

Supplementary materials for

Elvira Z. Baisheva

Bryophyte vegetation of Bashkiria, South Urals. IV. On the bryophyte communities in Belaya River Valley, Bashkortostan

Arctoa 32: 1-9

Table 1. Associations *Pylaisietum polyanthae* Felföldy 1941 (1–5) and *Pylaisiello polyanthae–Leskeetum nervosae* Baisheva et al. 1994 (6–15)

Number of relevé	1	2	3	4	5	C O N S T A N C Y	6	7	8	9	10	11	12	13	14	15	C O N S T A N C Y
Field number of relevé	337	281	274	281a	335a		310	333	394	314	279	402	403	316	340	278	
Length of the plot, cm	15	10	10	10	15		15	15	10	20	10	10	15	15	15	10	
With of the plot, cm	15	10	10	10	15		10	15	10	10	10	10	15	15	15	10	
Cover (%)	80	100	90	100	90		90	100	100	100	100	100	100	100	100	100	
Exposition	N		E	NE	E		NW	NW	N	S		N			N		
Heigh above the ground, cm	100		200	120	90		110	70	40	40		20			40		
Base of tree (B)/Trunk (T)	T	B	T	T	T		T	T	T	TC	B	T			T	B	
Substrate	PT	PT	PP	PT	TC		TC	PT	UL	TC	PT	TC	R	R	TC	PT	
Number of species	3	7	5	3	4		6	5	3	7	8	5	5	6	5	3	

D.s. of associations

<i>Pylaisia polyantha</i>	2	3	5	3	3	V	3	3	4	1	1	r	2	2	4	.	V
<i>Pseudoleskeella nervosa</i>	.	.	.	.	.		2	4	3	3	3	3	4	4	1	4	V

D.s. of *Frullanio dilatatae–Leucodontetea sciuroidis*, *Orthotrichetalia*, *Syntrichion laevipilae* and *Leskeion polycarpae*

<i>Radula complanata</i>	.	+	.	2	.	II	.	2	.	.	2	3	.	.	2	.	II
<i>Lewinskya speciosa</i>	1	.	2	.	.	II	+	2	.	.	.	.	1	.	.	.	II
<i>Nyholmiella obtusifolia</i>	4	.	.	.	.	I	2	.	.	.	.	.	.	.	.	.	I
<i>Leucodon sciuroides</i>	.	.	.	2	.		.	.	.	.	.	.	3	.	.	.	I
<i>Lewinskya affinis</i>	.	.	.	.	1	I	.	.	2	.	.	.	.	.	.	.	I
<i>Leskea polycarpa</i>	.	.	.	.	.		.	.	.	3	.	.	.	.	.	.	I

D.s. of *Dicranetalia scoparii* and *Dicrano-Hypnion*

<i>Jochenia pallescens</i>	.	.	r	.	.	I	.	+	.	+	.	.	.	.	.	.	I
<i>Ptilidium pulcherrimum</i>	.	.	1	.	.	I	.	.	.	.	.	.	.	.	.	.

D.s. of *Cladonio digitatae–Lepidozietea reptantis*, *Cladonio–Lepidozietalia* and *Brachythecietalia*

<i>Brachythecium salebrosum</i>	.	r	.	.	.	I	.	.	.	.	3	.	.	2	.	r	II
<i>Amblystegium serpens</i>	.	.	.	.	.		.	.	.	.	.	+	.	r	r	.	II
<i>Lophocolea minor</i>	.	.	.	.	.		.	.	.	.	+	+	.	.	.	.	I

Number of relevé	1	2	3	4	5		6	7	8	9	10	11	12	13	14	15	
D.s. of <i>Neckeretalia complanatae</i> and <i>Neckerion complanatae</i>																	
<i>Pseudoamblystegium subtile</i>	.	3	.	.	2	II	.	.	.	.	+	.	.	.	.	.	I
<i>Plagiomnium cuspidatum</i>	+	I	.	.	.	2	1	.	.	.	.	2	II
Other species:																	
<i>Haplocladium microphyllum</i>	.	2	.	.	.	I	+	.	.	2	3	.	.	+	3	.	III
<i>Platygyrium repens</i>		2	.	.	+	.	.	.	1	.	.	II
<i>Eurhynchium pulchellum</i>	.	1	.	.	.	I	.	.	.	.	.	.	.	.	.	.
<i>Campylophyllopsis sommerfeltii</i>	.	r	.	.	.	I	.	.	.	.	.	.	.	.	.	.
<i>Sanionia uncinata</i>	.		+	.	.	I	.	.	.	.	.	.	.	.	.	.
<i>Anomodon longifolius</i>	1	.	.	.	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 5, 6, 7, 9, 13 – 6; **2, 4, 10, 15** – 5; **3** – 3; **7** – 14; **8** – 15; **11, 12** – 16; **14** – 7.

Table 2. Association *Platygyrietum repentis* Le Blanc ex Marstaller 1986

Number of relevé	1	2	3	4	5	6	7	8	9	10	C O N S T A N C Y
Field number of relevé	318	358	306	359	357	304	342	280	311	308	
Length of the plot, cm	15	15	15	15	15	10	20	15	10	15	
With of the plot, cm	15	15	15	15	15	10	15	15	10	15	
Cover (%)	80	90	100	100	90	100	100	100	100	100	
Exposition			N	N	N						
Heigh above the ground, cm	100	120	50	30	170	200	60		140		
Base of tree (B)/Trunk (T)			T	T		T	T	B	T		
Substrate	R	R	TC	TC	T	BP	TC	BP	TC	R	
Number of species	7	4	7	4	2	5	4	5	7	7	
D.s. of association											
<i>Platygyrium repens</i>	4	3	4	4	5	3	3	4	4	3	V
D.s. of <i>Frullanio dilatatae</i> – <i>Leucodontetea sciuroidis</i> and <i>Orthotrichetalia</i>											
<i>Lewinskya speciosa</i>	2	2	r	.	.	.	.	.	2	r	III
<i>Pylaisia polyantha</i>	2	.	+	.	.	.	2	.	2	2	III
<i>Leucodon sciuroides</i>	.	2	.	.	.	.	2	.	.	.	I
D.s. of <i>Dicranetalia</i> and <i>Dicrano-Hypnion</i>											
<i>Jochenia pallescens</i>	1	.	+	+	.	2	.	.	+	3	III
<i>Ptilidium pulcherrimum</i>	.	.	.	.	.	.	.	3	.	.	I
<i>Dicranum montanum</i>	.	.	.	.	.	3	.	1	.	.	I
D.s. of <i>Cladonio digitatae</i> – <i>Lepidozietea reptantis</i> and <i>Brachythecietalia</i>											
<i>Brachythecium salebrosum</i>	.	.	2	3	.	.	.	.	.	+	II
<i>Cladonia coniocraea</i>	.	.	.	.	.	2	.	.	2	.	I
<i>Amblystegium serpens</i>	.	.	.	.	.	.	.	+	.	.	I
Other species:											
<i>Pseudoleskeella nervosa</i>	+	.	2	2	2	.	2	.	1	+	IV
<i>Plagiomnium cuspidatum</i>	.	.	2	.	.	.	.	.	.	.	I

