leifi</i>	658	M	J. Tabell	01-Jul-2009	Finland	Ostrobothnia borealis pars australis, Rovaniemi	66,45	25,66		GP 4355 JT
MM18150	<i>Elachista leifi</i>	658		Marko Mutanen	03-Jul-1995	Finland	Lapponia kemensis pars orientalis, Pelkosenniemi	67,19	27,88		Gen. prep. no. 533 M. Mutanen
MM06643	<i>Elachista luticomella</i>	658	M	Marko Mutanen	11-Jul-2007	Finland	Nylandia, Kirkkonummi	59,98	24,44		
MM06782	<i>Elachista luticomella</i>	658	M	Marko Mutanen	13-Jul-2007	Finland	Aland Islands, Maarianhamina	60,10	19,93		
MM06797	<i>Elachista luticomella</i>	658		Marko Mutanen	14-Jul-2007	Finland	Aland Islands, Sund	60,23	20,06		
MM08652	<i>Elachista luticomella</i>	658		Marko Mutanen	18-Jul-2008	Finland	Aland Islands, Hammarland	60,23	19,69		
MM09725	<i>Elachista luticomella</i>	658		Marko Mutanen, Meelika Mutanen, Atsalea Mutanen, Sylvia Mutanen	21-Jul-2008	Finland	Aland Islands, Geta	60,36	19,91		
MM20042	<i>Elachista luticomella</i>	658	M	J. Tabell	09-Jun-2008	Estonia	Saaremaa, Vasalemma	59,24	24,28		
MM00861	<i>Elachista maculicerusella</i>	658		Marko Mutanen	20.-21.6.2006	Finland	Aland Islands, Kökar	59,94	20,90		
MM02647	<i>Elachista maculicerusella</i>	658		Marko Mutanen, Panu Vaelimaeki	2006	Finland	Savonia australis, Imatra	61,11	28,80		genitalia examined
MM02648	<i>Elachista maculicerusella</i>	634		Marko Mutanen, Panu Vaelimaeki	2006	Finland	Savonia australis, Imatra	61,11	28,80		
MM03985	<i>Elachista maculicerusella</i>	658		Marko Mutanen	02-Aug-2006	Finland	Kymenlaakso, Karelia australis, Kotka	60,41	26,82		
MM03986	<i>Elachista maculicerusella</i>	658		Marko Mutanen	01-Aug-2006	Finland	Nylandia, Kirkkonummi	59,98	24,44		
MM09733	<i>Elachista maculicerusella</i>	658		Marko Mutanen, Meelika Mutanen, Atsalea Mutanen, Sylvia Mutanen	21-Jul-2008	Finland	Aland Islands, Geta	60,36	19,91		
MM12025	<i>Elachista maculicerusella</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Nylandia, Hanko	59,84	23,24		
MM14357	<i>Elachista maculicerusella</i>	658		Marko Mutanen	01-Jul-2009	Finland	Aland Islands, Sund	60,18	20,23		
MM15439	<i>Elachista maculicerusella</i>	658		B. Wikstrom	15.-16-May-2002	Russia	Moskovskaya, Moscow oblast, Stupino region	55,20	37,90		



MM15440	<i>Elachista maculicerusella</i>	658		B. Wikstrom	15.-16-May-2002	Russia	Moskovskaya, Moscow oblast, Stupino region	55,20	37,90	
MM15441	<i>Elachista maculicerusella</i>	658		B. Wikstrom	15.-16-May-2002	Russia	Moskovskaya, Moscow oblast, Stupino region	55,20	37,90	
MM15442	<i>Elachista maculicerusella</i>	658		A. Albrecht	03-Jun-1990	Estonia	Paernu r., Nigula	58,30	24,40	
MM15443	<i>Elachista maculicerusella</i>	658		A. Albrecht	03-Jun-1990	Estonia	Paernu r., Nigula	58,30	24,40	
MM15444	<i>Elachista maculicerusella</i>	658		M. Kozlov	25-Jul-1991	Russia	Murmansk, Murmansk, Luvenga, White sea cost	67,10	32,71	
MM15445	<i>Elachista maculicerusella</i>	658		M. Kozlov	25-Jul-1991	Russia	Murmansk, Murmansk, Luvenga, White sea cost	67,10	32,71	
MM15448	<i>Elachista maculicerusella</i>	658		L. Kaila	01-Jul-1990	Kazakhstan	Zailiskiy Alatau, Alma-Atinskij Nat.P.	43,08	77,25	
MM15449	<i>Elachista maculicerusella</i>	658		L. Kaila	01-Jul-1990	Kazakhstan	Zailiskiy Alatau, Alma-Atinskij Nat.P.	43,08	77,25	L. Kaila prep. 351
