

Supplementary Table 1. Acari identified by the classical (microscopic) approach, in bryophytes collected from the glacier ice surface, medial moraine, and glacial forefield of Austerdalsbreen, Norway. The numbers indicate the number of identified specimens. The table includes taxa not considered as separate species, e.g. Zerconidae n.d. (which could be in fact *Mixozircon* sp. or *Zircon* sp.) or family Laelapidae represented by three specimens but without possibility for identification (it could consist of one to three species).

Order/suborder	Family	Species	Glacier ice surface	Medial moraine	Glacial forefield	
Mesostigmata	Epicriidae	Epicriidae n.d.	0	0	1	
		Zerconidae	<i>Mixozircon sellnicki</i>	0	0	5
			<i>Zircon</i> sp.	0	0	13
			Zerconidae n.d.	1	0	19
	Veigaidae	<i>Veigaia</i> sp.	0	0	6	
		Veigaidae n.d.	0	0	1	
	Macrochelidae	Macrochelidae n.d.	0	0	1	
	Laelapidae	Laelapidae n.d.	0	3	0	
	Pachylaelapidae	Pachylaelapidae n.d.	0	0	2	
Prostigmata	Cocceupodidae	<i>Cocceupodes</i> sp.	0	0	1	
		<i>Linopodes</i> sp.	1	2	0	
	Eupodidae	<i>Claveupodes</i> sp.	1	0	2	
		<i>Eupodes</i> sp. 1	1	0	51	
		<i>Eupodes</i> sp. 2	0	0	1	
		Eupodidae n.d.	0	0	2	
	Penthaleidae	<i>Penthaleus</i> sp.	0	0	3	
	Rhagidiidae	<i>Poecilophysis</i> sp.	0	0	1	
		<i>Rhagidia</i> sp.	0	0	10	
		Rhagidiidae n.d.	0	0	1	
	Ereynetidae	<i>Ereynetes</i> sp.	0	0	3	
	Iolinidae	<i>Microtydeus</i> sp.	0	0	3	
		<i>Tydaeolus tenuiclaviger</i>	0	0	4	
		Iolinidae n.d.	1	0	0	
	Triophtydeidae	<i>Triophtydeus</i> sp.	2	0	0	
		Triophtydeidae n.d.	2	0	0	
	Tydeidae	<i>Brachytydeus breviculus</i>	4	0	0	
<i>Brachytydeus tridactylus</i>		0	0	7		

		<i>Brachytydeus wensteini</i>	0	0	7
		<i>Brachytydeus</i> sp.	1	0	1
		Tydeidae n.d.	1	0	6
	Stigmaeidae	<i>Stigmaeus longipilis</i>	0	0	1
		<i>Mediolata</i> sp.	0	0	1
		Stigmaeidae n.d.	0	0	1
	Tetranychidae	<i>Eotetranychus</i> sp.	1	0	0
	Cheyletidae	<i>Cheyletus eruditus</i>	0	2	0
	Tarsonemidae	<i>Tarsonemus</i> sp.	0	0	3
Endeostigmata	Alycidae	Alycidae n.d.	0	1	0
		<i>Bimichaelia</i> sp.	0	0	1
	Nanorchestidae	<i>Nanorchestes</i> sp.	0	0	3
	Alicorhagiidae	<i>Alicorhagia</i> sp.	1	0	0
Oribatida	Brachychthoniidae	<i>Brachychthonius</i> sp.	0	0	5
		<i>Liochthonius hystericinus</i>	1	0	0
		<i>Liochthonius</i> sp.	1	0	3
		<i>Poecilochthonius</i> sp.	0	1	0
		Brachychthoniidae n.d.	2	1	2
	Camisiidae	<i>Camisia solhoeyi</i>	0	0	1
	Nothridae	<i>Nothus palustris</i>	2	0	0
	Trhypochthoniidae	<i>Trhypochthoniellus</i> sp.	0	0	1
	Neoliodidae	? <i>Platyliodes</i> sp.	0	0	1
	Oppiidae	<i>Oppia</i> sp.	0	1	0
		<i>Oppiella nova</i>	0	0	12
		<i>Dissorhina ornata</i>	1	0	1
		<i>Micropopia minus</i>	4	0	0
	Quadropiidae	<i>Quadropia quadricarinata</i>	1	0	0
	Suctobelbidae	<i>Suctobelba subcornigera</i>	4	1	1
		<i>Tectocepheus velatus velatus</i>	0	0	2
	Tectocepheidae	<i>Tectocepheus velatus sarekensis</i>	2	2	1
		<i>Licneremaeus lincophorus</i>	2	0	1
	Licneremaeidae	<i>Licneremaeus lincophorus</i>	2	0	1
	Hemileiidae	<i>Hemileius initialis</i>	0	0	5
	Scheloribatidae	<i>Liebstadia</i> sp.	2	0	5
	Oribatulidae	<i>Oribatula tibialis</i>	0	0	4
		<i>Zygoribatula</i> sp.	0	0	3
	Ceratozetidae	<i>Melanozetes mollicomus</i>	1	0	0

		<i>Melanozetes</i> sp.	1	0	0
	Mycobatidae	<i>Mycobates sarekensis</i>	0	0	4
Astigmata	Astigmata n.d.	Astigmata n.d.	1	5	16

Supplementary Table 2. Collembola identified by the classical (microscopic) approach, in bryophytes collected from the glacier ice surface, medial moraine, and glacial forefield of Austerdalsbreen, Norway. The numbers indicate the number of identified specimens (not all identified to species level).

Species	Glacier ice surface	Medial moraine	Glacial forefield
<i>Agrenia bidenticulata</i>	676	57	1
<i>Tetracathella wahlgreni</i>			4
<i>Friesea mirabilis</i>		1	5
<i>Entomobrya</i> n.d.			1
<i>Orchesella</i> sp.			1
<i>Desoria</i> cf. <i>hiemalis</i>			2
<i>Desoria infuscata</i>		43	52
<i>Desoria olivacea</i>		2	16