

Table S1. Voucher information for the specimens used for the comparison and phylogenies of the Palearctic species.

Species	Voucher	COI Genbank accession number	16S Genbank accession number	Country	USI number
<i>L. gemellatus</i>	LO05	MZ389848	MZ429344	Russia/ Volgograd Prov.	ZISP_ENT 00000098
<i>L. gemellatus</i>	LO31	MZ389846	MZ429346	Russia/ Voronezh Prov.	ZISP_ENT 00001008
<i>L. gemellatus</i>	LO69	MZ389847	MZ429345	Russia/ Volgograd Prov.	ZISP_ENT 00000892
<i>L. gemellatus</i>	LO80	N/A	MZ429376	Russia/ Astrakhan Prov.	ZISP_ENT 00000902
<i>L. gemellatus</i>	LO92	MZ389849	MZ429343	Russia/ Tyva Rep.	ZISP_ENT 00001164
<i>L. gemellatus</i>	LO65	MZ389850	N/A	Russia/ Tyumen Prov.	ZISP_ENT 00000976
<i>L. gemellatus</i>	LO60	MZ389851	N/A	Russia/ Saratov Prov.	ZISP_ENT 00000973
<i>L. gemellatus</i>	LO99	N/A	MZ429374	Belarus	ZISP_ENT 00001173
<i>L. gemellatus</i>	LO103	N/A	MZ429373	Russia/ Bashkortostan Rep.	ZISP_ENT 00001243
<i>L. gemellatus</i>	LO104	MZ389852	MZ429342	Russia/ Orenburg Prov.	ZISP_ENT 00001244
<i>L. gemellatus</i>	LO81	N/A	MZ429372	Russia/ Astrakhan Prov.	ZISP_ENT 00000903
<i>L. gemellatus</i>	LO83	MZ389853	MZ429336	Russia/ Astrakhan Prov.	ZISP_ENT 00000905
<i>L. gemellatus</i>	LO100	MZ389854	MZ429381	Mongolia	ZISP_ENT 00001240
<i>L. gemellatus</i>	LO18	MZ389855	MZ429341	Morocco	ZISP_ENT 00001021
<i>L. gemellatus</i>	LO102	MZ389856	MZ429340	Russia/ Komi Rep.	ZISP_ENT 00001242
<i>L. gemellatus</i>	LO72	N/A	MZ429375	Russia/ Tyumen Prov.	ZISP_ENT 00000894
<i>L. gemellatus</i>	LO73	N/A	MZ429377	Russia/ Tyumen Prov.	ZISP_ENT 00000895
<i>L. gemellatus</i>	LO87	MZ389857	MZ429339	Russia/ Irkutsk Prov.	ZISP_ENT 00001161
<i>L. gemellatus</i>	LO86	MZ389858	MZ429338	Russia/ Irkutsk Prov.	ZISP_ENT 00001160
<i>L. gemellatus</i>	LO85	MZ389859	N/A	Russia/ Irkutsk Prov.	ZISP_ENT 00001159
<i>L. gemellatus</i>	LO61	MZ389860	MZ429337	Russia/ Buryatia Rep.	AMNH_PBI 00348724
<i>L. gemellatus</i>	LO56	MZ389861	MZ429335	Russia/ Astrakhan Prov.	ZISP_ENT 00000969
<i>L. gemellatus</i>	LO101	N/A	MZ429380	Mongolia	ZISP_ENT 00001241
<i>L. pratensis</i>	LO02	MZ389827	MZ429365	Russia/ Tatarstan Rep.	ZISP_ENT 00000095
<i>L. pratensis</i>	LO03	MZ389832	MZ429360	Russia/ Saratov Prov.	ZISP_ENT 00000096
<i>L. pratensis</i>	LO06	MZ389833	MZ429359	Poland	ZISP_ENT 00000099
<i>L. pratensis</i>	LO51	MZ389821	MZ429371	Russia/ Voronezh Prov.	ZISP_ENT 00000943
<i>L. pratensis</i>	LO42	MZ389822	MZ429370	Russia/ Voronezh Prov.	ZISP_ENT 00001012