MM16230	<i>Elachista maculicerusella</i>	658	F	J. Tabell	ex larva em. 7-Jun-2008	Finland	Tavastia australis, Hartola	61,59	26,02	Calamagrostis epigejos 27.V.2008
MM16231	<i>Elachista maculicerusella</i>	658	M	P. Varalda	ex larva em. 3-Apr-2007	Italy	Piedmont, Morano sul Po	45,16	8,36	Phalaris arundinacea 19.III.2007
MM16232	<i>Elachista maculicerusella</i>	658	M	J. Tabell	07-Jun-2009	Finland	Tavastia australis, Sysmä	61,54	25,93	
MM16233	<i>Elachista maculicerusella</i>	658	F	P. Varalda	ex larva em. 3-Apr-2007,	Italy	Piedmont, Morano sul Po	45,16	8,36	Phalaris arundinacea 19.III.2007, GP 4251 JT
MM16980	<i>Elachista maculicerusella</i>	658	M	J. Junnilainen	02-Jun-2008	Croatia	Jartsebarsko	45,67	15,65	
MM17940	<i>Elachista maculicerusella</i>	658		Sami Haapala	02-Jun-2009	Finland	Savonia australis, Imatra	61,14	28,76	
MM19518	<i>Elachista maculicerusella</i>	307		H. Hendriksen	09-Aug-2004	Denmark	Nez, Sjaelland, Kulhuse	55,92	11,91	
MM21343	<i>Elachista maculicerusella</i>	658	M	J. Junnilainen	02-Jun-2008	Croatia	Jartsebarsko	45,67	15,65	
MM21425	<i>Elachista maculosella</i>	658	F	J. Nel	26-Apr-2003	France	Brusquires de Cassis	43,20	41399,00	
MM15561	<i>Elachista nielswolffi</i>	571	M	Marko Mutanen	11.-12.7.2000	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,70	27,65	
MM16224	<i>Elachista nielswolffi</i>	658	M	J. Tabell	01-Jul-2009	Finland	Kainuu, Ostrobothnia kajanensis, Puolanka	64,65	28,02	
MM16225	<i>Elachista nielswolffi</i>	658	F	J. Tabell	ex larva em. 3-Jul-2008	Finland	Kainuu, Ostrobothnia kajanensis, Puolanka	64,65	28,05	Deschampsia flexuosa 24.VI.2008, GP 4429 JT
MM16226	<i>Elachista nielswolffi</i>	658	M	J. Tabell	01-Jul-2009	Finland	Kainuu, Ostrobothnia kajanensis, Puolanka	64,65	28,02	
MM17553	<i>Elachista nielswolffi</i>	658		Marko Mutanen	11.-12.7.2000	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,70	27,65	
MM18151	<i>Elachista nielswolffi</i>	658		Marko Mutanen	11.-12.7.2000	Finland	Ostrobothnia borealis pars australis, Pudasjärvi	65,70	27,65	
MM20883	<i>Elachista nielswolffi</i>	407	M	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450
MM20885	<i>Elachista nielswolffi</i>	658	M	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450
MM20888	<i>Elachista nielswolffi</i>	658	M	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450

MM06159	<i>Elachista nobilella</i>	658		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64	
MM06160	<i>Elachista nobilella</i>	626[1n]		Marko Mutanen, Tomi Mutanen	18.-17.6.2007	Finland	Karelia ladogensis, Parikkala	61,64	29,64	
MM06267	<i>Elachista nobilella</i>	658	M	Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	22.-23.6.2007	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM08381	<i>Elachista nobilella</i>	658		Marko Mutanen, Panu Vaelimaeki	17.-18.6.2005	Finland	Tavastia australis, Loppi	60,65	24,08	
MM17962	<i>Elachista nobilella</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	19-Jun-2010	Finland	Karelia borealis, Kitee	62,08	29,95	
MM20033	<i>Elachista nobilella</i>	658	M	J. Tabell	01-Jul-2009	Finland	Kainuu, Ostrobothnia kajanensis, Puolanka	64,65	28,04	
MM20034	<i>Elachista nobilella</i>	658	M	J. Tabell	13-May-2007	Finland	Tavastia australis, Hartola	61,44	25,98	
MM16133	<i>Elachista orstadii</i>	658	M	J. Jalava, J. Kullberg	17-Jun-1995	Russia	Tyva, Tannu-Ola Mts	50,83	94,32	L. Kaila prep. 1836