Number of relevé	1	2	3	4	5	6	7	8	9	10	
<i>Haplocladium microphyllum</i>	.	.	.	.	.	.	.	.	1	+	I
<i>Sanionia uncinata</i>	1	.	.	.	.	.	.	.	.	.	I
<i>Entodon schleicheri</i>	+	.	.	.	.	.	.	.	.	.	I
<i>Parmelia sulcata</i>	.	2	.	.	.	.	.	.	.	.	I
<i>Oxyrrhynchium hians</i>	.	.	.	.	.	.	.	+	.	.	I
<i>Hypogymnia physodes</i>	.	.	.	.	.	2	.	.	.	.	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 3, 6, 9, 10 – 6; **2, 4, 5** – 13; **7** – 7; **8** – 5.

Table 3. Association *Ptilidio pulcherrimi–Hypnetum pallescentis* Barkman ex Willmanns 1962:

subass. *P.p.-H.p. typicum* (Table 3, 1–5); subass. *P.p.-H.p. callicladietosum haldanianii* Baisheva 1995 (Table 3, 6–14)

Number of relevé	1	2	3	4	5	C O N S T A N C Y	6	7	8	9	10	11	12	13	14	C O N S T A N C Y
Field number of relevé	285	265	319	261	301		305	337a	360	294	269	292	297	307	309	
Length of the plot, cm	15	20	15	10	15		20	15	15	15	15	15	10	10	10	
With of the plot, cm	15	10	15	10	10		20	15	15	15	15	15	10	10	10	
Cover (%)	100	90	100	100	100		80	100	100	100	100	100	100	100	100	
Exposition							E	N	N					N		
Heigh above the ground, cm									30					100	40	
Base of tree (B)/Trunk (T)							B	B	T	B						
Substrate	R	R	R	R	R		TC	BP	BP	BP	R	R	R	R	R	
Number of species	7	6	10	5	6		8	3	4	5	6	11	7	8	8	

D.s. of association and subassociation

<i>Ptilidium pulcherrimum</i>	1	2	2	4	4	V	1	.	3	2	2	1	1	3	3	IV
<i>Jochenia pallescens</i>	4	1	3	2	.	IV	1	1	2	3	.	2	1	2	3	V
<i>Callicladium haldanianum</i>	.	.	.	.	.		1	5	4	2	4	1	2	1	2	V

D.s. of *Frullanio dilatatae–Leucodontetea sciuroidis* and *Orthotrichetalia*

<i>Pylaisia polyantha</i>	+	.	2	2	.	III	.	.	2	.	.	.	.	.	+	II
<i>Radula complanata</i>	.	.	.	.	.		2	.	.	.	.	.	.	+	.	II

D.s. of *Dicranetalia scoparii* and *Dicrano scoparii–Hypnion filiformis*

<i>Dicranum scoparium</i>	.	2	.	.	+	II	.	.	.	.	.	2	.	.	.	I
<i>Dicranum montanum</i>	.	.	.	.	2	I	.	.	.	3	2	2	2	.	.	III

D.s. of *Cladonio digitatae–Lepidozietea reptantis*, *Cladonio–Lepidozietalia* and *Brachythecietalia*

<i>Brachythecium salebrosum</i>	2	.	2	.	.	II	3	.	.	.	.	.	.	1	1	II
<i>Amblystegium serpens</i>	.	.	r	.	.	I	.	.	.	.	.	.	.	1	.	I
<i>Dicranum flagellare</i>	.	3	.	.	.	I	.	.	.	.	.	.	3	.	.	I
<i>Cladonia coniocraea</i>	.	.	.	.	2	I	.	.	.	.	2	.	3	.	.	II
<i>Lophocolea heterophylla</i>	.	.	.	.	.		.	.	.	+	2	+	.	.	.	II

Number of relevé	1	2	3	4	5		6	7	8	9	10	11	12	13	14	
<i>Dicranum fuscescens</i>	.	.	.	.	.		2	.	.	.	.	.	.	.	.	I
<i>Lophocolea minor</i>	.	.	.	.	.		.	.	.	.	.	+	.	.	.	I
						Other species:										
<i>Pseudoleskeella nervosa</i>	.	.	+	.	.	I	+	.	.	.	.	.	.	1	2	II
<i>Platygyrium repens</i>	.	.	2	2	+	III	.	.	.	.	.	.	.	2	2	II
<i>Plagiomnium cuspidatum</i>	2	.	+	.	.	II	.	.	.	.	.	.	.	.	.
<i>Haplocladium microphyllum</i>	2	.	1	.	.	II	.	.	.	.	.	.	.	.	r	I
<i>Pohlia nutans</i>	.	1	.	.	.	I	.	.	.	.	.	+	1	.	.	II
<i>Sanionia uncinata</i>	2	.	+	.	.	II	.	.	.	.	1	2	.	.	.	II
<i>Pleurozium schreberi</i>	.	2	.	.	+	II	.	.	.	.	.	2	.	.	.	I
<i>Oncophorus elongatus</i>	.	.	.	2	.	I	1	.	.	.	.	2	.	.	.	II
<i>Cynodontium strumiferum</i>	.	.	.	.	.		.	2	.	.	.	.	.	.	.	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 5, 9, 11, 12 – 5; **2** – 2; **3, 6, 7, 13, 14** – 6; **4** – 1; **8** – 13, **10** – 3.

