

Supplementary information for Vinarski et al. 'The pond snails of the genus *Radix* (Gastropoda, Lymnaeidae) in Issyk-Kul Lake (Central Asia), with a review of *Radix* in ancient tectonic lakes of the world'

Table S1

List of *COI* sequences of *Radix auricularia* used in this study

<i>COI</i> GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
KM067596	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
KM067597	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
KM067598	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
KM067599	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
KM067600	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
KM067601	Russia Far East	Russia: Kamchatka, Paratunskie Hot Springs	Bolotov et al. (2014)
OQ318814	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318815	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318813	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318816	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318817	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318818	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
OQ318819	Russia Far East	Russia: Kamchatka Peninsula	Vinarski et al. (2023)
KM067602	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM067603	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM067604	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM067605	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM111179	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM111180	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM067606	Russia Far East	Russia: Kamchatka, Khodutka Hot Lake	Bolotov et al. (2014)
KM067607	Russia Far East	Russia: Kamchatka, Malkinskie Hot Springs	Bolotov et al. (2014)
KM067608	Russia Far East	Russia: Kamchatka, Malkinskie Hot Springs	Bolotov et al. (2014)
KM067609	Russia Far East	Russia: Kamchatka, Malkinskie Hot Springs	Bolotov et al. (2014)
KM067610	Russia Far East	Russia: Kamchatka, Malkinskie Hot Springs	Bolotov et al. (2014)
KM067611	Russia Far East	Russia: Kamchatka, Malkinskie Hot Springs	Bolotov et al. (2014)
KM067612	Russia Far East	Russia: Kamchatka, Plotnikova River	Bolotov et al. (2014)
KM067613	Russia Far East	Russia: Kamchatka, Plotnikova River	Bolotov et al. (2014)
KT867293	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
KT867294	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
KT867295	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
KT867296	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
KT867297	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867298	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)

COI GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
KT867299	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867300	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867301	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867302	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867303	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867304	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867305	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867306	Siberia	Russia: Republic of Buryatia, Khakusy thermal spring	Aksenova et al. (2017)
KT867307	Siberia	Russia: Republic of Buryatia, Irkaninskiy thermal spring	Aksenova et al. (2017)
KT867308	Siberia	Russia: Republic of Buryatia, Irkaninskiy thermal spring	Aksenova et al. (2017)
KT867309	Siberia	Russia: Republic of Buryatia, Irkaninskiy thermal spring	Aksenova et al. (2017)
KT867310	Siberia	Russia: Republic of Buryatia, Irkana lake	Aksenova et al. (2017)
KT867311	Siberia	Russia: Republic of Buryatia, Irkana lake	Aksenova et al. (2017)
KT867312	Siberia	Russia: Republic of Buryatia, Irkana lake	Aksenova et al. (2017)
KT867313	Siberia	Russia: Republic of Buryatia, Kironskiy thermal spring	Aksenova et al. (2017)
KT877349	Siberia	Russia: Republic of Buryatia, Kironskiy thermal spring	Aksenova et al. (2017)
KT867314	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867315	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867316	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867317	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867318	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867319	Siberia	Russia: Republic of Buryatia, Baikal Lake	Aksenova et al. (2017)
KT867321	Siberia	Russia: Irkutsk region, Irkut river	Aksenova et al. (2017)
KT867296	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
MH189863	Tibetan Plateau	China: Tibet	Aksenova et al. (2018)
MH189864	Tibetan Plateau	China: Tibet	Aksenova et al. (2018)
MH189908	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH189910	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH189920	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2018)
MH189921	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2018)
MH189922	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2018)
MH189923	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2018)
MH189924	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2018)
MH189985	Siberia	Russia: Novosibirsk Oblast	Aksenova et al. (2018)
MH189986	Siberia	Russia: Novosibirsk Oblast	Aksenova et al. (2018)
MH189987	Siberia	Russia: Novosibirsk Oblast	Aksenova et al. (2018)
MH189988	Siberia	Russia: Krasnoyarsk Krai	Aksenova et al. (2018)
MH189989	Siberia	Russia: Krasnoyarsk Krai	Aksenova et al. (2018)
MH189990	Siberia	Russia: Krasnoyarsk Krai	Aksenova et al. (2018)
MH189991	Siberia	Russia: Sakha (Yakutia) Republic	Aksenova et al. (2018)
MH189992	Siberia	Russia: Sakha (Yakutia) Republic	Aksenova et al. (2018)