<i>L. pratensis</i>	LO32	MZ389823	MZ429369	Russia/ Voronezh Prov.	ZISP_ENT 00001009
<i>L. pratensis</i>	LO30	MZ389824	MZ429368	Russia/ Voronezh Prov.	ZISP_ENT 00001007
<i>L. pratensis</i>	LO08	MZ389825	MZ429367	Ukraine	ZISP_ENT 00000101
<i>L. pratensis</i>	LO45	MZ389826	MZ429366	Russia/ Tatarstan Rep.	ZISP_ENT 00000937
<i>L. pratensis</i>	LO93	MZ389828	N/A	Russia/ Stavropol Prov.	ZISP_ENT 00001168
<i>L. pratensis</i>	LO50	MZ389829	MZ429364	Russia/ Saratov Prov.	ZISP_ENT 00000942
<i>L. pratensis</i>	LO49	MZ389830	MZ429363	Russia/ Saratov Prov.	ZISP_ENT 00000941
<i>L. pratensis</i>	LO48	MZ389831	MZ429362	Russia/ Saratov Prov.	ZISP_ENT 00000940
<i>L. pratensis</i>	LO79	MZ389836	MZ429356	Italy	ZISP_ENT 00000901
<i>L. pratensis</i>	LO89	MZ389837	MZ429355	Russia/ Irkutsk Prov.	ZISP_ENT 00001163
<i>L. pratensis</i>	LO75	MZ389838	MZ429354	Russia/ Dagestan Rep.	ZISP_ENT 00000897
<i>L. pratensis</i>	LO07	MZ389839	MZ429353	Czech Republic	ZISP_ENT 00000100
<i>L. pratensis</i>	LO47	MZ389840	MZ429352	Russia/ Belgorod Prov.	ZISP_ENT 00000939
<i>L. pratensis</i>	LO21	MZ389841	MZ429351	Russia/ Belgorod Prov.	ZISP_ENT 00001024
<i>L. pratensis</i>	LO16	MZ389842	MZ429350	Russia/ Belgorod Prov.	ZISP_ENT 00001019
<i>L. pratensis</i>	LO76	MZ389843	MZ429349	Belarus	ZISP_ENT 00000898
<i>L. pratensis</i>	LO77	MZ389844	MZ429348	Russia/ Bashkortostan Rep.	ZISP_ENT 00000899
<i>L. pratensis</i>	LO57	MZ389845	MZ429347	Russia/ Bashkortostan Rep.	ZISP_ENT 00000970
<i>L. pratensis</i>	LO19	MZ389864	MZ429361	Russia/ Saratov Prov.	ZISP_ENT 00001022
<i>L. pratensis</i>	LO78	MZ389867	N/A	Russia/ Sverdlovsk Prov.	ZISP_ENT 00000900
<i>L. pratensis</i>	from Namyatova et al. 2021	MH359348	MH407322	Italy	UNSW_ENT 00027643
<i>L. punctatus</i>	LO27	MZ389816	MZ429386	Russia/ Voronezh Prov.	ZISP_ENT 00001004
<i>L. punctatus</i>	LO63	N/A	MZ429382	Russia/ Yamalo-Nenets Aut. Dist.	ZISP_ENT 00000974
<i>L. punctatus</i>	LO98	MZ389817	MZ429385	Russia/ Sverdlovsk Prov.	ZISP_ENT 00001172
<i>L. punctatus</i>	LO97	MZ389818	N/A	Russia/ Sverdlovsk Prov.	ZISP_ENT 00001171
<i>L. punctatus</i>	LO24	MZ389819	MZ429384	Russia/ Ryazan Prov.	ZISP_ENT 00001027
<i>L. punctatus</i>	LO84	MZ389820	MZ429383	Russia/ Irkutsk Prov.	ZISP_ENT 00001158
<i>L. rugulipennis</i>	LO01	MZ389809	MZ429394	Russia/ Lipetsk Prov.	ZISP_ENT 00000094
<i>L. rugulipennis</i>	LO44	MZ389798	MZ429408	Russia/ Voronezh Prov.	ZISP_ENT 00001014
<i>L. rugulipennis</i>	LO43	MZ389799	MZ429407	Russia/ Voronezh Prov.	ZISP_ENT 00001013