Table 4. Association *Brachythecio salebrosi–Amblystegietum serpentis* Baisheva et al. 1994:

subass. *B.s.–A.s. typicum* (1–8); subass. *B.s.–A.s. plagiomnietosum cuspidati* Baisheva et al. 1995 (9–13)

Number of relevé	1	2	3	4	5	6	7	8	C O N S T A N C Y	9	10	11	12	13	C O N S T A N C Y
Field number of relevé	336	355	295	296	290	288	315	356		317	332	282	291	284	
Length of the plot, cm	15	15	10	10	10	15	10	15		15	10	15	10	15	
With of the plot, cm	15	15	10	10	10	15	10	15		15	10	15	10	15	
Cover (%)	100	100	100	100	100	100	100	90		90	100	100	100	100	
Exposition		N	W	W		N	S	E							
Base of tree (B)/Trunk (T)		B	B	B		B	B	B							
Substrate	R	TC	TC	TC	R	PT	TC	TC		R	R	R	R	R	
Number of species	4	3	7	7	6	3	6	7		7	6	8	7	13	

D.s. of association and subassociation

<i>Brachythecium salebrosum</i>	.	.	1	1	3	2	2	1	IV	2	2	3	2	3	V
<i>Amblystegium serpens</i>	5	5	3	4	2	4	4	1	V	4	2	3	4	2	V
<i>Plagiomnium cuspidatum</i>	.	.	.	.	.	.	+	.	I	1	2	1	2	2	V

D.s. of *Frullanio dilatatae–Leucodontetea sciuroidis* and *Orthotrichetalia*

<i>Radula complanata</i>	.	.	4	2	+	2	.	.	III	.	.	.	.	.
<i>Pylaisia polyantha</i>	.	2	1	.	.	.	+	2	III	.	.	.	.	.
<i>Lewinskya speciosa</i>	.	.	+	.	.	.	.	.	I	.	.	.	.	.

D.s. of *Dicranetalia scoparii* and *Dicrano–Hypnion*

<i>Jochenia pallescens</i>	.	2	2	1	.	.	.	.	II	1	.	.	.	r	II
<i>Ptilidium pulcherrimum</i>	.	.	.	.	.	.	2	.	I	.	.	.	.	.

D.s. of *Cladonio digitatae–Lepidozietea reptantis*, *Cladonio–Lepidozietalia* and *Brachythecietalia*

<i>Lophocolea heterophylla</i>	.	.	.	.	.	.	.	.	I	.	.	2	r	+	III
<i>Lophocolea minor</i>	.	.	.	.	+	.	.	.	I	.	.	+	.	2	II
<i>Sciuro-hypnum curtum</i>	.	.	.	.	.	.	.	.		1	2	.	.	.	II

Number of relevé	1	2	3	4	5	6	7	8		9	10	11	12	13	
<i>Brachytheciastrum velutinum</i>	1	.	.	.	.	.	.	.	I	.	.	.	.	+	I
<i>Sciuro-hypnum reflexum</i>	.	.	.	2	.	.	.	.	I	.	.	.	.	.
Other species:															
<i>Campylophyllopsis sommerfeltii</i>	2	.	.	.	.	.	.	4	II	+	3	1	2	2	V
<i>Haplocladium microphyllum</i>	+	.	.	.	r	.	.	+	II	.	.	2	1	2	III
<i>Sanionia uncinata</i>	.	.	.	r	.	.	.	1	II	.	.	2	+	+	III
<i>Pseudoleskeella nervosa</i>	.	.	.	+	2	.	2	.	II	r	.	.	.	.	I
<i>Platygyrium repens</i>	.	.	r	.	.	.	.	.	I	.	.	.	.	.
<i>Ceratodon purpureus</i>	.	.	.	.	.	.	.	r	I	.	.	.	.	.
<i>Ptychostomum capillare</i>	.	.	.	.	.	.	.	.		.	2	.	.	.	I
<i>Pohlia nutans</i>	.	.	.	.	.	.	.	.		.	.	.	.	r	I
<i>Pleurozium schreberi</i>	.	.	.	.	.	.	.	.		.	.	.	.	+	I
<i>Oncophorus elongatus</i>	.	.	.	.	.	.	.	.		.	.	.	.	+	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 7, 9, 10 – 6; **2, 8** – 13; **3, 4, 5, 6, 11, 12, 13** – 5.

Table 5. Comparison of communities of ass. *Brachythecio salebrosi–Amblystegietum serpentis* described in the different regions of the Republic of Bashkortostan

Number of syntaxa	1	2	3	4	5	6
Number of relevés	8	5	14	15	25	18
D. s. of association and subassociation						
<i>Brachythecium salebrosum</i>	IV	V	IV	V	V	IV
<i>Amblystegium serpens</i>	V	V	V	V	IV	III
<i>Plagiomnium cuspidatum</i>	I	V	II	V		V
D.s. of <i>Frullanio–Leucodontetea</i> and <i>Orthotrichetalia</i>						
<i>Pylaisia polyantha</i>	III	.	III	.	.	.
<i>Radula complanata</i>	III	.	I	.	.	.
<i>Lewinskya speciosa</i>	I	.	.	.	.	.
<i>Nyholmiella obtusifolia</i>	.	.	I	.	.	.
D.s. of <i>Leskeion polycarpae</i>						
<i>Leskea polycarpa</i>			IV	I	I	I
D.s. of <i>Dicranetalia</i> and <i>Dicrano-Hypnion</i>						
<i>Jochenia pallescens</i>	II	II	I	III	.	.
<i>Ptilidium pulcherrimum</i>	I	.	.	.	.	.
<i>Callicladium haldanianum</i>	.	.	.	II	.	.
<i>Dicranum montanum</i>	.	.	.	I	I	.
D.s. of <i>Cladonio -Lepidozietea</i> and <i>Lophocoleetalia</i>						
<i>Lophocolea minor</i>	I	II	.	II	I	I
<i>Lophocolea heterophylla</i>	.	III	I	II	.	I
D.s. of <i>Brachythecietalia</i> and <i>Bryo-Brachythecion</i>						
<i>Brachytheciastrum velutinum</i>	I	I	I	I	I	.
<i>Sciuro-hypnum reflexum</i>	I	.	.	IV	II	II
<i>Sciuro-hypnum curtum</i>	.	II	I	I	.	.
<i>Sciuro-hypnum starkei</i>	.	.	I	I	.	.
<i>Brachythecium rutabulum</i>	.	.	.	I	.	.

