

**Electronic Appendix 1.** – Description of 22 studied meadows in the Železné hory Mts. GD – average groundwater depth, pH<sub>(wt)</sub> – measured in deionised water solution. Alliance (ZM) – phytosociological classification (Moravec et al. 1995)

locality	Area (ha)	Altitude (m a.s.l.)	Alliance (ZM)	Management	biomass (g/m <sup>2</sup> )	NH <sub>4</sub> (mg/kg)	NO <sub>3</sub> (mg/kg)	PO <sub>4</sub> (mg/kg)	Total N (g/kg)	total P (mg/kg)	Organic matter (%)	pH (wt)	GD (cm)
Kochánovice	0.44	335 - 337	Molinion	mown since 2004	483.44	2.19	0.85	0.21	4.46	393.95	17.64	6.66	46
Hluboký	0.46	383 - 384	Molinion	regularly mown	510.75	2.50	0.79	0.22	3.26	365.83	12.14	5.44	38
Strádovka	13.12	570 - 586	Caricion fuscae	regularly mown	314.14	4.27	11.90	0.43	18.63	1152.37	65.12	5.82	26
Hubský	8.03	581 - 592	Caricion fuscae	mown c. 2 times in three years	295.00	1.71	0.45	0.22	4.83	528.72	17.97	4.80	47
Nový rybník	0.41	567 - 573	Calthion	mown since 2006	455.42	6.03	0.56	0.29	3.98	331.22	16.76	5.46	10
Kameničky	0.15	556 - 558	Calthion	regularly mown	352.00	2.79	0.69	0.25	6.07	761.85	21.37	5.17	12
Úpolíný u Trhové Kamenice	0.80	550 - 555	Caricion fuscae	regularly mown	255.47	2.10	0.83	0.28	3.90	537.11	15.24	5.67	27
Chobotovský potok	1.87	534 - 540	Calthion	regularly mown	467.39	3.98	1.15	0.28	13.56	1332.72	44.95	4.89	14
Zubří	5.63	614 - 622	Caricion fuscae	regularly mown	410.04	2.88	0.55	0.26	4.34	489.89	17.32	5.36	25
Křemenice	0.47	609 - 610	Calthion	regularly mown	680.34	6.24	0.83	0.31	6.75	998.54	30.26	5.42	4
Buchtovka	1.89	536 - 550	Caricion fuscae	regularly mown	313.85	7.36	1.11	0.60	13.91	1013.21	52.22	5.17	10
Tobolky	0.30	547 - 553	Caricion fuscae	mown since 2004	446.56	2.64	2.54	0.43	7.67	838.63	32.83	5.77	17
Maršálka	4.21	591 - 610	Caricion fuscae	regularly mown	377.57	3.52	0.58	0.33	6.90	748.28	26.42	5.57	9
V Borovičkách	0.32	592 - 595	Calthion	regularly mown	484.73	4.17	1.01	0.24	3.95	447.66	17.66	5.45	25
V Ohradách	0.42	589 - 594	Molinion	mown since 2007	583.13	2.38	1.50	0.23	5.09	498.90	20.71	5.60	23
Rváčov	0.16	584 - 586	Calthion	mown since 2009	457.70	2.50	1.74	0.25	4.82	463.89	17.88	5.74	23
Jančouř	1.10	546 - 550	Calthion	mown since 2006	455.50	3.54	0.46	0.21	2.74	360.43	11.33	5.44	45
Kocourov	0.70	549 - 550	Sphagno recurvi – Caricion canescentis	regularly mown (abandoned in 2006-2008)	285.61	3.10	0.54	0.32	8.54	863.15	40.09	4.72	4
Rovný	0.56	580 - 586	Calthion	regularly mown	464.49	1.44	3.39	0.34	8.45	1169.01	34.32	6.20	41
Jánuš	2.93	549 - 556	Caricion fuscae	abandoned	334.07	2.51	0.53	0.22	4.96	534.14	16.32	5.26	23
Mokřadlo	1.56	442 - 444	Molinion	regularly mown	322.28	2.71	0.34	0.18	3.82	463.91	14.75	5.33	64
Zlatá louka	0.89	476 - 482	Sphagno warnstorffiani – Tomenthypnion	regularly mown	260.13	7.90	4.10	0.80	26.40	891.56	71.39	6.59	17

Moravec J. (ed.) (1995): Red list of plant communities of the Czech Republic. – Oblastní vlastivědné muzeum v Litoměřicích. Litoměřice. (In Czech).