MM16136	<i>Elachista orstadii</i>	658	M	O. Bidzilya	15-Jul-1995	Russia	Altai Krai, Ukok Plateau	49,30	87,50	
MM16137	<i>Elachista orstadii</i>	656	M	O. Bidzilya	18-Jun-1995	Russia	Altai Krai, Ukok Plateau	49,30	87,50	
MM18552	<i>Elachista orstadii</i>	658		Ingvar Svensson	15-May-1996	Sweden	Oeg, Heda	58,28	14,69	
MM18553	<i>Elachista orstadii</i>	658		Ingvar Svensson	02-Jun-1994	Sweden	Oel, Gardby	56,59	16,64	
MM18586	<i>Elachista orstadii</i>	658		Bengt A. Bengtsson	20-May-2010	Sweden	Sm, Hoegsby, Valakra	57,20	15,98	
MM18593	<i>Elachista orstadii</i>	658		Bengt A. Bengtsson	05-Jun-2004	Sweden	Oel, Gardby	56,59	16,64	
MM20879	<i>Elachista orstadii</i>	658	M	T. Nupponen, K. Nupponen	27-Jun-2000	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2750
MM20882	<i>Elachista orstadii</i>	658	M	T. Nupponen, K. Nupponen	27-Jun-2000	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2750
MM20884	<i>Elachista orstadii</i>	658	F	T. Nupponen, K. Nupponen	27-Jun-2000	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2750
MM20900	<i>Elachista orstadii</i>	658	M	K. Nupponen	20-May-2004	Russia	Orenburg, South Ural, Guberlinsky Mts., Orsk 40 km W, near Guberlja village	51,25	58,08	340
MM20901	<i>Elachista orstadii</i>	379	F	K. Nupponen	20-May-2004	Russia	Orenburg, South Ural, Guberlinsky Mts., Orsk 40 km W, near Guberlja village	51,25	58,08	340
MM20906	<i>Elachista orstadii</i>	658	M	K. Nupponen	20-May-2004	Russia	Orenburg, South Ural, Guberlinsky Mts., Orsk 40 km W, near Guberlja village	51,25	58,08	340
MM20970	<i>Elachista orstadii</i>	307	M	Timo Nupponen, Kari Nupponen	04-Jul-2000	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2500
MM21452	<i>Elachista orstadii</i>	658	M	O. Karsholt	27-May-1994	Greece	Epirus, Ipiros, S. Metsova	39,75	21,19	1550
MM21453	<i>Elachista orstadii</i>	658	M	O. Karsholt	27-May-1994	Greece	Epirus, Ipiros, S. Metsova	39,75	21,19	1550
MM21454	<i>Elachista orstadii</i>	658	M	O. Karsholt	27-May-1994	Greece	Epirus, Ipiros, S. Metsova	39,75	21,19	1550
MM15558	<i>Elachista poae</i>	658	M	Marko Mutanen	21-Jun-2004	Finland	Nylandia, Karjaa	60,19	23,75	

MM15559	<i>Elachista poae</i>	658	F	Marko Mutanen	21-Jun-2004	Finland	Nylandia, Karjaa	60,19	23,75	
MM16313	<i>Elachista poae</i>	658	M	J. Tabell	ex pupa 18.6.2008	Finland	Tavastia australis, Heinola	61,20	26,01	Glyceria maxima 12.VI.2008
MM02664	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80	
MM02665	<i>Elachista pomerana</i>	651		Marko Mutanen, Panu Vaelimaeki		Finland	Karelia australis, Imatra	61,11	28,80	
MM02666	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2006	Finland	Savonia australis, Imatra	61,11	28,80	
MM08066	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	3.-17.7.2006	Finland	Lapponia kemensis pars occidentalis, Kolari	67,28	23,75	
MM08634	<i>Elachista pomerana</i>	658	M	Marko Mutanen	18-Jul-2008	Finland	Aland Islands, Eckerö	60,28	19,58	
MM08635	<i>Elachista pomerana</i>	658	M	Marko Mutanen	18-Jul-2008	Finland	Aland Islands, Eckerö	60,28	19,58	
MM08636	<i>Elachista pomerana</i>	658	M	Marko Mutanen	18-Jul-2008	Finland	Aland Islands, Eckerö	60,28	19,58	
MM10299	<i>Elachista pomerana</i>	638		Marko Mutanen	ex larva June 2008	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	larva on Calamagrostis purpurea
