

Supplementary table 1. The collecting points in the Mondy settlement area

Area on the map	Field №	Habitat description	Collection date	longitude	latitude	alt, m	Collector
1	294	right bank of Irkut River upstream Mondy, creek bank near road Mondy-Khankh (Mongolia)	9.VII.2023	100.958053	51.666077	1356	Fedosov
1	b10	right bank of Irkut River upstream Mondy, road Mondy-Khankh (Mongolia), roadside ditch at the foot of N-faced slope with <i>Larix</i> -dominated forest	9.VII.2023	100.9601	51.6665	1348	Pisarenko
1	b11	right bank of Irkut River upstream Mondy, foot of N-faced slope with <i>Larix</i> -dominated forest	9.VII.2023	100.9602	51.6654	1360	Pisarenko
1	b12	right bank of Irkut River upstream Mondy, Ovoo-Gorkhi Creek banks.	9.VII.2023	100.9577	51.666	1350	Pisarenko
2	292	right bank of Irkut River upstream Mondy, boggy depression	9.VII.2023	100.974573	51.667365	1340	Fedosov
2	293	right bank of Irkut River upstream Mondy, forested slope near road Mondy-Mondy-Khankh (Mongolia)	9.VII.2023	100.960188	51.666457	1349	Fedosov
2	b8	right bank of Irkut River upstream Mondy, mosaic of <i>Larix</i> -forest and petrophytic steppes on eskers	9.VII.2023	100.9748	51.6672	1348	Pisarenko
2	b9	right bank of Irkut River upstream Mondy, the swampy periphery of small pool with peat outcrops	9.VII.2023	100.9747	51.6652	1340	Pisarenko
3	299	left bank of Irkut River upstream Mondy, rock outcrops and steppe along the river	11.VII.2023	100.974765	51.678129	1354	Fedosov
3	300	birch dominated forest on the northern slope of moraine hill	11.VII.2023	100.967522	51.682838	1415	Fedosov
3	301	open steppe community	11.VII.2023	100.975603	51.681617	1363	Fedosov
3	b16a	left bank of Irkut River upstream Mondy, a moraine hill at the interfluvium of rivers Irkut and Bulukhta, S-faced steppe slope, sedimentary rock outcrops (conglomerates)	11.VII.2023	100.9746	51.6783	1330	Pisarenko
3	b16b	top of the moraine hill, <i>Artemisia</i> -dominated steppe	11.VII.2023	100.9662	51.6805	1430	Pisarenko
3	b16c	N-faced slope of moraine hill, grassy mixed <i>Betula</i> & <i>Larix Larix</i> -dominated forest	11.VII.2023	100.9694	51.6835	1400	Pisarenko
3	b16d	E-faced slope of moraine hill, steppe community	11.VII.2023	100.9758	51.6819	1355	Pisarenko
4	286	rocky steppe on S-faced slope of the moraine hill	7.VII.2023	100.999848	51.677434	1294	Fedosov
4	287	rocky steppe on S-faced slope of the moraine hill	7.VII.2023	101.003942	51.68137	1440	Fedosov
4	288	forest on slope of the moraine hill	8.VII.2023	100.997541	51.681557	1418	Fedosov