Number of syntaxa	1	2	3	4	5	6
	Other species:					
<i>Sanionia uncinata</i>	II	III	II	III	I	I
<i>Haplocladium microphyllum</i>	II	III	.	.	.	.
<i>Pseudoleskeella nervosa</i>	II	I	.	I	.	.
<i>Campylophyllopsis sommerfeltii</i>	II	V	I	II	I	.
<i>Ceratodon purpureus</i>	I	.	III	I	.	I
<i>Platygyrium repens</i>	I	.	I	.	.	.
<i>Ptychostomum capillare</i>	.	I	.	.	.	I
<i>Pohlia nutans</i>	.	I	I	I	I	.
<i>Pleurozium schreberi</i>	.	I	I	I	I	.
<i>Oncophorus elongatus</i>	.	I	.	.	.	.
<i>Oxyrrhynchium hians</i>	.	.	.	I	I	.
<i>Ptychostomum imbricatum</i>	.	.	.	.	I	I
<i>Brachythecium albicans</i>	.	.	.	I	.	.
<i>Amblystegium varium</i>	.	.	.	I	.	.
<i>Climacium dendroides</i>	.	.	.	I	.	.
<i>Leptodictyum riparium</i>	.	.	.	I	.	.
<i>Plagiothecium denticulatum</i>	.	.	I	.	.	I
<i>Rhytidiadelphus triquetrus</i>	.	.	I	.	I	.
<i>Plagiothecium</i> sp.	.	.	I	.	.	.

Syntaxa: 1 – subass. *B.s.-A.s. typicum* from the Belaya River valley;

2 – subass. *B.s.-A.s. plagiomnietosum cuspidati* from the Belaya River valley;

3 – subass. *B.s.-A.s. typicum* from the different regions of the Bashkir Cis-Urals (Baisheva et al., 1994);

4 – subass. *B.s.-A.s. plagiomnietosum cuspidati* from north-eastern part of the Bashkortostan (Baisheva, 1995);

5 – subass. *B.s.-A.s. typicum* from the western part of the Bashkortostan (Baisheva, 2000);

6 – subass. *B.s.-A.s. plagiomnietosum cuspidati* from the western part of the Bashkortostan (Baisheva, 2000).

Table 6. Associations *Anomodontetum rugelii* Peciar 1965 (1–11) and *Anomodontetum longifolii* Waldh. 1944 (12–20)

Number of relevé	1	2	3	4	5	6	7	8	9	10	11	C O N S T A N C Y	12	13	14	15	16	17	18	19	20	C O N S T A N C Y		
Field number of relevé	379	384	381	398	391	378	383	400	382	390	387			365	399	388	392	395	401	61	380		364	
Length of the plot, cm	30	15	15	30	20	40	15	20	15	15	15			15	15	10	20	40	10	20	15		20	
Width of the plot, cm	15	15	15	15	20	20	15	20	15	15	15			15	15	10	20	40	10	20	15		20	
Cover (%)	100	100	100	100	90	100	100	100	100	90	100			100	100	100	80	80	100	100	100		80	
Exposition	SE	N	SE	SE	SE	SE	SE	SE	SE	SE	SE			S	S	SE	SE	SE	N	S	SE		S	
Substrate	LM	UL	LM	LM	LM	LM	LM	LM	LM	LM	LM			LM	LM	LM	LM	LM	TC	LM	UL		LM	
Number of species	5	5	4	8	7	6	3	4	4	4	8			10	9	6	7	9	4	4	5		8	
D.s. of associations																								
<i>Anomodon rugelii</i>	4	4	3	3	4	4	4	5	4	4	3	V	.	.	.	.	.	.	.	+	.	I
<i>Anomodon longifolius</i>	2	+	2	.	2	.	.	.	.	.	2	III	3	2	4	3	3	4	5	5	3	V
D.s. of <i>Neckeretea complanatae</i> , <i>Neckeretalia complanatae</i> and <i>Neckerion complanatae</i>																								
<i>Sciuro-hypnum populeum</i>	.	.	+	.	+	.	2	1	3	1	+	IV	3	2	1	.	.	.	.	.	.	II
<i>Rhynchostegium murale</i>	.	.	.	2	.	.	.	.	.	2	2	II	.	1	+	.	.	.	.	.	.	II
<i>Plagiomnium cuspidatum</i>	.	.	.	r	.	.	2	2	.	.	.	II	.	.	.	.	.	.	2	.	.	I
<i>Anomodon viticulosus</i>	.	.	.	.	+	.	.	.	.	.	.	I	.	.	.	1	2	.	.	.	.	II
<i>Homalothecium sericeum</i>	.	.	.	.	.	.	.	.	.	.	.	I	.	.	.	+	+	.	.	.	.	II
D.s. of <i>Ctenidietea mollusci</i> and <i>Ctenidietalia mollusci</i>																								
<i>Tortella tortuosa</i>	.	.	.	2	2	.	.	.	.	.	.	I	2	2	.	3	2	.	.	.	+	III
<i>Encalypta streptocarpa</i>	.	.	.	.	.	.	.	.	.	.	.		.	.	.	2	1	.	.	.	1	II
<i>Tortella fragilis</i>	.	.	.	.	.	.	.	.	.	.	+	I	.	+	.	.	.	.	.	.	2	I

Number of relevé	1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16	17	18	19	20	
D.s. of <i>Cladonio digitatae</i> – <i>Lepidozietea reptantis</i> , <i>Cladonio-Lepidozietalia</i> and <i>Brachythecietalia</i>																						
<i>Lophocolea minor</i>	+	r	.	2	.	+	.	1	+	.	2	IV	.	+	.	.	.	3	.	.	.	II
<i>Amblystegium serpens</i>	.	3	.	.	.	.	.	.	.	.	.	I	.	.	.	.	.	2	.	+	.	II
<i>Brachythecium salebrosum</i>	+	.	I
<i>Sciuro-hypnum starkei</i>	.	r	.	.	.	2	.	.	.	.	.	I	.	.	.	.	.	.	.	.	.
<i>Brachytecium capillaceum</i>	2	.	.	I
Other species:																						
<i>Radula complanata</i>	+	.	.	.	+	2	3	II	.	.	3	.	+	2	.	.	.	II
<i>Plagiomnium rostratum</i>	2	.	.	2	.	+	.	.	.	.	.	II	.	.	.	.	.	.	.	.	.
<i>Taxyphyllum wissgrillii</i>	.	.	2	.	.	2	.	.	1	.	.	II	.	.	.	.	.	.	.	1	.	I
<i>Pseudoleskeella nervosa</i>	.	.	.	+	I	.	3	.	.	.	.	.	.	.	I
<i>Homomallium incurvatum</i>	.	.	.	+	+	I	+	+	2	.	+	.	.	.	+	III
<i>Brachythecium albicans</i>	+	I	2	.	.	.	.	.	.	.	2	II
<i>Ptychostomum capillare</i>	r	I	.	.	r	.	r	.	.	.	.	II
<i>Pseudoleskeella catenulata</i>		2	.	.	.	.	.	.	.	3	II
<i>Syntrichia ruralis</i>		+	.	.	r	.	.	1	.	.	II
<i>Schistidium apocarpum</i> s.l.		1	.	.	.	.	.	.	.	+	II
<i>Bryum</i> sp.		1	.	.	2	.	.	.	.	.	II