<i>COI</i> GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
MH189993	Siberia	Russia: Sakha (Yakutia) Republic	Aksenova et al. (2018)
MH190008	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MOBIL1472-16	USA: Alaska	USA: Alaska, Kenai Peninsula	Bold Systems V4
KT326304	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KT326309	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KT326308	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KT326307	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KT326306	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KT326305	Tibetan Plateau	China: Qinghai, Hainan Tibetan Autonomous Prefecture, Xinghai County	von Oheimb et al. (2016)
KX585182	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585181	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585180	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585179	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585178	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585177	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona drainage system	Clewing et al. (2016)
KX585176	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585172	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585171	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585169	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585168	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585167	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585166	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585165	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585162	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585156	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585155	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585154	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585153	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585152	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585151	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585150	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585149	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)

<i>COI</i> GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
KX585099	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585095	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585093	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585170	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585098	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585159	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
KX585100	Tibetan Plateau	China: Golog Tibetan Autonomous Prefecture, Lake Donggi Cona	Clewing et al. (2016)
MH189994	Siberia	Russia: Yamalo-Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190006	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190009	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MH190010	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MH190011	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MH190012	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MH190013	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2018)
MH190017	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190018	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190020	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190021	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190029	European Russia	Russia: Nenets Autonomous Okrug	Aksenova et al. (2018)
MH190034	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH190035	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH190036	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH190039	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
MH190043	Russia Far East	Russia: Khabarovsk Krai	Aksenova et al. (2018)
OP084730	Alaska	USA: Alaska	Aksenova et al. (2024)
OP084731	Alaska	USA: Alaska	Aksenova et al. (2024)
OP084732	Alaska	USA: Alaska	Aksenova et al. (2024)
OP084742	Tibetan Plateau	China: Xinjiang	Aksenova et al. (2024)
OP084755	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OP084774	Russia Far East	Russia: Arkhangelsk Oblast	Aksenova et al. (2024)
OQ318827	Central Asia	Kazakhstan: Aktobe Region	Vinarski et al. (2023)
OP084780	Central Asia	Kazakhstan: Aktobe Region	Aksenova et al. (2024)
OP084810	Central Asia	Kazakhstan: East Kazakhstan Region	Aksenova et al. (2024)
OP084814	Russia Far East	Russia: Amur Oblast	Aksenova et al. (2024)
OP084826	Russia Far East	Russia: Primorsky Krai	Aksenova et al. (2024)
OP084832	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)

<i>COI</i> GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
OP084834	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084837	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084839	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084840	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084841	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084846	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084853	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084854	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084855	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084856	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084857	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084858	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084859	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084860	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084868	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084869	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084870	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084878	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084881	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084882	Russia Far East	Russia: Kamchatka Peninsula	Aksenova et al. (2024)
OP084887	Siberia	Russia: Kemerovo Oblast	Aksenova et al. (2024)
OP084889	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OP084890	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OP084891	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OP084892	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OQ318837	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OP084893	Siberia	Russia: Republic of Yakutia	Aksenova et al. (2024)
OQ318839	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318840	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318842	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318844	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318845	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318846	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)
OQ318847	Siberia	Russia: Republic of Yakutia	Vinarski et al. (2023)

<i>COI</i> GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
OQ318848	Siberia	Russia: Irkutsk Oblast	Vinarski et al. (2023)
OQ318849	Siberia	Russia: Irkutsk Oblast	Vinarski et al. (2023)
OP084719	Europe	Russia: Kaliningrad Oblast	Aksenova et al. (2024)
OP084846	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084790	Europe	Italy: Tuscany	Aksenova et al. (2024)
OP084816	Canada: British Columbia	Canada: British Columbia	Aksenova et al. (2024)
OP084838	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084844	Russia Far East	Russia: Chukchi Peninsula	Aksenova et al. (2024)
OP084894	Siberia	Russia: Republic of Buryatia	Aksenova et al. (2024)
OP084895	Siberia	Russia: Republic of Buryatia	Aksenova et al. (2024)
KM067614	Russia Far East	Russia: Kunashir, Aliger Lake	Bolotov et al. (2014)
LC360980	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360976	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360978	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360977	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC658639	Japan	Japan: Hokkaido	Saito et al. (2021)
LC360963	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360979	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360964	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360965	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360973	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC658650	Japan	Japan: Hokkaido	Saito et al. (2021)
LC360972	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC658640	Japan	Japan: Hokkaido	Saito et al. (2021)
LC360971	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360969	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360968	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC658382	Japan	Japan: Hokkaido	Saito et al. (2021)
KM067615	Russia Far East	Russia: Primorye, pond near Razdolnaya River	Bolotov et al. (2014)
LC658609	Russia Far East	Russia: Primorsky Krai	Saito et al. (2021)
LC658524	Russia Far East	Russia: Primorsky Krai	Saito et al. (2021)
KM067618	Russia Far East	Russia: Sakhalin, Tym River	Bolotov et al. (2014)
KT867296	Siberia	Russia: Republic of Buryatia, Dzelindinskiye thermal springs	Aksenova et al. (2017)
LC658407	Central Asia	Mongolia: Ovorkhangai	Saito et al. (2021)
LC658655	Central Asia	Mongolia: Khovsgol	Saito et al. (2021)
LC658578	Russia Far East	Russia: Primorsky Krai	Saito et al. (2021)