4	b1	Irkut River Valley, lateral moraine along the southern macroslope of the Tunkinskie Goltsy Range, at the foot of Khulugaisha Mt., steep S-faced slope, petrophytic steppe	7.VII.2023	101.003	51.679	1300 - 1400	Pisarenko
4	b2	southern macroslope of the Tunkinskie Goltsy Range, at the foot of Khulugaisha Mt., steep S-faced slope above lateral moraine, grassy <i>Larix</i> -dominated forest in shallow ravine	7.VII.2023	100.9976	51.6816	1424	Pisarenko
4	b3	southern macroslope of the Tunkinskie Goltsy Range, at the foot of Khulugaisha Mt., steep S-faced slope, grassy <i>Larix</i> -dominated forest	8.VII.2023	101.0017	51.6869	1480	Pisarenko
5	289	forest on southern slope of Khulugaisha Mt.	8.VII.2023	101.006308	51.694753	1528	Fedosov
5	290	minerotrophic bog on southern slope of Khulugaisha Mt.	8.VII.2023	100.99661	51.7053	1702	Fedosov
5	291	shallow lake in depression on southern slope of Khulugaisha Mt.	8.VII.2023	100.994554	51.699264	1570	Fedosov
5	b4	S-faced macro-slope of the Khulugaisha Mt. in the lower part; wet <i>Larix</i> -forest on a flat spot	8.VII.2023	101.0063	51.6948	1530	Pisarenko
5	b5	S-faced macro-slope of the Khulugaisha Mt. in the lower part, covered by <i>Larix</i> -dominated forest; broad gully with granite boulders	8.VII.2023	100.9992	51.7002	1590	Pisarenko
5	b6	<i>Larix</i> -dominated peatmoss boggy forest along the outlet of the groundwater on a concave spot in the middle part of Khulugaisha Mt.	8.VII.2023	100.9966	51.7052	1715	Pisarenko
5	b7	upper part of forest-belt, grassy <i>Betula</i> -forest	8.VII.2023	100.9937	51.707	1770	Pisarenko
6	295	forest on southern slope of Khulugaisha Mt.	10.VII.2023	101.008812	51.696413	1550	Fedosov
6	296	rocks near mountain brook on southern slope of Khulugaisha Mt.	10.VII.2023	100.996548	51.715376	1850	Fedosov
6	297	upper part of forest belt on southern slope of Khulugaisha Mt.	10.VII.2023	100.999274	51.720752	1955	Fedosov
6	298	upper part of forest belt on southern slope of Khulugaisha Mt., rock outcrops along the ridge	10.VII.2023	101.001907	51.71789	2042	Fedosov
6	b13	S-faced macro-slope of the Khulugaisha Mt., upper part of forest belt, deep ravine with stones on <i>Larix</i> -dominated forested slope	10.VII.2023	100.9961	51.7156	1840	Pisarenko
6	b14	Khulugaisha Mt. near timberline, <i>Larix</i> dominated open forest with <i>Rhododendron</i> & <i>Dryas</i> in cover	10.VII.2023	101.0036	51.7248	2160	Pisarenko
6	b15	S-faced slope of the Khulugaisha Mt., upper part of forest belt, swampy brook banks	10.VII.2023	100.9982	51.7150	1900	Pisarenko
7	322	Khulugaima Creek middle course, forest belt, along the creek	18.VII.2023	101.02038	51.71365	1720	Fedosov
7	b38	Khulugaima Creek middle course, narrow ravine of a brook on a slope with <i>Pinus sibirica</i> & <i>Larix</i> -dominated forest	18.VII.2023	101.02209	51.71886	1860	Pisarenko
8	316	Khulugaima Creek valley, alpine belt, rocks along abandoned brook	16.VII.2023	101.017443	51.735429	2158	Fedosov
8	317	Khulugaima Creek valley, alpine belt, snowbed community	17.VII.2023	101.011609	51.743027	2285	Fedosov
8	320	Khulugaima Creek upper course, alpine belt rocks along the brook with	17.VII.2023	101.011515	51.751211	2464	Fedosov

		waterfall					
8	321	Khulugaima Creek upper course, alpine belt rocks along the creek	18.VII.2023	101.01721	51.72813	2120	Fedosov
8	b28	Khulugaima Creek upper course, above timberline, SW-faced stony valley of tributary brook	16.VII.2023	101.0194	51.7362	2190	Pisarenko
8	b29	Khulugaima Creek upper course, rock field on a slope in tundra surroundings	16.VII.2023	101.0244	51.7340	2300	Pisarenko
8	b30	Khulugaima Creek upper course, rocks along the stream under the snowfield	17.VII.2023	101.0116	51.7431	2270	Pisarenko
8	b36	Khulugaima Creek upper course, <i>Dryas</i> - dominated tundra	18.VII.2023	101.0186	51.7336	2160	Pisarenko
8	b37	Khulugaima Creek upper course, boulders in bushy tundra on SW-faced slope	18.VII.2023	101.0172	51.7303	2130	Pisarenko
9	318	Khulugaima Creek upper course below the pass, alpine belt	17.VII.2023	101.005356	51.753665	2432	Fedosov
9	319	Mountain tundra on the pass in Khulugaima Creek upper course	17.VII.2023	100.999121	51.758409	2544	Fedosov
9	b31	Khulugaima Creek upper course, wet grass-sedge tundra	17.VII.2023	101.0083	51.750	2396	Pisarenko
9	b32	Khulugaima Creek upper course, boulders near snowbed	17.VII.2023	101.0012	51.7549	2465	Pisarenko
9	b33	Khulugaima Creek upper course, grass tundra	17.VII.2023	100.9968	51.7559	2536	Pisarenko
9	b34	Khulugaima Creek upper course, boggy tundra	17.VII.2023	101.00387	51.75482	2460	Pisarenko
9	b35	Khulugaima Creek upper course, <i>Dryas</i> - dominated tundra	17.VII.2023	101.01096	51.75184	2470	Pisarenko

Supplementary table 2. Matrix of measures of mutual inclusion of several moss floras of the Cis-Baikal region

	Mondy	1	2 & 3	4	5	6
Mondy	1.00	0.79	0.70	0.75	0.51	0.63
1. Zhakhna – Sorok upstreams	0.41	1.00	0.45	0.44	0.29	0.39
2. Nilova Pustin' & 3. Yekhe-Ger–Shumak upstreams	0.56	0.68	1.00	0.70	0.51	0.54
4. Sayan-Dzhida upland	0.53	0.58	0.61	1.00	0.43	0.49
5. Middle Khamar-Daban	0.48	0.51	0.59	0.58	1.00	0.68
6. Barguzin Reserve	0.48	0.55	0.51	0.52	0.55	1.00