**Electronic Appendix 2.** - Species list. Plant species recorded on 22 wet meadows in the Železné hory Mts. in 2007 and 2009.

*Aegopodium podagraria* L., *Agrostis canina* L., *Agrostis capillaris* L., *Agrostis stolonifera* L., *Achillea millefolium* agg. – including *Achillea millefolium* L. and *Achillea pratensis* Saukel et Länger, *Achillea ptarmica* L., *Ajuga reptans* L., *Alnus glutinosa* (L.) Gaertn., *Alopecurus pratensis* L., *Anemone nemorosa* L., *Angelica sylvestris* L., *Anthoxanthum odoratum* L., *Anthriscus sylvestris* (L.) Hoffm., *Avenella flexuosa* (L.) Drejer, *Avenula pubescens* (Huds.) Dum.

*Bistorta major* S. F. Gray, *Briza media* L.

*Calamagrostis canescens* (Weber) Roth, *Calamagrostis epigejos* (L.) Roth, *Caltha palustris* L., *Campanula patula* L., *Campanula rotundifolia* L., *Cardamine pratensis* L., *Carex acuta* L., *Carex brizoides* L., *Carex canescens* L., *Carex davalliana* Sm., *Carex demissa* Hornem., *Carex diandra* Schrank, *Carex echinata* Murray, *Carex flava* L., *Carex hartmanii* Cajander, *Carex hirta* L., *Carex hostiana* DC., *Carex nigra* (L.) Reichardt, *Carex ovalis* Good, *Carex pallescens* L., *Carex panicea* L., *Carex pilulifera* L., *Carex pulicaris* L., *Carex rostrata* Stokes, *Carex tomentosa* L., *Carex vesicaria* L., *Centaurea jacea* L., *Cerastium arvense* L., *Cerastium holosteoides* Fries, *Cirsium arvense* (L.) Scop., *Cirsium canum* (L.) All., *Cirsium oleraceum* (L.) Scop., *Cirsium palustre* (L.) Scop., *Cirsium rivulare* (Jacq.) All., *Colchicum autumnale* L., *Conyza canadensis* (L.) Cronquist, *Crepis mollis* subsp. *hieracioides* Domin, *Crepis paludosa* (L.) Moench, *Cynosurus cristatus* L.

*Dactylis glomerata* L., *Dactylorhiza majalis* (Rchb.) Hunt et Summerhayes, *Danthonia decumbens* (L.) DC., *Deschampsia cespitosa* (L.) P. B., *Drosera rotundifolia* L., *Dryopteris carthusiana* (Vill.) H. P. Fuchs

*Elytrigia repens* (L.) Nevski, *Epilobium angustifolium* L., *Epilobium ciliatum* Rafin., *Epilobium palustre* L., *Epipactis palustris* (L.) Crantz, *Equisetum arvense* L., *Equisetum fluviatile* L., *Equisetum palustre* L., *Equisetum sylvaticum* L., *Eriophorum angustifolium* Honck.

*Festuca filiformis* Pourr., *Festuca gigantea* (L.) Vill., *Festuca ovina* L., *Festuca pratensis* Huds., *Festuca rubra* L., *Filipendula ulmaria* (L.) Maxim., *Frangula alnus* Mill., *Fraxinus excelsior* L.

*Galium album* Mill., *Galium aparine* L., *Galium boreale* L., *Galium palustre* L., *Galium uliginosum* L., *Geum rivale* L., *Glechoma hederacea* L., *Glyceria fluitans* (L.) R. Br.,

*Hieracium pilosella* L., *Holcus lanatus* L., *Holcus mollis* L., *Hypericum maculatum* Crantz, *Hypericum perforatum* L., *Hypericum tetrapterum* Fries

*Impatiens noli-tangere* L.

*Juncus articulatus* L., *Juncus conglomeratus* L., *Juncus effusus* L., *Juncus filiformis* L., *Knautia arvensis* (L.) Coulter

*Laserpitium prutenicum* L., *Lathyrus pratensis* L., *Leontodon hispidus* L., *Leucanthemum vulgare* agg. – including *Leucanthemum vulgare* Lamk and *Leucanthemum ircutianum* DC., *Linum catharticum* L., *Lolium perenne* L., *Lotus uliginosus* Schkuhr, *Luzula campestris* agg. – including *Luzula campestris* (L.) DC. and *Luzula multiflora* (Ehrh.) Lej., *Lycopus europaeus* L., *Lychnis flos-cuculi* L., *Lysimachia nummularia* L., *Lysimachia vulgaris* L., *Lythrum salicaria* L.

