

Supplementary Materials



(a)



(b)



(c)



(d)



(e)



(f)

Figure S1. Images of the studied mires. Kabardno-Balkaria: Zayachye **(a)**, Vysokoe **(b)**, Konkoe **(c)**, Ushtulu **(d)**; North Ossetia-Alania: Chifanzar **(e)** and Lower Kubus **(f)**.

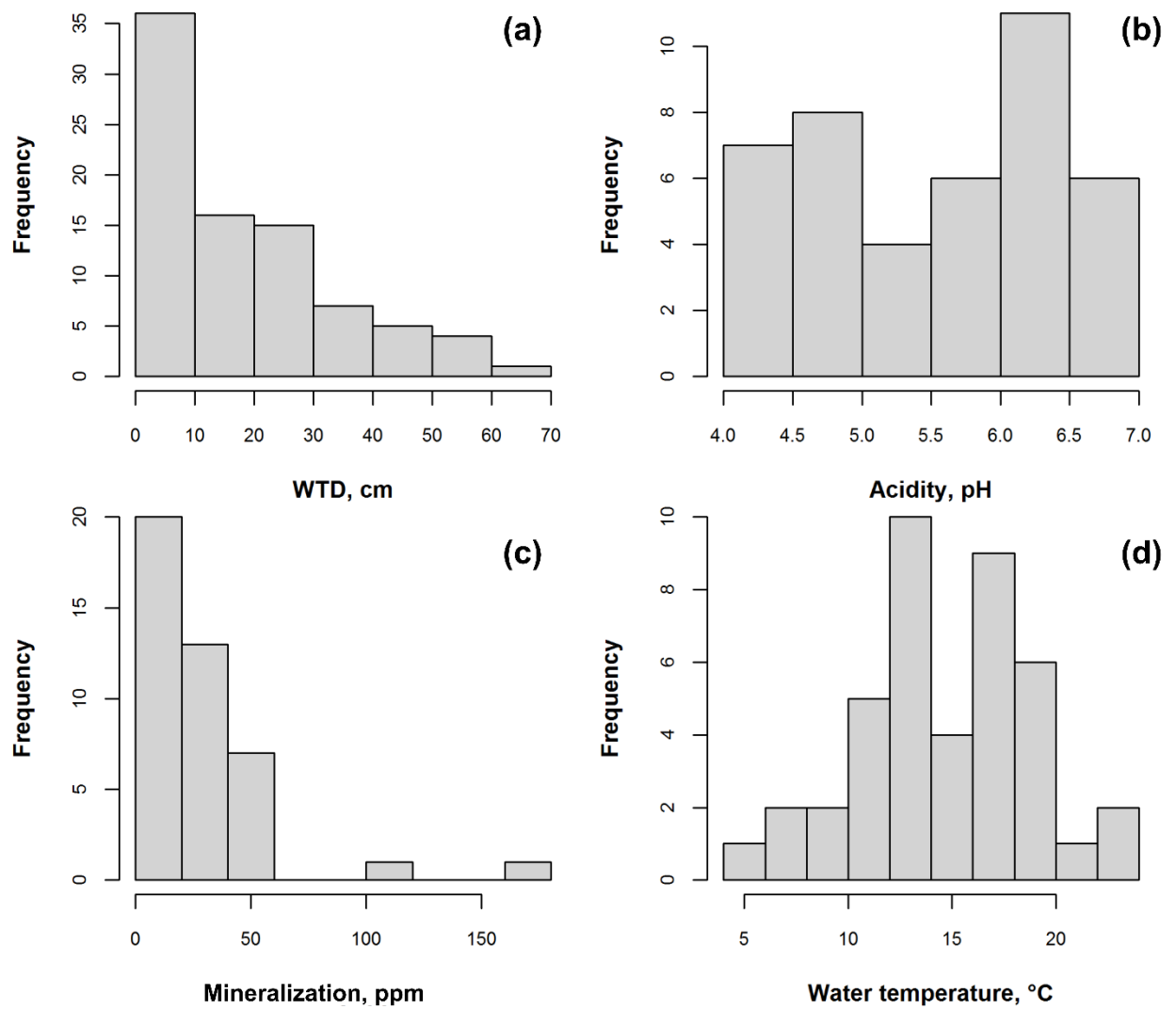


Figure S2. Histograms of (a) water table depths (WTD, cm), (b) acidity (pH), (c) mineralization (ppm) and (d) water temperature (C °) in *Sphagnum*-dominated biotopes of eight mires in the Northern Caucasus Mountains.