Number of relevé	1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16	17	18	19	20	
<i>Didymodon rigidulus</i>	+	I
<i>Leptogium tenuissimum</i>		r	.	.	.	.	.	.	.	.	I
<i>Serpoleskea subtilis</i>	r	.	.	.	.	.	.	.	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 2, 3, 5, 6, 7, 9, 10, 11 14, 15, 16, 19 – 15; **4, 8, 13, 17** – 16; **12, 20** – 14; **18** – 8

Table 7. *Anomodon viticulosus* - community

Number of relevé	1	2	3	4	5	6	7	8	9	C O N S T A N C Y
Field number of relevé	2	1	11	17	4	18	277a	276a	7	
Length of the plot, cm	30	30	40	40	40	40	20	15	40	
Width of the plot, cm	30	30	40	40	40	40	20	15	40	
Cover (%)	100	100	85	100	80	90	100	100	70	
Exposition	SW	SW	W	NE	SW	NE	NW	NW	W	
Substrate	LM	LM	LM	LM	LM	LM	LM	LM	LM	
Number of species	6	4	4	5	4	8	13	10	5	
D. s. of community										
<i>Anomodon viticulosus</i>	4	4	4	4	3	4	3	2	3	V
D.s. of <i>Neckeretea complanatae</i> , <i>Neckeretalia complanatae</i> and <i>Neckerion complanatae</i>										
<i>Homalothecium sericeum</i>	.	.	.	.	.	.	2	r	.	II
<i>Plagiomnium cuspidatum</i>	.	2	.	.	.	.	.	.	.	I
<i>Neckera pennata</i>	.	.	.	.	.	.	.	2	.	I
<i>Porella platyphylla</i>	.	.	.	.	.	.	2	.	.	I
D.s. of <i>Ctenidietea mollusci</i> , <i>Ctenidietalia mollusci</i> , <i>Ctenidion mollusci</i> and <i>Distichion capillacei</i>										
<i>Tortella tortuosa</i>	.	.	.	.	.	.	1	.	.	III
<i>Distichium capillaceum</i>	.	.	.	.	.	.	r	2	.	II
<i>Flexitrichum flexicaule</i>	.	.	.	1	.	+	.	.	.	II
<i>Campyliadelphus chrysophyllus</i>	.	.	.	.	.	r	.	.	.	I
D.s. of <i>Schistidietea apocarpi</i> , <i>Schistidietalia apocarpi</i> and <i>Grimmion tergestinae</i>										
<i>Schistidium submuticum</i>	.	.	.	.	.	2	.	.	.	I
<i>Schistidium lancifolium</i>	.	.	.	.	.	.	.	+	.	I
D.s. of <i>Frullanio-Leucodontetea</i> and <i>Orthotrichetalia</i>										
<i>Leucodon sciuroides</i>	.	.	.	.	.	.	2	2	.	II
<i>Frullania dilatata</i>	.	.	.	.	.	.	.	r	.	I

Number of relevé	1	2	3	4	5	6	7	8	9	
<i>Nyholmiella obtusifolia</i>	r	.	.	.	.	.	.	.	.	I
			Other species:							
<i>Syntrichia ruralis</i>	1	.	1	.	1	.	1	.	1	III
<i>Hypnum cupressiforme</i>	.	.	.	2	.	2	2	3	.	III
<i>Pseudoleskeella nervosa</i>	r	1	.	.	.	.	.	.	2	II
<i>Pseudoleskeella catenulata</i>	.	.	2	.	+	.	.	.	.	II
<i>Brachytecium capillaceum</i>	3	2	r	.	.	.	.	.	.	II
<i>Abietinella abietina</i>	.	.	.	.	.	+	+	+	.	II
<i>Didymodon fallax</i>	.	.	.	.	.	1	.	.	.	II
<i>Orthotrichum cupulatum</i>	.	.	.	.	3	.	.	.	2	II
<i>Serpoleskea confervoides</i>	1	.	.	.	.	.	.	.	.	I
<i>Plagiochila porelloides</i>	.	.	.	.	.	.	+	.	.	I
<i>Dicranum fuscescens</i>	.	.	.	.	.	.	.	+	.	I
<i>Pseudoleskeella tectorum</i>	.	.	.	.	.	r	.	.	.	I
<i>Paraleucobryum longifolium</i>	.	.	.	.	.	.	+	.	.	I
<i>Barbilophozia barbata</i>	.	.	.	.	.	.	1	.	.	I
<i>Ptychostomum elegans</i>	.	.	.	.	.	.	+	.	.	I
<i>Bryum sp.</i>	.	.	.	2	.	.	.	.	.	I
<i>Didymodon ferrugineus</i>	.	.	.	2	.	.	.	.	.	I
<i>Encalypta sp.</i>	.	.	.	.	.	.	.	.	+	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 2, 3, 5, 9 – 8; 4, 6 – 10; 7, 8 – 4.

