



SUPPLEMENTARY MATERIAL

Assessment of the effectiveness of overseeding methods for hardwood meadows under various pluviothermal conditions

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Table S1. Floristic composition of the meadow sward (percentage of species) in the years 2017–2020

Species	O				STU/Sm				STU/Sp				VU/Sm				VU/Sp			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
Experiment I (Zimna Woda)																				
<i>Festulolium*</i>	–	–	–	–	+	2	2	2	+	+	1	1	+	1	+	+	+	+	+	+
<i>Festuca pratensis*</i>	1	1	2	2	5	5	6	6	5	6	6	6	3	5	5	5	5	4	7	7
<i>Dactylis glomerata*</i>	15	12	9	6	27	18	12	12	20	20	18	18	26	20	14	14	20	16	16	16
<i>Lolium perenne*</i>	5	2	4	9	5	8	10	10	11	6	8	8	6	5	8	8	10	6	6	6
<i>Lolium hybridicum*</i>	–	–	–	–	5	4	1	1	5	3	3	3	5	3	2	2	5	2	2	2
<i>Phleum pratense*</i>	1	1	1	2	5	3	1	1	5	5	3	3	3	2	5	5	+	+	1	1
<i>Poa pratensis*</i>	10	13	23	10	15	13	17	17	16	15	15	15	18	18	18	18	18	20	24	24
Native and undersown grasses – Σ	32	29	39	29	62	44	49	49	62	57	54	54	61	54	52	52	58	48	56	56
Other grasses	54	53	44	51	20	23	26	26	23	21	29	29	20	21	27	27	32	31	33	33
Sum of all grasses	86	88	83	83	82	77	75	75	85	78	83	83	81	75	79	79	90	79	89	89
<i>Trifolium pratense*</i>	2	2	1	1	8	13	6	6	5	12	4	4	4	10	6	6	2	8	3	3
<i>Lotus corniculatus*</i>	–	–	–	–	3	3	2	2	1	1	1	1	2	2	1	1	1	2	1	1
<i>Trifolium repens</i>	–	1	1	1	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
All legume	2	3	2	2	11	16	8	8	6	13	5	5	7	13	7	7	3	10	4	4
All herbs and weeds	12	9	15	15	7	7	17	17	9	9	12	12	12	12	14	14	7	11	8	8
Sum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Uvn	66.70	63.38	67.70	67.70	81.38	74.75	76.50	76.50	79.13	77.13	77.13	77.13	79.40	75.50	77.10	77.10	75.88	70.75	74.90	74.90
Experiment II (Racibory)																				
<i>Festulolium*</i>	–	–	–	–	2	2	2	2	3	2	2	2	1	1	1	1	1	1	1	1
<i>Festuca pratensis*</i>	5	4	3	3	1	4	5	5	5	5	6	6	5	6	5	5	+	4	3	3
<i>Dactylis glomerata*</i>	12	10	7	7	14	10	16	16	15	10	15	15	10	13	15	15	10	8	6	6
<i>Lolium perenne*</i>	5	4	6	6	10	10	8	8	10	10	8	8	10	11	12	12	11	8	9	9

Species	O				STU/Sm				STU/Sp				VU/Sm				VU/Sp			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
<i>Lolium hybridicum</i>	–	–	1	1	12	6	3	3	5	10	5	5	5	5	4	4	5	6	1	1
<i>Phleum pratense</i> *	10	3	2	2	10	8	8	8	5	6	6	6	5	8	4	4	16	8	8	8
<i>Poa pratensis</i> *	7	6	9	9	11	13	21	21	10	20	19	19	9	10	19	19	20	26	25	25
Native and undersown grasses – Σ	39	27	28	28	60	53	63	63	53	63	61	61	45	54	60	60	63	18	53	53
Other grasses	54	58	47	47	21	14	10	10	24	13	12	12	44	28	19	19	23	18	24	24
Sum of all grasses	93	85	75	75	81	67	73	73	77	76	73	73	89	82	79	79	86	79	77	77
Trifolium pratense*	–	1	1	1	15	25	12	12	16	22	14	14	8	10	12	12	6	16	10	10
Lotus corculatus*	–	–	–	–	1	1	1	1	1	–	2	2	1	2	1	1	1	–	1	1
Trifolium repens	1	7	9	9	–	–	3	3	3	–	1	1	–	–	–	–	1	–	–	–
All Legume	1	8	10	10	16	26	16	16	20	22	17	17	9	12	13	13	8	16	11	11
All herbs and weeds	6	7	12	12	3	7	11	11	3	2	10	10	2	6	8	8	6	5	12	12
Sum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Uvn	66.50	68.50	68.90	68.90	86.38	77.75	81.30	81.30	85.38	77.25	80.90	80.90	75.00	77.13	80.00	80.00	85.00	80.13	81.40	81.40
Experiment III (Ranna)																				
<i>Festulolium</i> *	–	–	–	–	4	3	3	3	3	3	3	3	2	1	2	2	1	+	1	1
<i>Festuca pratensis</i> *	4	3	4	4	8	6	14	14	16	13	12	12	6	5	8	8	15	12	12	12
<i>Dactylis glomerata</i> *	13	15	16	16	19	20	18	18	21	20	18	18	25	26	24	24	26	25	22	22
<i>Lolium perenne</i> *	5	3	7	7	4	4	9	9	3	3	7	7	3	3	8	8	2	2	7	7
<i>Lolium hybridicum</i> *	–	–	–	–	5	4	4	4	4	3	2	2	2	2	1	1	3	2	1	1
<i>Phleum pratense</i> *	+	+	1	1	1	2	2	2	+	1	2	2	+	1	2	2	+	+	2	2
<i>Poa pratensis</i> *	14	13	16	16	25	21	18	18	20	18	22	22	20	19	18	18	20	18	20	20
Native and undersown grasses – Σ	36	34	44	44	66	60	68	68	67	61	66	66	59	57	63	63	67	59	65	65

cont. Tab. S1

Species	O				STU/Sm				STU/Sp				VU/Sm				VU/Sp			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
Other grasses	48	47	37	37	20	22	21	21	20	22	21	21	33	32	23	23	22	27	23	23
Sum of all grasses	87	81	81	81	86	82	89	89	87	83	87	87	92	89	86	86	89	86	88	88
<i>Trifolium pratense</i> *	3	4	–	–	8	10	2	2	10	12	2	2	5	7	2	2	6	8	1	1
<i>Lotus corniculatus</i> *	–	–	–	–	1	2	1	1	+	+	1	1	1	1	–	–	+	+	1	1
<i>Trifolium repens</i>	1	1	–	–	0	1	1	1	–	–	1	1	0	–	1	1	–	–	–	–
All legume	4	5	–	–	9	13	4	4	10	12	4	4	6	8	3	3	6	8	2	2
All herbs and weeds	9	14	19	19	5	5	7	7	3	5	9	9	2	3	11	11	5	6	10	10
Sum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Uvn	69.40	67.13	67.10	67.10	86.00	76.63	74.70	74.70	88.38	80.88	79.70	79.70	76.50	77.63	77.60	77.60	86.25	80.13	79.30	79.30

Explanations: O = control object; STU/Sm = strip till unit used on summer time; STU/Sp = strip till unit used on spring time; VU/Sm = vredo unit used on summer time; VU/Sp = vredo unit used on spring time; Uvn = utility value numbers; * = under sown species.