MM12474	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80	
MM12478	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80	
MM12479	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80	
MM12480	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80	
MM12481	<i>Elachista pomerana</i>	658		Marko Mutanen, Panu Vaelimaeki	2007	Finland	Savonia australis, Imatra	61,11	28,80	
MM13866	<i>Elachista pomerana</i>	427		M. Mutanen		Finland	Lapland, Tornio	65,90	24,45	
MM13867	<i>Elachista pomerana</i>	658		M. Mutanen		Finland	Lapland, Tornio	65,90	24,45	
MM14239	<i>Elachista pomerana</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	29-Jun-2009	Finland	Aland Islands, Eckerö	60,24	19,59	
MM14642	<i>Elachista pomerana</i>	658		Marko Mutanen, Nestori Mutanen, Anttoni Mutanen	27-Jul-2009	Finland	Ostrobothnia borealis pars australis, Kiiminki	65,07	25,73	
MM16007	<i>Elachista pomerana</i>	658		Vesa Lepistoe, Kari Vaalamo	02-Jun-2006	Finland	Nylandia, Sipoo	60,22	25,38	
MM20014	<i>Elachista pomerana</i>	657[1n]	F	J. Tabell	02-Jul-2008	Finland	Tavastia australis, Hartola	61,57	26,05	
MM20909	<i>Elachista pomerana</i>	658	M	Jalava, Kullberg	13-Jul-1996	Russia	Buryatiya, Buryatia, Svyatov Nos pns., Monahovo	53,67	109,0 0	460
MM18885	<i>Elachista rufocinerea</i>	658		P. Faiallo	04-May-1995	Italy	Liguria, Passo Turchino	44,48	8,73	
MM19517	<i>Elachista rufocinerea</i>	223		H. Hendriksen	03-May-1995	Denmark	Jylland, Hald ege	56,44	9,40	
MM21348	<i>Elachista rufocinerea</i>	658	M	L. Srnka	22-Mar-2001	Croatia	Zaostrog	43,14	17,27	
MM15299	<i>Elachista subnigrella</i>	658	M	A. Albrecht	02-Jun-1990	Estonia	Saaremaa, Mustjala	58,46	22,23	
MM16131	<i>Elachista subnigrella</i>	554	M	J. Bjorklund	14-Jun-1994	Sweden	Upland, Sollentuna	59,43	17,93	
MM16132	<i>Elachista subnigrella</i>	658	M	J. Bjorklund	14-Jun-1994	Sweden	Upland, Sollentuna	59,43	17,93	

MM16245	<i>Elachista subnigrella</i>	658	M	J. Tabell	ex larva em. 26-Jun-2005	Austria	Villach	46,61	13,85		GP 4515 L. Kaila
MM18550	<i>Elachista subnigrella</i>	658		Ingvar Svensson	03-Jun-2004	Sweden	Oel, Sandvik	57,07	16,86		
MM18551	<i>Elachista subnigrella</i>	658		Ingvar Svensson	17-Jun-1997	Sweden	Oeg, Styra	58,40	15,00		
MM19866	<i>Elachista subnigrella</i>	658		Ingvar Svensson	01-Jun-2004	Sweden	Oland, Lilla Horn	57,08	16,90		
MM21429	<i>Elachista talgarella</i>	658	M	L. Kaila	07-Aug-1990	Kazakhstan	Almaty, Transili Alatau, , Almaty Nat. Pk.	43,50	77,15	3000	paratype
MM21430	<i>Elachista talgarella</i>	540	M	L. Kaila	07-Aug-1990	Kazakhstan	Almaty, Transili Alatau, , Almaty Nat. Pk.	43,50	77,15	3000	paratype
MM16154	<i>Elachista tanaella</i>	658	M	L. Aarvik	15-Jul-2002	Norway	Fn, Tana Faccabaeljakka	70,30	28,20		paratype
TLMF Lep 04548	<i>Elachista wieseriella</i>	658		Huemer P.& Erlebach S.& Wieser	12-Jun-1999	Austria	Karnten, Auf der Mussen SE/ St.Jakob im Lesachtal N	46,71	12,94	1700	
TLMF Lep 06858	<i>Elachista wieseriella</i>	658		Deutsch H.	27-Jul-2005	Austria	Tirol, Osttirol, Koednitztal, Greiwiesen E/ Kals am Grossglockner	47,02	12,68	2100	
MM06515	<i>Elachista vonschantzi</i>	643	F	Marko Mutanen, Nestori Mutanen	03-Jul-2007	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,05	24,88		
MM06516	<i>Elachista vonschantzi</i>	658	F	Marko Mutanen, Nestori Mutanen	03-Jul-2007	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,05	24,88		