Table 8. Association *Homomallietum incurvati* Philippi 1965

Number of relevé	1	2	3	4	5	6	7	8	C O N S T A N C Y
Field number of relevé	300	298	299	302	324	320	389	323	
Length of the plot, cm	15	15	15	20	15	15	15	15	
Width of the plot, cm	10	15	10	15	15	15	15	15	
Cover (%)	90	90	100	80	80	90	90	100	
Exposition	N	N	N	N	S	S	S	S	
Substrate	LM	LM	LM	LM	LM	LM	LM	LM	
Number of species	9	3	6	8	8	3	5	6	
D.s. of association									
<i>Homomallium incurvatum</i>	3	3	3	4	3	2	3	2	V
D. s. of <i>Neckerion complanatae</i>									
<i>Sciuro-hypnum populeum</i>	.	.	.	.	.	.	+	.	I
<i>Rhynchostegium murale</i>	.	.	.	.	.	.	3	.	I
D. s. of <i>Ctenidietalia mollusci</i> , <i>Ctenidion mollusci</i> and <i>Distichion capillacei</i>									
<i>Tortella tortuosa</i>	2	.	.	2	2	.	1	2	IV
<i>Flexitrichum flexicaule</i>	2	4	.	2	2	.	.	2	IV
<i>Campyliadelphus chrysophyllus</i>	+	1	2	2	.	.	.	.	III
<i>Encalypta streptocarpa</i>	r	.	+	.	.	.	.	.	II
<i>Encalypta raptocarpa</i>	.	.	.	.	+	.	.	.	I
<i>Tortella fragilis</i>	2	.	r	.	.	3	.	.	II
<i>Distichium capillaceum</i>	2	.	.	.	.	.	.	.	I
D.s. of <i>Schistidietea apocarpi</i> , <i>Schistidietalia apocarpi</i> and <i>Grimmion tergestinae</i>									
<i>Schistidium apocarpum s.l.</i>	2	.	.	+	.	.	.	.	II
<i>Schistidium submuticum</i>	.	.	2	.	.	.	.	.	I
Other species:									
<i>Hypnum cupressiforme</i>	.	.	3	.	2	3	.	2	III

Number of relevé	1	2	3	4	5	6	7	8	
<i>Pleurozium schreberi</i>	+	.	.	+	II
<i>Pseudoleskeella nervosa</i>	.	.	.	2	1	.	.	2	II
<i>Syntrichia ruralis</i>	2	.	.	2	II
<i>Radula complanata</i>	3	.	I
<i>Lophocolea minor</i>	.	.	.	+	I
<i>Ptychostomum capillare</i>	+	.	.	.	I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 2, 3, 4 – 5; **5, 6, 8** – 6; **7** – 16.

Table 9. Comparison of communities of ass. *Homomallietum incurvati* Philippi 1965 described in the Republic of Bashkortostan and Germany

Number of syntaxa	1	2	3	4	5	6	7	8	9	10
Number of relevés	8	13	20	23	13	16	27	8	82	11

D.s. of association

<i>Homomallium incurvatum</i>	V	V	V	V	V	V	V	V	V	V
D. s. of <i>Neckeretea complanatae</i> , <i>Neckeretalia complanatae</i> and <i>Neckerion complanatae</i>										
<i>Sciuro-hypnum populeum</i>	I	.	.	I	I	V	II	II	III	V
<i>Rhynchostegium murale</i>	I	I	.	II	I	.	II	II	III	I
<i>Homalothecium sericeum</i>	.	III	II	II	I	II	II	II	III	.
<i>Porella platyphylla</i>	.	.	III	.	.	II	I	.	I	.
<i>Metzgeria furcata</i>	.	.	.	.	.	.	I	.	.	I
<i>Anomodon viticulosus</i>	.	.	.	.	.	.	.	II	I	.
<i>Plagiomnium cuspidatum</i>	.	.	.	.	.	.	.	.	I	.
<i>Homalia trichomanoides</i>	.	.	.	.	.	.	.	.	.	II
D. s. of <i>Ctenidietea mollusci</i> , <i>Ctenidietalia mollusci</i> , <i>Ctenidion mollusci</i> and <i>Distichion capillacei</i>										
<i>Tortella tortuosa</i>	IV	I	I	II	I	I	I	.	I	.
<i>Flexitrichum flexicaule</i>	IV	.	.	.	.	.	.	.	.	.
<i>Campyliadelphus chrysophyllus</i>	III	.	II	.	.	.	.	.	.	.
<i>Encalypta streptocarpa</i>	II	.	.	.	.	.	.	I	I	.
<i>Tortella fragilis</i>	II	.	.	.	.	.	.	.	.	.
<i>Encalypta rhaptocarpa</i>	I	.	.	.	.	.	.	.	.	.
<i>Distichium capillaceum</i>	I	.	.	.	.	.	.	.	.	.
<i>Ctenidium molluscum</i>	.	III	I	II	I	.	I	.	I	.
<i>Campylophyllum halleri</i>	.	.	.	I	.	.	.	.	.	.
D.s. of <i>Schistidietea apocarpi</i> , <i>Schistidietalia apocarpi</i> and <i>Grimmion tergestinae</i>										
<i>Schistidium apocarpum s.l.</i>	II	V	V	.	.	II	.	.	.	II
<i>Schistidium submuticum</i>	I	.	.	.	.	.	.	.	.	.

Number of syntaxa	1	2	3	4	5	6	7	8	9	10
<i>Schistidium crassipilum</i>	.	.	.	V	V	I	IV	V	V	I
<i>Schistidium robustum</i>	.	.	.	II	I	.	.	.	.	.
<i>Didymodon rigidulus</i>	.	.	.	.	.	.	.	.	I	.
<i>Tortula muralis</i>	.	.	.	.	I	.	.	I	I	.
Other species:										
<i>Hypnum cupressiforme</i>	III	III	III	III	IV	IV	III	IV	III	II
<i>Syntrichia ruralis</i>	II	.	.	.	.	.	.	.	.	.
<i>Pleurozium schreberi</i>	II	.	.	.	.	.	.	.	.	.
<i>Pseudoleskeella nervosa</i>	II	.	.	.	.	.	.	.	.	.
<i>Radula complanata</i>	I	.	.	.	.	.	.	.	I	.
<i>Lophocolea minor</i>	I	.	.	.	.	.	.	.	.	I
<i>Ptychostomum capillare</i>	I	.	.	.	.	.	.	II	.	II
<i>Ptychostomum moravicum</i>	.	.	II	II	II	I	I	.	III	.
<i>Brachythecium rutabulum</i>	.	I	.	I	I	I	I	III	I	II
<i>Homalothecium lutescens</i>	.	.	I	I	I	.	I	.	I	.
<i>Orthotrichum anomalum</i>	.	.	.	I	.	I	.	.	I	.
<i>Plasteurhynchium striatulum</i>	.	I	I	.	.	.	.	.	.	.
<i>Serpoleskea confervoides</i>	.	I	.	.	.	.	.	.	I	I
<i>Brachytheciastrum velutinum</i>	.	.	I	.	I	III	.	.	.	.
<i>Bryoerythrophyllum recurvirostrum</i>	.	.	I	.	.	I		I	I	I
<i>Campylophyllopsis calcarea</i>	.	.	I	.	I	.	I	.	I	.
<i>Brachythecium glareosum</i>	.	.	.	.	I	.	.	.	I	.
<i>Oxyrrhynchium hians</i>	.	.	.	.	I	.	.	I	.	.
<i>Lepraria sp.</i>	.	.	.	.	.	I	.	.	III	.
<i>Amblystegium serpens</i>	.	.	.	.	.	I	I	.	I	.
<i>Frullania dilatata</i>	.	.	.	.	.	.	I	.	I	.