COI GenBank acc. no.	Region in the Median joining network	Country, locality	Reference
LC658525	Russia Far East	Russia: Primorsky Krai	Saito et al. (2021)
LC658500	Russia Far East	Russia: Kamchatka	Saito et al. (2021)
KM067616	Russia Far East	Russia: Primorye, Ussuri River	Bolotov et al. (2014)
LC360967	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360966	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360962	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360960	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC360959	Japan	Japan: Hokkaido	Ohari et al. (2020)
LC658450	Japan	Japan: Hokkaido	Saito et al. (2021)
LC658449	Japan	Japan: Hokkaido	Saito et al. (2021)
LC658607	Japan	Japan: Hokkaido	Saito et al. (2021)
KU950448	European Russia	Russia: Arkhangelsk Oblast, Severnaya Dvina River	Aksenova et al. (2016)
MH189895	European Russia	Russia: Leningrad Oblast	Aksenova et al. (2018)
MH189904	European Russia	Russia: Republic of Crimea	Aksenova et al. (2018)
MH189996	European Russia	Russia: Moscow Oblast	Aksenova et al. (2018)
OP084787	Europe	Italy: Piedmont	Aksenova et al. (2024)
MH189868	European Russia	Russia: Krasnodar Krai	Aksenova et al. (2018)

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Table S2

Morphometric characteristics of *Radix obliquata* and *R. subdisjuncta* shells
from Issyk-Kul Lake (Cholpon-Ata, sampling date 07.2013)

Measurement / index	<i>R. obliquata</i> (n = 23)*	<i>R. subdisjuncta</i> (n = 43)**
Whorl number	<u>2.75–4.12***</u> 3.56±0.32	<u>2.75–4.75***</u> 3.72±0.39
Shell height (SH)	<u>14.8–32.1</u> 19.5±4.7	<u>10.2–16.0</u> 12.7±1.6
Shell width (SW)	<u>12.1–35.2</u> 17.8±5.8	<u>6.0–12.8</u> 9.1±1.8
Spire height (SpH)	<u>1.6–4.9</u> 3.3±0.8	<u>2.5–6.3</u> 3.9±0.7
Body whorl height (BWH)	<u>12.9–31.1</u> 17.6±4.7	<u>7.8–13.6</u> 10.6±1.6
Aperture height (AH)	<u>11.8–31.5</u> 17.4±5.0	<u>6.5–12.3</u> 9.2±1.6
Aperture width (AW)	<u>8.3–23.1</u> 12.5±3.7	<u>4.0–9.0</u> 6.4±1.2
SW/SH	<u>0.77–1.10</u> 0.90±0.10	<u>0.59–0.83</u> 0.71±0.06
SpH/SH	<u>0.09–0.29</u> 0.17±0.05	<u>0.22–0.45</u> 0.31±0.05
BWH/SH	<u>0.85–0.97</u> 0.90±0.03	<u>0.76–0.88</u> 0.83±0.03
AH/SH	<u>0.78–1.00</u> 0.88±0.06	<u>0.58–0.82</u> 0.72±0.06
AW/AH	<u>0.64–0.80</u> 0.72±0.04	<u>0.62–0.83</u> 0.69±0.05

Table S3

PCA loadings of the conchometric variables on the first three axes (*Radix obliquata* and *R. subdisjuncta* from Issyk-Kul Lake)

Eigenvalues %	Variable	PC1	PC2	PC3
		108.827 98.18	1.1740 1.06	0.5266 0.48
Eigenvectors	Whorl number	-0.01284	0.1152	-0.00239
	Shell height	0.419	0.5543	-0.2099
	Shell width	0.5271	-0.3261	0.6729
	Spire height	-0.00969	0.6382	0.4332
	Body whorl height	0.4305	0.2837	-0.1153
	Aperture height	0.4806	-0.2174	-0.5357
	Aperture width	0.3606	-0.1952	0.1235