<i>L. rugulipennis</i>	LO29	MZ389800	MZ429406	Russia/ Voronezh Prov.	ZISP_ENT 00001006
<i>L. rugulipennis</i>	LO28	MZ389801	MZ429405	Russia/ Voronezh Prov.	ZISP_ENT 00001005
<i>L. rugulipennis</i>	LO113	MZ389802	MZ429404	Russia/ Volgograd Prov.	ZISP_ENT 00001078
<i>L. rugulipennis</i>	LO67	MZ389803	MZ429403	Russia/ Tyumen Prov.	ZISP_ENT 00000978
<i>L. rugulipennis</i>	LO46	MZ389804	MZ429401	Russia/ Tatarstan Rep.	ZISP_ENT 00000938
<i>L. rugulipennis</i>	LO115	MZ389805	MZ429400	Russia/ Sverdlovsk Prov.	ZISP_ENT 00001238
<i>L. rugulipennis</i>	LO59	MZ389806	MZ429399	Russia/ Saratov Prov.	ZISP_ENT 00000972
<i>L. rugulipennis</i>	LO25	MZ389807	MZ429398	Russia/ Ryazan Prov.	ZISP_ENT 00001002
<i>L. rugulipennis</i>	LO23	MZ389808	MZ429397	Russia/ Ryazan Prov.	ZISP_ENT 00001026
<i>L. rugulipennis</i>	LO26	MZ389810	MZ429393	Russia/ Leningrad Prov.	ZISP_ENT 00001003
<i>L. rugulipennis</i>	LO90	MZ389811	MZ429392	Russia/ Irkutsk Prov.	ZISP_ENT 00001164
<i>L. rugulipennis</i>	LO11	MZ389812	MZ429391	France	ZISP_ENT 00000104
<i>L. rugulipennis</i>	LO74	N/A	MZ429390	Russia/ Chukotka Autonomous Dist.	ZISP_ENT 00000896
<i>L. rugulipennis</i>	LO54	MZ389814	MZ429389	Russia/ Chukotka Autonomous Dist.	AMNH_PBI 00350201
<i>L. rugulipennis</i>	LO14	MZ389815	MZ429388	Bulgaria	ZISP_ENT 00001017
<i>L. rugulipennis</i>	LO12	MZ389862	MZ429395	Norway	ZISP_ENT 00001015
<i>L. rugulipennis</i>	LO13	MZ389863	MZ429396	Norway	ZISP_ENT 00001016
<i>L. rugulipennis</i>	LO20	MZ389865	MZ429387	Russia/ Belgorod Prov.	ZISP_ENT 00001023
<i>L. rugulipennis</i>	LO55	MZ389866	MZ429402	Russia/ Krasnoyarsk Prov.	AMNH_PBI 00350200
<i>L. wagneri</i>	LO04	MZ429409	MZ429409	Russia/ Buryatia Rep.	ZISP_ENT 00000097
<i>L. wagneri</i>	LO111	MZ389788	MZ429415	Russia/ Sverdlovsk Prov.	ZISP_ENT 00001085
<i>L. wagneri</i>	LO70	MZ389789	MZ429414	Russia/ Leningrad Prov.	ZISP_ENT 00000093
<i>L. wagneri</i>	LO109	MZ389792	MZ429412	Russia/ Komi Rep.	ZISP_ENT 00001073
<i>L. wagneri</i>	LO108	MZ389793	MZ429411	Russia/ Komi Rep.	ZISP_ENT 00001077
<i>L. wagneri</i>	LO88	MZ389794	N/A	Russia/ Irkutsk Prov.	ZISP_ENT 00001162
<i>L. wagneri</i>	LO10	MZ389795	MZ429410	Russia/ Buryatia Rep.	ZISP_ENT 00000103
<i>L. wagneri</i> or <i>pratensis</i>	LO22	MZ389790	MZ429413	Russia/ Ryazan Prov.	ZISP_ENT 00001025
<i>L. wagneri</i> or <i>pratensis</i>	LO09	MZ389791	N/A	Czech Republic	ZISP_ENT 00000102
<i>L. wagneri</i> or <i>pratensis</i>	LO41	MZ389834	MZ429358	Russia/ Voronezh Prov.	ZISP_ENT 00001011
<i>L. wagneri</i> or <i>pratensis</i>	LO17	MZ389835	MZ429357	Russia/ Belgorod Prov.	ZISP_ENT 00001020
<i>Lygus</i> sp.	LO82	N/A	MZ429379	Russia/ Astrakhan Prov.	ZISP_ENT 00000904
<i>Lygus</i> sp.	LO68	MZ389797	MZ429378	Russia/ Volgograd Prov.	ZISP_ENT 00000891

<i>Lygus</i> sp.	from Namyatova et al. (2021)	MH359347	MH407321	Kazakhstan	UNSW_ENT 00027650
<i>L. hesperus</i>	Unpublished	KF679984	KF679984	USA	N/A
<i>L. lineolaris</i>	from Roehrdanz et al. 2014	NC_021975	NC_021975	USA	N/A
<i>Apolygus lucorum</i>	from Wang et al. (2021)	KU234539	KU234539	China	N/A

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