Number of syntaxa	1	2	3	4	5	6	7	8	9	10
<i>Isothecium alopecuroides</i>	I	II

Low constancy species: *Brachythecium tommasinii* (2–I); *Cladonia pyxidata* (3–I); *Didymodon fallax* (5 – I); *Didymodon sinuosus* (9 – I); *Didymodon vinealis* (9 – I); *Eurhynchium crassinervium* (9 – I); *Exsertotheca crispa* (9 – I); *Grimmia pulvinata* (9 – I); *Hygrohypnum luridum* (10-I); *Leptogium lichenoides* (2–I); *Leskea polycarpa* (9 – I); *Leucodon sciuroides* (9 – I); *Physcia dubia* (6-I); *Pterigynandrum filiforme* (7-I); *Syntrichia calcicola* (9 – I); *Tortella bambergeri* (9 – I); *Tortula subulata* (9 – I); *Zygodon viridissimus* (9 – I).

Syntaxa:

- 1 – communities of ass. *Homomallietum incurvati* Philippi 1965 from the Belaya River valley;
- 2 – ass. *Homomallietum incurvati* Philippi 1965 (var. *typica* + var. *Ctenidium molluscum*) from nature reserve “Ibengarten bei Dermbach in der Rhön” (Thuringia, Germany) (Marstaller, 1988)
- 3 – ass. *Homomallietum incurvati* Philippi 1965 (var. *typica* + var. *Tortella tortuosa*) from nature reserves "Großer Hörseiberg and Huhrodt" and "Kleiner Hörselberg" near Eisenach (Thuringia, Germany) (Marstaller, 1991)
- 4 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from nature reserve „Mertelstal und Heldrastein“ near Schnellmannshausen (Thuringia, Germany) (Marstaller, 2004)
- 5 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from nature reserve "Ziegenried" near Plaue (Thuringia, Germany) (Marstaller, 2003)
- 6 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from Teufelsberg Mt. near Weissendorf (Thuringia, Germany) (Marstaller, 2005)
- 7 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from Bleicheroder Mt. (Thuringia, Germany) (Marstaller, 2008)
- 8 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from in the vicinity of Zscheiplitz near Freyburg /Unstrut (Saxony-Anhalt, Germany) (Marstaller, 2017).
- 9 – communities of ass. *Homomallietum incurvati* Philippi 1965 from Saxony-Anhalt, Germany (Schubert, 2009).
- 10 – subass. *H.i. typicum* + subass. *H.i. brachythecietosum populei* from Pfalz, Germany (Lauer, 2002).

Table 10. Association *Pseudoleskeelletum catenulatae* Ježek & Vondráček 1962

Number of relevé	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	C O N S T A N C Y
Field number of relevé	25	8	6	3	12	14	15	13	339	338	329	330	373	371	372	22	363	367	368	29	35	28	
Length of the plot, cm	20	15	30	30	20	15	30	30	20	15	15	15	20	20	20	15	20	20	20	15	20	20	
Width of the plot, cm	15	15	30	30	20	15	30	30	20	15	15	15	20	20	20	15	15	20	20	15	20	20	
Cover (%)	90	100	100	100	80	90	90	70	100	100	100	100	90	100	100	100	90	100	100	60	70	60	
Exposition	NE	W	W	SW	W	SE	SE	SE	S	S	S	S	S	S	S	W	S	S	S	NE	NE	NE	
Substrate	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	
Number of species	7	5	7	3	3	5	6	7	8	8	4	8	5	7	8	6	5	7	5	3	3	4	

D.s. of association

<i>Pseudoleskeella catenulata</i>	3	4	3	4	2	4	3	3	3	2	5	3	2	3	3	4	4	4	2	4	3	3	V
-----------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----------

D.s. of *Schistidietea apocarpi*, *Schistidietalia apocarpi* and *Grimmion tergestinae*

<i>Schistidium apocarpum s.l.</i>	.	.	.	.	.	.	.	.	1	2	+	1	.	.	.	.	+	.	+	.	.	.	II
<i>Didymodon rigidulus</i>	1	.	2	.	.	.	.	1	.	+	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Schistidium submuticum</i>	.	.	.	.	.	1	.	.	.	.	.	.	.	r	.	.	.	.	.	.	.	.	I
<i>Schistidium crassipilum</i>	1	+	.	1	I

D.s. of *Neckeretalia complanatae* and *Neckerion complanatae*

<i>Sciuro-hypnum populeum</i>	3	I
-------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----------

D.s. of *Ctenidietea mollusci*, *Ctenidietalia mollusci*, *Ctenidion mollusci* and *Distichion capillacei*

<i>Tortella tortuosa</i>	2	.	.2	.	.	.2	3	2	.	2	2	.	+	.	.	r	2	2	3	2	2	2	IV
<i>Flexitrichum flexicaule</i>	.	.	.	.	.	.	.	.	+	2	.	3	.	2	2	r	.	.	.	.	.	.	II
<i>Encalypta rhaptocarpa</i>	.	.	.	.	.	.	.	1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Campyliadelphus chrysophyllus</i>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	I
<i>Tortella fragilis</i>	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	I

Number of relevé	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
<i>Encalypta streptocarpa</i>	2	.	.	.	.	.	1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	I
D.s. of <i>Frullanio–Leucodontetea</i> and <i>Orthotrichetalia</i>																							
<i>Leucodon sciuroides</i>	3	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Radula complanata</i>	2	.	.	.	.	.	.	.	.	.	I
Other species																							
<i>Syntrichia ruralis</i>	.	.	+	2	4	1	+	1	2	1	+	1	.	.	2	.	2	2	2	.	2	1	IV
<i>Hypnum cupressiforme</i>	2	.	r	.	.	.	2	.	.	3	.	.	2	3	.	.	.	II
<i>Pseudoleskeella nervosa</i>	.	2	.	.	.	.	.	.	1	3	.	2	2	.	.	.	.	.	.	.	.	.	II
<i>Brachytecium capillaceum</i>	.	3	2	2	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	I
<i>Orthotrichum cupulatum</i>	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Orthotrichum anomalum</i>	2	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Anomodon longifolius</i>	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Didymodon fallax</i>	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	I
<i>Serpoleskea confervoides</i>	.	.	+	I
<i>Homomallium incurvatum</i>	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	I
<i>Brachytecium albicans</i>	+	I
<i>Encalypta sp.</i>	r	.	.	.	.	.	.	I
<i>Schistidium sp.</i>	r	.	.	.	.	.	.	.	I
<i>Abietinella abietina</i>	2	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	I
<i>Ptychostomum capillare</i>	r	.	.	r	.	.	.	.	.	.	.	I
<i>Bryum sp.</i>	+	2	.	.	.	2	.	.	.	.	I
<i>Cladonia ramulosa</i>	+	r	.	.	.	.	.	.	.	I
<i>Ptychostomum imbricatulum</i>	+	.	.	+	I
<i>Ptychostomum moravicum</i>	3	.	.	.	.	.	.	I