Table S1. An alphabetical list of the encountered testate amoebae taxa, their relative abundance (% to the total counts), occurrence (% to the total number of samples) and maximal relative abundance per sample (%).

	Taxa	Taxa codes	Relative abundance, %	Occurrence, %	Maximal relative abundance per sample, %
1	<i>Alabasta longicollis</i>	<i>Ala.lon</i>	0.1	1.2	4.7
2	<i>Alabasta militaris</i>	<i>Ala.mil</i>	0.4	10.7	16.0
3	<i>Arcella arenaria</i>	<i>Arc.are</i>	0.1	3.6	1.3
4	<i>Arcella arenaria compressa</i>	<i>Arc.arec</i>	0.0	2.4	1.3
5	<i>Arcella artocrea</i>	<i>Arc.art</i>	0.1	4.8	6.0
6	<i>Arcella catinus</i>	<i>Arc.cat</i>	0.0	2.4	1.3
7	<i>Arcella dentata</i>	<i>Arc.den</i>	0.0	1.2	0.7
8	<i>Arcella discoides</i>	<i>Arc.dis</i>	0.1	6.0	2.7
9	<i>Arcella discoides foveosa</i>	<i>Arc.disf</i>	0.2	8.3	6.7
10	<i>Arcella discoides pseudovulgaris</i>	<i>Arc.disp</i>	0.0	1.2	10.0
11	<i>Arcella discoides pseudovulgaris undulata</i>	<i>Arc.dispu</i>	0.0	1.2	2.0
12	<i>Arcella discoides scutelliformis</i>	<i>Arc.diss</i>	0.0	1.2	0.7
13	<i>Arcella hemisphaerica</i>	<i>Arc.hem</i>	0.0	2.4	8.0
14	<i>Arcella intermedia</i>	<i>Arc.hema</i>	0.0	1.2	0.7
15	<i>Arcella intermedia laevis</i>	<i>Arc.intl</i>	0.1	1.2	4.0
16	<i>Arcella rotundata</i>	<i>Arc.rot</i>	0.2	6.0	12.0
17	<i>Arcella rotundata stenostoma undulata</i>	<i>Arc.rosu</i>	0.0	3.6	1.3
18	<i>Arcella vulgaris</i>	<i>Arc.vul</i>	0.1	2.4	10.7
19	<i>Arcella vulgaris polymorpha</i>	<i>Arc.vulp</i>	0.0	1.2	4.0
20	<i>Argygnia dentistoma</i>	<i>Arg.den</i>	0.9	28.6	12.0
21	<i>Argygnia vitraea</i>	<i>Arg.vit</i>	0.1	2.4	2.7
22	<i>Assulina muscorum</i>	<i>Ass.mus</i>	15.3	83.3	90.0
23	<i>Assulina seminulum</i>	<i>Ass.sem</i>	0.0	1.2	0.7
24	<i>Awerintzewia cyclostoma</i>	<i>Awe.cyc</i>	0.0	1.2	2.0
25	<i>Centropyxis aculeata</i>	<i>Cen.acu</i>	0.2	10.7	8.0
26	<i>Centropyxis aculeata lata</i>	<i>Cen.acul</i>	0.0	1.2	2.0
27	<i>Centropyxis aculeata oblonga</i>	<i>Cen.acuo</i>	0.0	2.4	1.3
28	<i>Centropyxis aerophila</i>	<i>Cen.aer</i>	0.5	21.4	10.0
29	<i>Centropyxis aerophila sphagnicola</i>	<i>Cen.aers</i>	0.1	4.8	1.3