MM08614	<i>Elachista vonschantzi</i>	658	M	Marko Mutanen	30-Jun-2008	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,05	24,88		
MM08615	<i>Elachista vonschantzi</i>	637	M	Marko Mutanen	30-Jun-2008	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,05	24,88		
MM14167	<i>Elachista vonschantzi</i>	658		Marko Mutanen	24-Jun-2009	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,03	24,88		
MM14168	<i>Elachista vonschantzi</i>	658		Marko Mutanen	24-Jun-2009	Finland	Ostrobotnia borealis pars australis, Hailuoto	65,03	24,88		
MM16121	<i>Elachista zernyi</i>	658	M	J. Jalava, J. Kullberg	20.-22.6.1995	Russia	W-Sajan Mts., Krasnojarsk Reg.	52,78	93,30		L. Kaila prep. 1837
MM16122	<i>Elachista zernyi</i>	623	M	J. Jalava, J. Kullberg	20.-22.6.1995	Russia	W-Sajan Mts., Krasnojarsk Reg.	52,78	93,30		
MM16123	<i>Elachista zernyi</i>	658	M	J. Jalava, J. Kullberg	20.-22.6.1995	Russia	W-Sajan Mts., Krasnojarsk Reg.	52,78	93,30		L. Kaila prep. 2843
MM16124	<i>Elachista zernyi</i>	658	F	J. Jalava, J. Kullberg	03-Jul-1996	Russia	Buryatiya, Barguzin Valley	54,83	111,3 0		
MM16125	<i>Elachista zernyi</i>	658	M	J. Jalava, J. Kullberg	4.-6.7.1996	Russia	Buryatiya, Barguzin Range	54,87	110,9 2		
MM17654	<i>Elachista zernyi</i>	658		Jari Kaitila	22-Jul-2000	Finland	Laponia enontekiensis, Enontekiö	68,99	20,50		
MM18554	<i>Elachista zernyi</i>	658		Ingvar Svensson	02-Jul-1995	Sweden	Hr, Hamrafjaellet	62,56	12,29		
MM18555	<i>Elachista zernyi</i>	658		Ingvar Svensson	01-Jul-1995	Sweden	Hr, Hamrafjaellet	62,56	12,29		
MM20931	<i>Elachista zernyi</i>	658	M	K. Nupponen	17-Jun-2002	Russia	Irkutsk, Irkutsk prov., Sludjanka village 2 km SE, Lake Baikal shope slope	51,67	103,7 2	500	

MM20932	Elachista zernyi	407	M	K. Nupponen	16-Jun-2002	Russia	Buryatiya, SW-Buryatia, East Sayan Mts., Halagun river, Turan village 8 km W	51,64	101,58	900	
MM20933	Elachista zernyi	658	M	K. Nupponen	15-Jun-2002	Russia	Buryatiya, SW-Buryatia, East Sayan Mts., Mondy village 2 km E	51,68	101,02	1450	
MM22606	Elachista zernyi	658	M	J.-P. Kaitila	12-Jul-2008	Finland	Laponia enontekiensis, Enontekiö, Toshkajjoki	69,16	21,58		
MM16120	Elachista sp. 01MM	658	M	K. Mikkola	14-Jul-1991	Russia	Chukot Autonomous Okrug, Chuckhi Pns, Provideniya	64,92	172,50		BAB prep. 396X
MM16145	Elachista sp. 02MM	658	M	J. Jalava, J. Kullberg	04-Jul-1994	Russia	Polar Ural, Europe Asia Pass	67,03	65,08		L. Kaila prep. 1208
MM16146	Elachista sp. 02MM	639	M	J. Jalava, J. Kullberg	04-Jul-1994	Russia	Polar Ural, Europe Asia Pass	67,03	65,08		L. Kaila prep. 4855
MM16181	Elachista sp. 03MM	551[1n]	M	Jalava, Kullberg, Koponen	02-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,08	65,17		L.Kaila prep. 1209
MM21420	Elachista sp. 03MM	658	M	Jalava, Kullberg, Koponen	02-Jul-1994	Russia	Polar Ural, Krasnyi Kamen	66,55	65,10	200	
MM21421	Elachista sp. 04MM	627	M	L. Kaila	31-Jul-1990	Kyrgyzstan	Naryn, 45 km NE Naryn	41,40	76,31	2650	
MM21377	Elachista sp. 05MM	658	M	Z. Tokar	07-Jul-2000	Slovenia	Juliske Alpe, Mangart	46,43	13,65	2000	
MM21382	Elachista sp. 05MM	658	M	Z. Tokar	07-Jul-2000	Slovenia	Juliske Alpe, Mangart	46,43	13,65	2000	
MM21476	Elachista sp. 06MM	658	M	K. Nupponen, R. Haverinen	23-Jul-2010	Kyrgyzstan	Alai mts, Tengiz-Bai pass	39,38	72,14	3650	