*Mentha arvensis* L., *Menyanthes trifoliata* L., *Molinia caerulea* L., *Myosotis palustris* agg. – including *Myosotis palustris* (L.) L. and *Myosotis nemorosa* Besser

*Nardus stricta* L.

*Parnassia palustris* L., *Pedicularis sylvatica* L., *Peucedanum palustre* (L.) Moench, *Phleumpratense* L., *Phragmites australis* (Cav.) Steud., *Picea abies* (L.) Karsten, *Plantago lanceolata* L., *Poa angustifolia* L., *Poa palustris* L., *Poa pratensis* L., *Poa trivialis* L., *Polygala amarella* Crantz, *Polygala vulgaris* L., *Populus tremula* L., *Potentilla erecta* (L.) Rauschel, *Potentilla palustris* (L.) Scop., *Prunella vulgaris* L.

*Ranunculus acris* L., *Ranunculus auricomus* L., *Ranunculus flammula* L., *Ranunculus nemorosus* DC., *Ranunculus repens* L., *Rhinanthus minor* L., *Rumex acetosa* L., *Rumex crispus* L., *Rumex obtusifolius* L.

*Salix cinerea* L., *Sanguisorba officinalis* L., *Scirpus sylvaticus* L., *Scorzonera humilis* L.,  
*Scutellaria galericulata* L., *Selinum carvifolia* (L.) L., *Sorbus aucuparia* L., *Stellaria graminea* L.,  
*Stellaria palustris* Hoffm., *Succisa pratensis* Moench

*Tanacetum vulgare* L., *Taraxacum* sp. , *Tephrosia crispa* (Jacq.) Schur, *Trifolium*  
*pratense* L., *Trifolium repens* L., *Trifolium spadiceum* L., *Trisetum flavescens* (L.) P. B., *Trollius*  
*altissimus* Crantz

*Urtica dioica* L.

*Valeriana dioica* L., *Veronica beccabunga* L., *Veronica chamaedrys* L., *Veronica*  
*officinalis* L., *Veronica scutellata* L., *Veronica serpyllifolia* L., *Vicia cracca* L., *Viola canina* L.,  
*Viola hirta* L., *Viola palustris* L., *Viola riviniana* Rchb.

**Electronic Appendix 3.** – Tolerance values and Pearson correlation coefficients between plant traits, \* –  $0.05 > p > 0.01$ ; \*\* –  $p < 0.01$ ; Persistence - Persistence of ramet connection; Multiplication - Multiplication rate. Tolerance for the variable is defined as 1 minus the  $r^2$  of this variable with all other independent variables in the regression. Low tolerance values indicate that the variable is correlated with one or more of the other predictors. Predictors with tolerance  $< 0.1$  should be omitted from the analyses (Quinn and Keough 2007).

TOLERANCE		Clonal index	Cyclicity	Persistence	Multiplication	Lateral spread	Plant height	SLA	Rosette	Semi-rosette
<b>0.370</b>	<b>Clonal index</b>	1.000								
<b>0.334</b>	<b>Cyclicity</b>	-0.092	1.000							
<b>0.769</b>	<b>Persistence</b>	-0.072	<b>0.250*</b>	1.000						
<b>0.635</b>	<b>Multiplication</b>	<b>0.483**</b>	0.036	-0.169	1.000					
<b>0.379</b>	<b>Lateral spread</b>	<b>0.685**</b>	<b>-0.299**</b>	-0.166	<b>0.210*</b>	1.000				
<b>0.899</b>	<b>Plant height</b>	0.003	0.030	0.179	-0.023	0.008	1.000			
<b>0.744</b>	<b>SLA</b>	-0.047	<b>-0.267*</b>	<b>-0.353**</b>	0.078	-0.001	-0.147	1.000		
<b>0.461</b>	<b>Rosette</b>	-0.172	<b>0.209*</b>	0.169	0.154	<b>-0.268*</b>	-0.168	<b>-0.256*</b>	1.000	
<b>0.290</b>	<b>Semi-rosette</b>	-0.046	<b>0.657*</b>	0.044	-0.039	<b>-0.292**</b>	0.103	0.015	<b>-0.314**</b>	1.000