	Taxa	Taxa codes	Relative abundance, %	Occurrence, %	Maximal relative abundance per sample, %
30	<i>Centropyxis cassis</i>	<i>Cen.cass</i>	0.1	8.3	2.0
31	<i>Centropyxis elongata</i>	<i>Cen.elo</i>	0.1	6.0	5.3
32	<i>Centropyxis platystoma</i>	<i>Cen.pla</i>	0.1	6.0	2.0
33	<i>Corythion dubium</i>	<i>Cor.dub</i>	5.1	51.2	49.3
34	<i>Cryptodifflugia oviformis</i>	<i>Cry.ovi</i>	14.3	63.1	80.7
35	<i>Cryptodifflugia oviformis fuscum</i>	<i>Cry.ovif</i>	0.6	28.6	9.3
36	<i>Cyclopyxis eurystoma</i>	<i>Cyc.eyr</i>	0.2	6.0	6.7
37	<i>Cyclopyxis kahli</i>	<i>Cyc.kah</i>	0.0	2.4	2.0
38	<i>Cyclopyxis kahli cyclostoma</i>	<i>Cyc.kahc</i>	0.0	1.2	0.7
39	<i>Cyphoderia ampulla</i>	<i>Cyp.amp</i>	0.2	9.5	4.7
40	<i>Difflugia bacillifera</i>	<i>Dif.bac</i>	0.0	1.2	2.0
41	<i>Difflugia globulosa</i>	<i>Dif.glo</i>	0.1	4.8	1.3
42	<i>Difflugia lucida</i>	<i>Dif.luc</i>	0.0	2.4	0.7
43	<i>Difflugia oblonga</i>	<i>Dif.obl</i>	0.0	1.2	0.7
44	<i>Difflugia penardi</i>	<i>Dif.pen</i>	0.4	16.7	10.0
45	<i>Difflugia rubescens</i>	<i>Dif.rub</i>	0.0	1.2	0.7
46	<i>Euglypha acantophora</i>	<i>Eug.aca</i>	0.0	1.2	0.7
47	<i>Euglypha bryophila</i>	<i>Eug.bry</i>	0.0	1.2	0.6
48	<i>Euglypha ciliata</i>	<i>Eug.cil</i>	0.3	11.9	7.3
49	<i>Euglypha compressa</i>	<i>Eug.com</i>	0.3	6.0	9.3
50	<i>Euglypha compressa glabra</i>	<i>Eug.comg</i>	0.0	2.4	0.7
51	<i>Euglypha cristata</i>	<i>Eug.cri</i>	1.0	22.6	21.3
52	<i>Euglypha denticulata</i>	<i>Eug.den</i>	0.3	4.8	18.7
53	<i>Euglypha filifera</i>	<i>Eug.fil</i>	0.2	13.1	4.0
54	<i>Euglypha filifera pyriformis</i>	<i>Eug.filp</i>	0.0	1.2	0.7
55	<i>Euglypha laevis</i>	<i>Eug.lae</i>	2.1	32.1	22.0
56	<i>Euglypha rotunda</i>	<i>Eug.rot</i>	3.3	44.0	54.0
57	<i>Euglypha strigosa</i>	<i>Eug.str</i>	0.6	11.9	16.0
58	<i>Euglypha tuberculata</i>	<i>Eug.tub</i>	0.4	16.7	10.7
59	<i>Gibbocarina galeata</i>	<i>Gib.gal</i>	0.1	7.1	2.0
60	<i>Gibbocarina gracilis</i>	<i>Gib.gra</i>	0.0	1.2	0.7
61	<i>Heleopera petricola</i>	<i>Hel.pet</i>	0.2	9.5	6.0
62	<i>Heleopera rosea</i>	<i>Hel.ros</i>	0.2	11.9	9.3
63	<i>Heleopera sphagni</i>	<i>Hel.sph</i>	0.0	3.6	1.3
64	<i>Hyalosphenia papilio</i>	<i>Hya.pap</i>	11.0	40.5	82.7
65	<i>Hyalosphenia platystoma</i>	<i>Hya.pla</i>	0.1	9.5	1.3