MM21477	Elachista sp. 06MM	650	M	K. Nupponen, R. Haverinen	23-Jul-2010	Kyrgyzstan	Alai mts, Tengiz-Bai pass	39,38	72,14	3650	
MM16170	Elachista sp. 07MM	636	M	Yu. Budashkin	19-May-1996	Ukraine	Krym, Karadagh	44,90	35,20		
MM21388	Elachista sp. 07MM	658	F	Yu. Budashkin	20-May-1996	Ukraine	Crimea, Karadagh	44,90	35,20		
MM21389	Elachista sp. 07MM	658	F	Yu. Budashkin	28-May-1996	Ukraine	Crimea, Karadagh	44,90	35,20		
MM21391	Elachista sp. 07MM	253	F	Yu. Budashkin	12-Jun-1994	Ukraine	Crimea, Karadagh	44,90	35,20		
MM20908	Elachista sp. 08MM	658	M	Jalava, Tammaru	08-Jul-1997	Russia	Magadan, Magadanskaya Oblast, Magadan 15 km E	59,57	151,20	50	
MM20914	Elachista sp. 08MM	658	M	Jalava, Tammaru	08-Jul-1997	Russia	Magadan, Magadanskaya Oblast, Magadan 15 km E	59,57	151,20	50	
MM20915	Elachista sp. 08MM	658	F	Jalava, Tammaru	07-Jul-1997	Russia	Magadan, Magadanskaya Oblast, Magadan 15 km E	59,57	151,20	50	
MM20916	Elachista sp. 08MM	658	M	Jalava, Tammaru	07-Jul-1997	Russia	Magadan, Magadanskaya Oblast, Magadan 15 km E	59,57	151,20	50	
MM20917	Elachista sp. 08MM	658	M	Jalava, Tammaru	07-Jul-1997	Russia	Magadan, Magadanskaya Oblast, Magadan 15 km E	59,57	151,20	50	
MM20857	Elachista sp. 09MM	658	F	O. Karsholt	27-May-1994	Greece	Epirus, Ipiros, S. Metsova	39,75	21,19	1550	
MM21455	Elachista sp. 09MM	626	M	O. Karsholt	27-May-1994	Greece	Epirus, Ipiros, S. Metsova	39,75	21,19	1550	

MM20892	Elachista sp. 10MM	658	M	T. Nupponen, K. Nupponen	25-Jun-2000	Russia	Altai Krai, Altai Mts., Kuraisky steppe	50,25	87,88	1600	
MM20880	Elachista sp. 11MM	658	M	T. Nupponen, K. Nupponen	27-Jun-2000	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2750	
MM20893	Elachista sp. 11MM	658	M	K. Nupponen	08-Jul-2001	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2300	
MM20894	Elachista sp. 11MM	658	F	K. Nupponen	08-Jul-2001	Russia	Altai Krai, Altai Mts., Kuraisky hrebet	50,30	87,88	2300	
MM20967	Elachista sp. 11MM	658	M	K. Nupponen	07-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM20972	Elachista sp. 11MM	658	M	K. Nupponen	11-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM20878	Elachista sp. 12MM	658	M	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450	
MM20886	Elachista sp. 12MM	658	F	T. Nupponen, K. Nupponen	24-Jun-2000	Russia	Altai Krai, Altai Mts., Sarlyk region	51,00	85,58	1450	
MM20968	Elachista sp. 12MM	658	M	K. Nupponen	10-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM20969	Elachista sp. 12MM	658	M	K. Nupponen	09-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM20971	Elachista sp. 12MM	658	M	K. Nupponen	07-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM20973	Elachista sp. 12MM	658	M	K. Nupponen	09-Jul-2001	Russia	Altai Krai, Altai mnts., Kuraisky hrebet	50,27	87,83	2300	
MM21468	Elachista sp. 12MM	658	M	K. Nupponen	11-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM21470	Elachista sp. 12MM	658	M	K. Nupponen	13-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM21472	Elachista sp. 12MM	658	F	K. Nupponen	06-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM21473	Elachista sp. 12MM	411	M	K. Nupponen	07-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM21474	Elachista sp. 12MM	658	M	K. Nupponen	10-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM21475	Elachista sp. 12MM	406[2n]	M	K. Nupponen	07-Jul-2001	Russia	Altai Krai, Altai Mts, Kuraisky hrebet	50,16	87,50	2300	