Number of relevé	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Rhytidium rugosum</i>	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ptychostomum elegans</i>	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

I
I

Localities of relevés (ordinal No. of relevé in the table indicated in bold – No. of locality mentioned in the captures under Figure 1):

1, 16, 20, 21, 22 – 11; **2, 3, 4, 5** – 8; **6, 7, 8** – 9; **9, 10** – 7; **11, 12** – 6; **13, 14, 15** – 14; **16**–10; **17, 18, 19** – 14.

Table 11. Comparison of communities of ass. *Pseudoleskeelletum catenulatae* Ježek & Vondráček 1962 described in the Republic of Bashkortostan, Spain and Germany

Number of syntaxa	1	2	3	4	5
Number of relevés	22	6	11	7	10
D.s. of association					
<i>Pseudoleskeella catenulata</i>	V	V	V	V	V
D.s. of <i>Schistidietea apocarpi</i> , <i>Schistidietalia apocarpi</i> and <i>Grimmion tergestinae</i>					
<i>Schistidium apocarpum</i> s.l.	II	III	II	V	II
<i>Didymodon rigidulus</i>	I	I	I	IV	II
<i>Schistidium submuticum</i>	I	.	.	.	.
<i>Schistidium crassipilum</i>	I	.	.	.	.
D.s. of <i>Ctenidietea mollusci</i> , <i>Ctenidietalia mollusci</i> , <i>Ctenidion mollusci</i> and <i>Distichion capillacei</i>					
<i>Tortella tortuosa</i>	IV	I	IV	IV	V
<i>Flexitrichum flexicaule</i>	II	.	II	II	IV
<i>Encalypta rhaptocarpa</i>	I	.	.	.	.
<i>Encalypta streptocarpa</i>	I	I	II	III	III
<i>Campyliadelphus chrysophyllus</i>	I	.	.	.	.
<i>Tortella fragilis</i>	I	.	.	.	.
<i>Distichium capillaceum</i>	.	I	.	.	.
D.s. of <i>Frullanio–Leucodontetea</i> and <i>Orthotrichetalia</i>					
<i>Leucodon sciuroides</i>	I	I	.	III	.
<i>Radula complanata</i>	I	.	.	.	.
Other species					
<i>Syntrichia ruralis</i>	IV	.	I	.	.
<i>Hypnum cupressiforme</i>	II	.	I	III	.
<i>Pseudoleskeella nervosa</i>	II	.	.	.	.
<i>Orthotrichum cupulatum</i>	I	III	.	I	.

<i>Orthotrichum anomalum</i>	I	III	I	III	I
<i>Abietinella abietina</i>	I	.	I	.	.
<i>Ptychostomum capillare</i>	I	.	I	V	.
<i>Cladonia ramulosa</i>	I	.	.	II	V
<i>Ptychostomum imbricatulum</i>	I	.	.	.	III
<i>Ptychostomum moravicum</i>	I	.	I	.	.
<i>Homalothecium sericeum</i>	.	IV	III	III	II
<i>Tortula muralis</i>	.	I	I	V	I
<i>Grimmia pulvinata</i>	.	I	I	I	IV
<i>Bryum argenteum</i>	.	.	II	V	.
<i>Leptogium sinuatum</i>	.	.	III	.	.
<i>Bryoerythrophyllum recurvirostrum</i>	.	.	I	II	I
<i>Syntrichia montana</i>	.	.	.	IV	I
<i>Pseudocrossidium revolutum</i>	.	.	.	.	V
<i>Buckia vausherii</i>	.	.	.	.	IV
<i>Physcia muscigena</i>	.	.	.	.	II

Low constancy species: *Anomodon longifolius* (1-I); *Anomodon viticulosus* (1-I); *Brachythecium albicans* (1-I); *Brachythecium capillaceum* (1-I); *Brachythecium salebrosum* (2-I); *Bryum sp.* (1, 5 – I); *Camptothecium lutescens* (3-I); *Cladonia furcata* (5-I); *Cladonia sp. moravicum* (3-I); *Dermatocarpon miniatum* (4-I); *Deschampsia flexuosa moravicum* (3-I); *Didymodon fallax* (1-I); *Diploschistes bryophilus* (5-I); *Encalypta sp.* (1-I); *Encalypta vulgaris* (5-I); *Homomallium incurvatum* (1-I); *Lecanora sp.* (3-I); *Ptychostomum elegans* (1-I); *Rhytidium rugosum* (1-I); *Schistidium sp.* (1-I); *Sciuro-hypnum populeum* (1-I); *Serpoleskea confervoides* (1-I); *Sesleria varia* (3-I); *Streblotrichum convolutum* (5-I); *Syntrichia calcicola* (3-I); *Thymus sp.* (3-I); *Toninia coeruleonigricans* (5-I).

Syntaxa:

1 – ass. *Pseudoleskeelletum catenulatae* from the Belaya River valley; 2 - ass. *Pseudoleskeelletum catenulatae* from the Sierras Béticas Nts. (Southern Spain) (Guerra, 1985); 3 - ass. *Pseudoleskeelletum catenulatae* from Rübeland limestone area (Germany) (Nörr, 1970); 4 - Bryum-subass of ass. *Pseudoleskeelletum catenulatae* from Thuringia, Germany) (Marstaller, 1980). Currently, this syntaxa is recognized as subass. *P.c. pseudocrossidietosum revoluti* Marstaller 1987 (Marstaller, 2006); 5 - *Barbula revoluta* - subass. of ass. *Pseudoleskeelletum catenulatae* from Thuringia, Germany) (Marstaller, 1980). Now this syntaxa is considered as variant (Marstaller, 2006).