	Taxa	Taxa codes	Relative abundance, %	Occurrence, %	Maximal relative abundance per sample, %
66	<i>Lagenodifflugia sphaeroideus</i>	<i>Lag.sph</i>	0.0	1.2	2.0
67	<i>Lesquereusia gibbosa</i>	<i>Les.gib</i>	0.0	2.4	0.7
68	<i>Lesquereusia spiralis</i>	<i>Les.spi</i>	0.0	2.4	2.0
69	<i>Longinebela penardiana</i>	<i>Lon.pen</i>	0.5	20.2	6.0
70	<i>Longinebela tubulosa</i>	<i>Lon.tub</i>	0.0	3.6	1.3
71	<i>Microchlamys patella</i>	<i>Mic.pat</i>	0.8	15.5	23.3
72	<i>Nebela collaris</i>	<i>Neb.col</i>	0.5	22.6	4.7
73	<i>Nebela tinctoria</i>	<i>Neb.tin</i>	0.5	16.7	21.3
74	<i>Netzelia wailesi</i>	<i>Net.wai</i>	0.0	3.6	1.3
75	<i>Padaungiella lageniformis</i>	<i>Pad.lag</i>	0.3	10.7	10.0
76	<i>Padaungiella wailesi</i>	<i>Pad.wai</i>	0.0	1.2	0.7
77	<i>Phryganella acropodia</i>	<i>Phr.acr</i>	0.4	17.9	12.0
78	<i>Playfairina valkanovi</i>	<i>Play.val</i>	0.1	8.3	2.7
79	<i>Pontigulasia incisa</i>	<i>Pon.inc</i>	0.0	4.8	0.7
80	<i>Pyxidicula cymbalum</i>	<i>Pyx.cym</i>	0.0	2.4	0.7
81	<i>Pyxidicula operculata</i>	<i>Pyx.ope</i>	0.0	3.6	2.0
82	<i>Quadrullella symmetrica</i>	<i>Qua.sym</i>	0.6	26.2	8.7
83	<i>Sphenoderia fissirostris</i>	<i>Sph.fis</i>	0.0	1.2	0.7
84	<i>Sphenoderia lenta</i>	<i>Sph.len</i>	0.0	4.8	1.3
85	<i>Tracheleuglypha dentata</i>	<i>Tra.den</i>	0.6	22.6	10.0
86	<i>Trigonopyxis minuta</i>	<i>Trg.min</i>	0.0	2.4	2.0
87	<i>Trinema complanatum</i>	<i>Trn.com</i>	0.7	23.8	10.0
88	<i>Trinema enchelys</i>	<i>Trn.enc</i>	10.2	54.8	62.0
89	<i>Trinema galeata</i>	<i>Trn.gal</i>	0.2	7.1	4.0
90	<i>Trinema leidyi</i>	<i>Trn.lei</i>	0.0	2.4	0.7
91	<i>Trinema lineare</i>	<i>Trn.lin</i>	22.7	92.9	80.7
92	<i>Trinema lineare truncatum</i>	<i>Trn.lint</i>	0.2	11.9	2.7
93	<i>Trinema sp.</i>	<i>Trn.sp</i>	0.0	1.2	0.7
94	<i>Valkanovia delicatula</i>	<i>Val.del</i>	1.2	15.5	30.7
95	<i>Wailesella eboracensis</i>	<i>Wai.ebo</i>	0.0	3.6	1.3
96	<i>Zivkovicia compressa</i>	<i>Ziv.com</i>	0.0	3.6	2.0
97	<i>Zivkovicia spectabilis</i>	<i>Ziv.spe</i>	0.0	2.4	1.3