MM22535	Elachista sp. 12MM	658	M	J. Jalava, J. Kullberg	17-Jun-1995	Russia	Tyva, Tannu-Ola Mts	50,50	94,19	2175	
MM22536	Elachista sp. 12MM	658	M	J. Jalava, J. Kullberg	17-Jun-1995	Russia	Tyva, Tannu-Ola Mts	50,50	94,19	2175	
MM22541	Elachista sp. 13MM	658	M	K. Nupponen	05-Aug-2010	Kyrgyzstan	Tien-Shan Mts., Eki-Naryn	41,31	76,30	2600	
MM15492	Elachista sp. 14MM	658	M	K. Nupponen, J. Junnilainen	06-May-1996	Turkey	Aksehir, Sultan Daglari	38,33	31,33		L. Kaila prep. 3017
MM15493	Elachista sp. 14MM	658	M	T. Nupponen	09-Jun-2002	Turkey	Aksehir, Sultan Daglari	38,33	31,33		
MM15494	Elachista sp. 14MM	658	M	J. Junnilainen	9.-13.5.2000	Turkey	Aksehir, Cetince	38,18	31,21		
MM21341	Elachista sp. 14MM	259	M	J. Junnilainen	20-May-2005	Turkey	Aksehir, Sultan Daglari	38,33	31,33		
MM21649	Elachista sp. 15MM	658	M	J. Tabell	02-May-2012	Greece	Crete, Omalos 2 km NNE	35,34	23,90	1030	
MM22599	Elachista sp. 16MM	658	M	K. Nupponen, J. Junnilainen	26-Jun-1997	Russia	Chelyabinsk, South Ural, Miass town, Ilmen State Reserve	55,01	60,10	350	

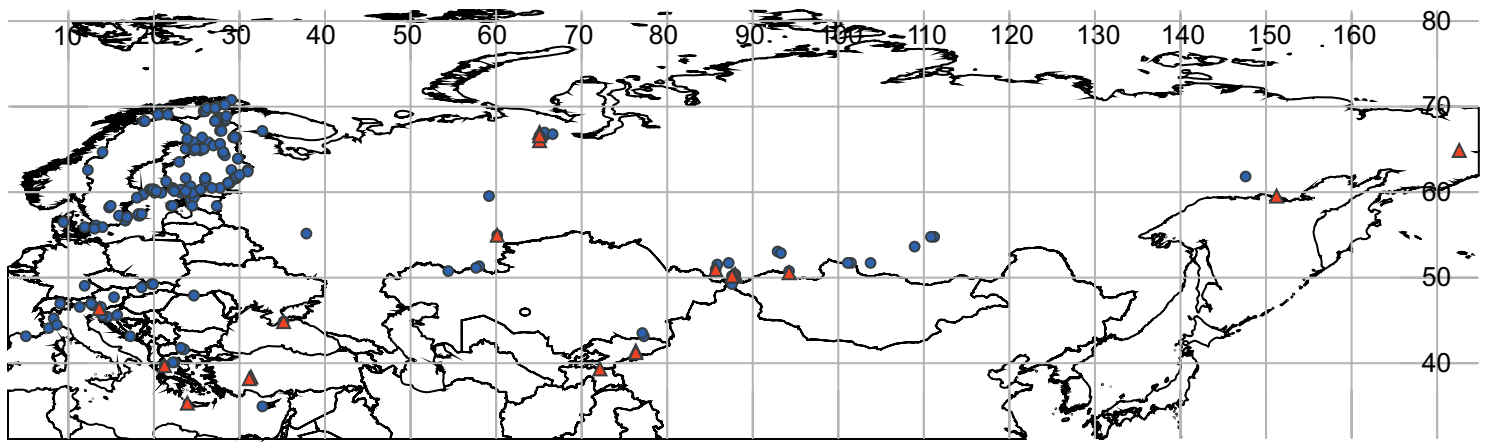
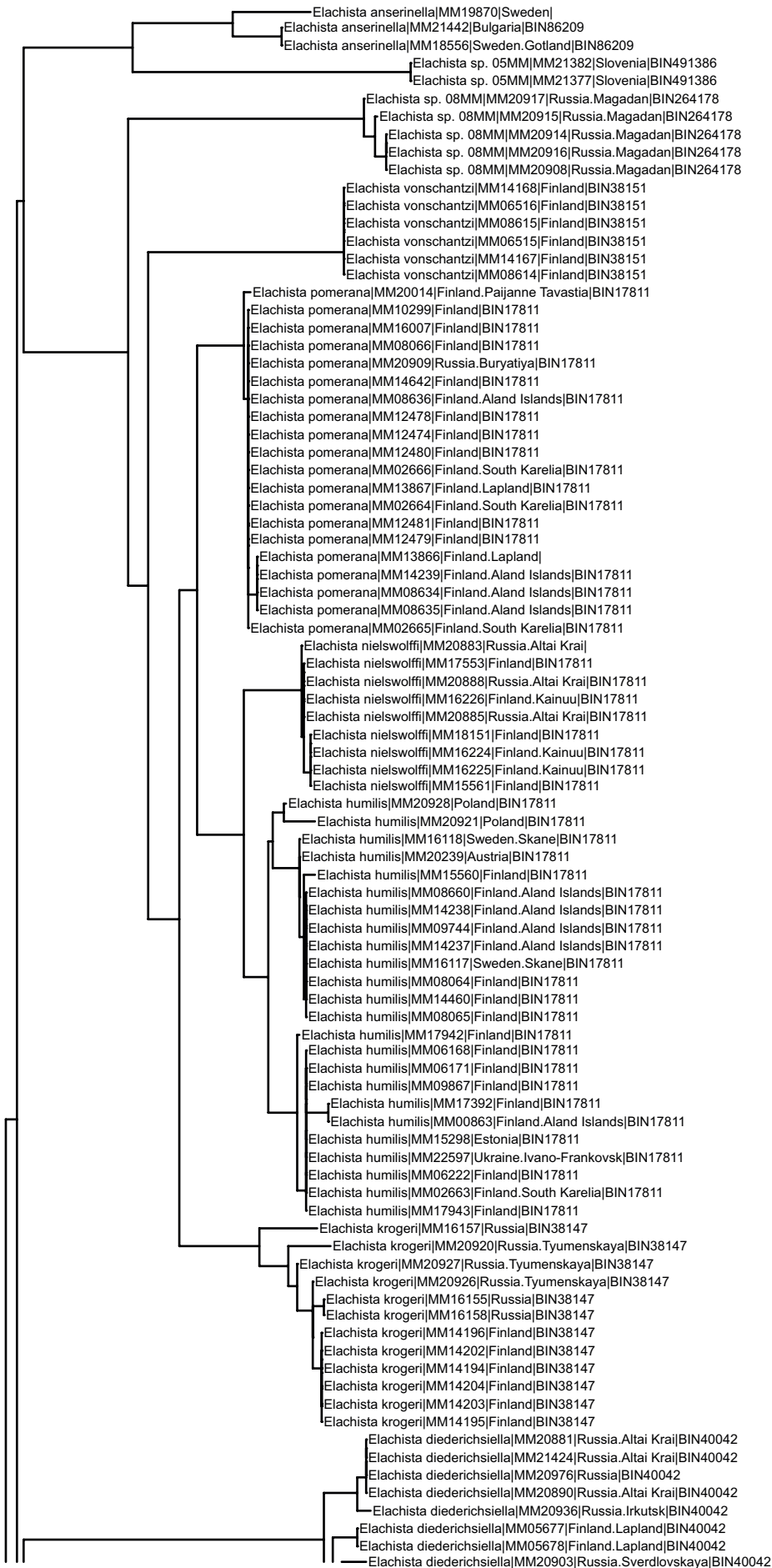
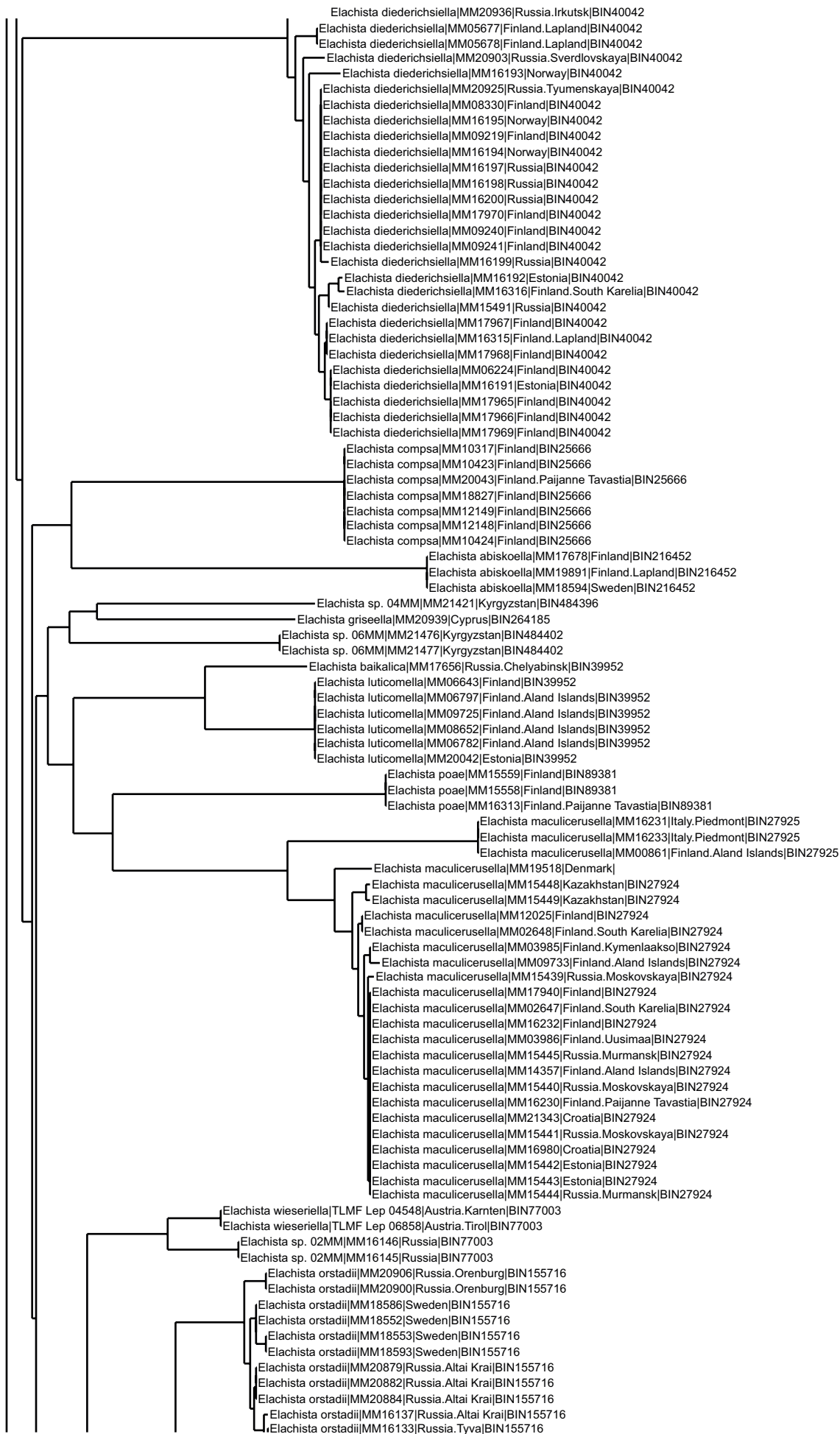


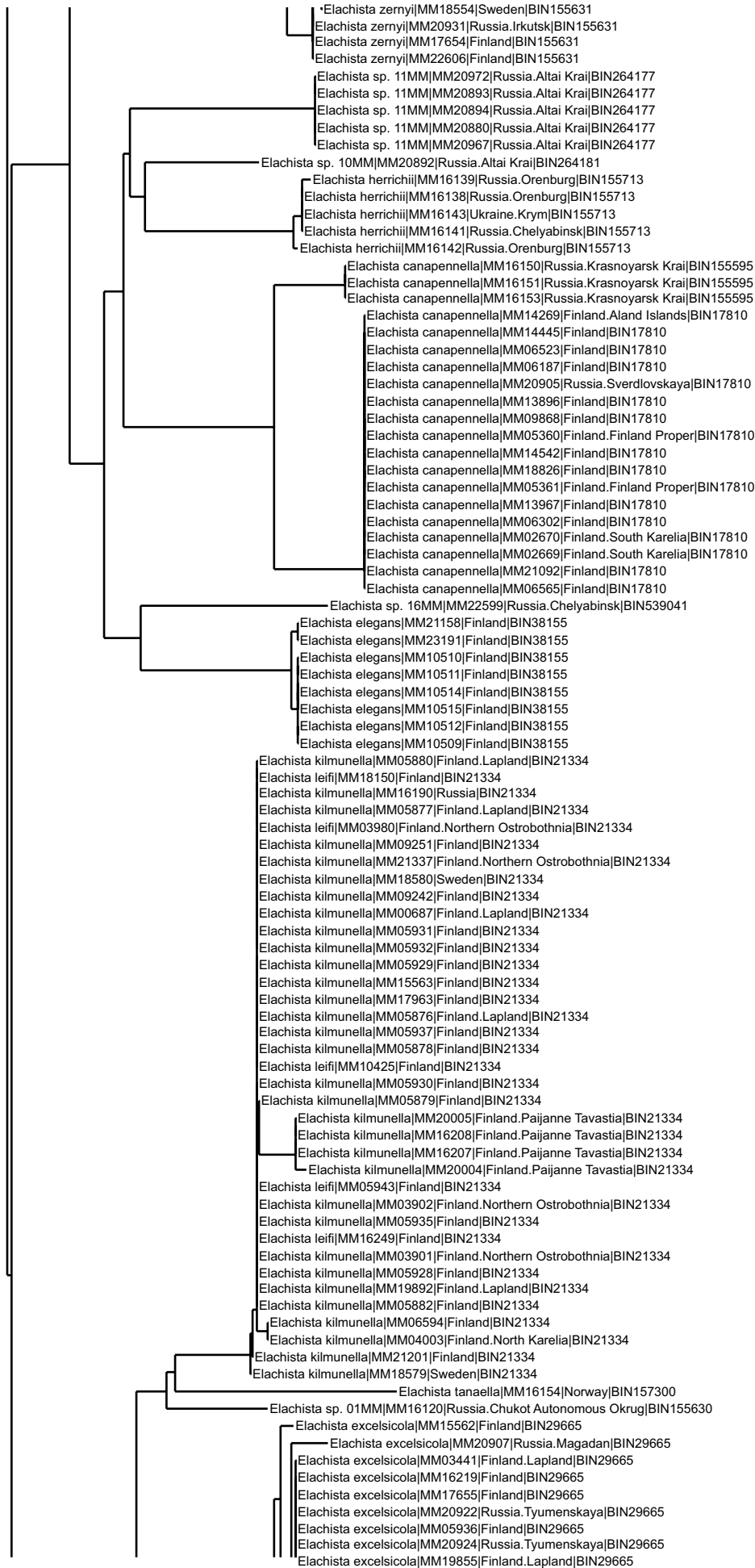
Figure S1. A map of collection localities of the samples included in this study. Records representing named species are depicted as blue dots, records representing putative new species as red triangles. Each of the 16 putative new species was found only in a single locality. The map was created using the SimpleMapp<sup>64</sup>.







Elachista orstadii|MM20884|Russia.Altai Krai|BIN155716  
Elachista orstadii|MM16137|Russia.Altai Krai|BIN155716  
Elachista orstadii|MM16133|Russia.Tyva|BIN155716  
Elachista orstadii|MM21454|Greece.Epirus|BIN155716  
Elachista orstadii|MM21452|Greece.Epirus|BIN155716  
Elachista orstadii|MM21453|Greece.Epirus|BIN155716  
Elachista orstadii|MM20901|Russia.Orenburg|  
Elachista orstadii|MM20970|Russia.Altai Krai|  
Elachista orstadii|MM16136|Russia.Altai Krai|BIN155716  
Elachista sp. 07MM|MM21389|Ukraine|BIN89389  
Elachista sp. 07MM|MM21388|Ukraine|BIN89389  
Elachista sp. 07MM|MM16170|Ukraine.Krym|BIN89389  
Elachista sp. 07MM|MM21391|Ukraine|  
Elachista atricomella|MM20988|Croatia|BIN89389  
Elachista atricomella|MM20937|Bulgaria|BIN89389  
Elachista atricomella|MM20942|Greece|BIN89389  
Elachista atricomella|MM21445|Greece|BIN89389  
Elachista atricomella|MM20938|Bulgaria|BIN89389  
Elachista atricomella|MM21444|Greece|BIN89389  
Elachista atricomella|MM20940|Bulgaria|BIN89389  
Elachista atricomella|MM19862|Sweden|BIN89389  
Elachista atricomella|MM18546|Sweden.Gotland|BIN89389  
Elachista atricomella|MM17257|Sweden|BIN89389  
Elachista atricomella|MM18547|Sweden.Gotland|BIN89389  
Elachista atricomella|MM20987|Croatia|BIN89389  
Elachista atricomella|MM21447|Austria.Tirol|BIN89389  
Elachista atricomella|MM21386|Slovakia|BIN89389  
Elachista atricomella|MM20989|Croatia|BIN89389  
Elachista atricomella|MM20022|Estonia|BIN89389  
Elachista atricomella|MM20023|Estonia|BIN89389  
Elachista atricomella|MM20918|Estonia|BIN89389  
Elachista atricomella|MM17256|Sweden|BIN89389  
Elachista atricomella|MM21387|Slovenia|BIN89389  
Elachista atricomella|MM16223|Estonia|BIN89389  
Elachista sp. 14MM|MM15494|Turkey|BIN89389  
Elachista sp. 14MM|MM15492|Turkey|BIN89389  
Elachista sp. 14MM|MM21341|Turkey|  
Elachista sp. 14MM|MM15493|Turkey|BIN89389  
Elachista sp. 13MM|MM22541|Kyrgyzstan|BIN155442  
Elachista sp. 12MM|MM21475|Russia.Altai Krai|  
Elachista sp. 12MM|MM20971|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM21468|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM20969|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM21473|Russia.Altai Krai|  
Elachista sp. 12MM|MM21470|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM21472|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM22536|Russia.Tyva|BIN155442  
Elachista sp. 12MM|MM21474|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM20878|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM22535|Russia.Tyva|BIN155442  
Elachista sp. 12MM|MM20968|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM20973|Russia.Altai Krai|BIN155442  
Elachista sp. 12MM|MM20886|Russia.Altai Krai|BIN155442  
Elachista subnigrella|MM15299|Estonia|BIN155442  
Elachista subnigrella|MM16245|Austria|BIN155442  
Elachista subnigrella|MM18551|Sweden|BIN155442  
Elachista subnigrella|MM19866|Sweden|BIN155442  
Elachista subnigrella|MM16131|Sweden|BIN155442  
Elachista subnigrella|MM16132|Sweden|BIN155442  
Elachista subnigrella|MM18550|Sweden|BIN155442  
Elachista fuscofrontella|MM16175|Estonia|BIN157299  
Elachista fuscofrontella|MM21451|Russia.Orenburg|BIN157299  
Elachista albicapilla|MM20832|France|BIN264189  
Elachista albifrontella|MM20891|Russia.Altai Krai|BIN40022  
Elachista albifrontella|MM12029|Finland|BIN40022  
Elachista albifrontella|MM06161|Finland|BIN40022  
Elachista albifrontella|MM06598|Finland|BIN40022  
Elachista albifrontella|MM14309|Finland.Aland Islands|BIN40022  
Elachista albifrontella|MM02662|Finland.South Karelia|BIN40022  
Elachista albifrontella|MM06514|Finland|BIN40022  
Elachista albifrontella|MM20887|Russia.Altai Krai|BIN40022  
Elachista albifrontella|MM14235|Finland.Aland Islands|BIN40022  
Elachista deriventa|MM14012|Finland|BIN38121  
Elachista deriventa|MM14011|Finland|BIN38121  
Elachista deriventa|MM16310|Finland.Paijanne Tavastia|BIN38121  
Elachista deriventa|MM04316|Finland|BIN38121  
Elachista deriventa|MM15197|Finland|BIN38121  
Elachista deriventa|MM14008|Finland|BIN38121  
Elachista deriventa|MM14009|Finland|BIN38121  
Elachista deriventa|MM14010|Finland|BIN38121  
Elachista zernyi|MM20932|Russia.Buryatiya|  
Elachista zernyi|MM20933|Russia.Buryatiya|BIN155631  
Elachista zernyi|MM16124|Russia.Buryatiya|BIN155631  
Elachista zernyi|MM16123|Russia|BIN155631  
Elachista zernyi|MM16121|Russia|BIN155631  
Elachista zernyi|MM16125|Russia.Buryatiya|BIN155631  
Elachista zernyi|MM16122|Russia|BIN155631  
Elachista zernyi|MM18555|Sweden|BIN155631  
Elachista zernyi|MM18554|Sweden|BIN155631  
Elachista zernyi|MM20931|Russia.Irkutsk|BIN155631  
Elachista zernyi|MM17654|Finland|BIN155631



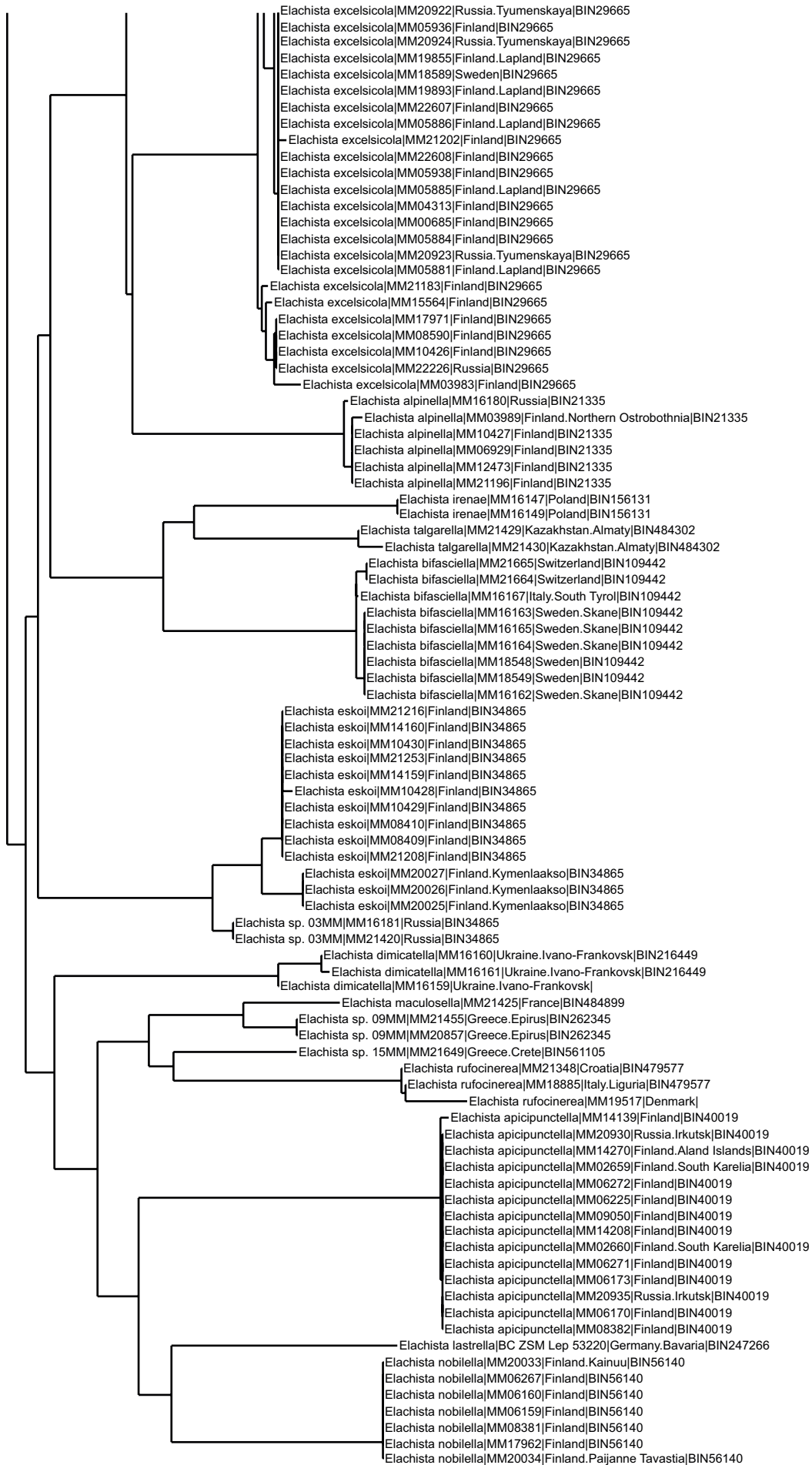


Figure S2. A detailed Neighbor-Joining tree, generated under the K2P nucleotide substitution model, of the study taxa with BIN numbers indicated for each specimen. The tree includes the outgroup species (*E. abiskoella*) but is not rooted to it.