

Meier T., Hensen I. & Kühn I. (2024) Functional approach to xerothermic grasslands in Central Germany: trait composition, dominant grasses and soil factors. – Preslia 96: 183–208.

Supplementary Table S1. Mean frequencies and covers of the most common species and their functional traits (VPH – vegetative plant height, LDM – leaf dry mass, LA – leaf area, SLA – specific leaf area, LDMC – leaf dry matter content, LNC – leaf nitrogen concentration, LCC – leaf carbon concentration, C/N – leaf carbon/nitrogen ratio; mean and SD). Additionally, these parameters are given at the end of the table for the functional groups of grasses and forbs.

species	fre [%]	cov [%]	VPH [cm]		LDM [mg]		LA [mm ²]		SLA [mm ² /mg]		LDMC [mg/g]		LNC [%]		LCC [%]		C/N	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<i>Achillea pannonica</i>	2.97	0.32	26.04	10.17	74.06	85.76	881.75	861.06	14.78	5.08	342.70	102.97	1.87	0.69	40.16	7.33	22.92	7.62
<i>Acinos arvensis</i>	6.93	0.77	8.76	3.48	2.44	0.73	49.58	9.67	21.90	7.19	398.26	126.30	1.60	0.46	47.49	1.49	31.60	8.03
<i>Agrimonia eupatoria</i>	7.92	0.89	18.17	5.84	308.61	142.30	3691.67	1623.01	13.01	5.35	324.88	63.68	2.09	0.35	46.46	0.51	22.81	3.84
<i>Alyssum montanum</i>	10.89	0.99	8.23	2.30	1.61	1.21	25.14	14.43	19.53	12.33	505.86	184.93	1.83	0.45	36.17	3.18	20.93	5.60
<i>Anthericum liliago</i>	10.89	1.91	25.24	7.94	74.53	38.26	804.89	304.43	11.92	3.98	232.56	39.63	3.15	0.83	44.37	0.61	15.08	4.16
<i>Anthericum ramosum</i>	1.98	0.17	20.82	10.63	25.45	5.66	292.52	73.71	11.78	3.11	292.13	59.87	2.58	0.74	45.69	0.55	18.53	5.54
<i>Anthyllis vulneraria</i>	7.92	0.89	13.91	6.03	33.45	17.19	545.37	251.28	17.74	6.21	336.76	192.19	2.32	0.43	38.78	1.45	17.12	2.49
<i>Arrhenatherum elatius</i>	4.95	1.66	62.50	11.82	32.12	11.25	781.13	258.40	25.28	7.10	613.02	125.69	2.42	0.33	45.39	0.31	18.99	2.47
<i>Artemisia campestris</i>	2.97	0.32	27.93	8.98	12.72	7.04	176.48	87.17	14.80	5.53	301.59	71.48	3.56	0.27	45.10	0.71	12.73	0.95
<i>Astragalus danicus</i>	4.95	0.59	9.81	4.83	15.71	5.69	286.42	125.60	19.10	7.01	389.95	64.00	2.36	0.83	41.43	5.88	18.81	4.82
<i>Brachypodium pinnatum</i>	15.84	4.63	18.73	8.86	42.66	22.21	794.01	466.26	18.37	3.87	629.05	110.50	1.89	0.54	45.01	1.11	26.01	8.15
<i>Bromus erectus</i>	56.44	18.13	44.83	13.50	53.49	25.21	708.54	300.09	14.27	5.02	541.69	139.99	1.91	0.54	44.51	1.61	25.42	8.21
<i>Carex humilis</i>	56.44	8.81	9.04	3.69	8.35	4.28	115.59	57.87	14.60	4.75	588.72	134.16	1.98	0.51	45.83	1.39	24.86	6.89
<i>Centaurea scabiosa</i>	10.89	1.11	22.00	13.94	183.76	110.80	2615.60	1767.28	15.52	7.26	211.61	49.47	3.01	0.69	44.61	1.37	15.56	3.63
<i>Centaurea stoebe</i>	7.92	1.26	64.71	24.10	67.39	58.96	939.45	799.46	14.90	4.73	298.12	91.42	2.79	0.69	45.29	1.40	17.15	4.25
<i>Cervaria rivini</i>	6.93	0.89	10.05	4.07	279.66	164.76	2497.36	1210.63	11.16	8.55	403.92	37.05	2.13	0.54	45.54	1.17	22.60	5.83
<i>Dianthus carthusianorum</i>	2.97	0.07	21.52	7.80	9.33	3.41	109.89	27.99	12.72	3.94	456.80	91.32	2.03	0.19	44.81	0.40	22.15	2.32
<i>Eryngium campestre</i>	7.92	0.45	18.68	4.99	531.00	354.40	3030.80	1433.60	7.71	5.77	447.42	104.40	1.54	0.37	44.98	1.01	31.07	8.99
<i>Erysimum crepidifolium</i>	2.97	0.20	15.97	6.06	21.63	9.84	209.41	99.93	10.06	2.75	393.79	50.25	2.61	0.35	43.71	0.31	16.95	2.18
<i>Euphorbia cyparissias</i>	18.81	0.84	14.66	4.80	0.84	0.49	17.22	9.59	25.30	20.02	476.57	186.50	2.72	0.67	45.01	2.62	17.49	4.62
<i>Falcaria vulgaris</i>	3.96	0.35	26.19	9.30	253.77	175.20	2457.87	1404.31	13.31	10.25	366.27	41.90	1.82	0.50	42.23	1.20	24.49	6.16
<i>Festuca csikhegyensis</i>	16.83	2.33	11.46	6.31	20.42	9.90	122.93	55.67	6.42	1.81	588.67	114.77	1.58	0.36	45.05	1.12	30.19	7.62
<i>Festuca rupicola</i>	22.77	5.37	21.79	4.87	17.97	6.64	145.98	46.46	8.60	2.55	645.74	138.88	1.32	0.30	45.35	2.04	35.78	7.50

<i>Filipendula vulgaris</i>	10.89	2.75	21.08	7.31	143.41	62.53	1544.38	581.80	11.11	1.81	469.32	48.57	1.90	0.47	45.47	2.03	24.81	3.91
<i>Fragaria viridis</i>	2.97	0.32	11.41	3.35	136.38	51.31	1403.50	509.58	11.48	5.27	475.69	58.85	1.74	0.24	44.93	3.23	26.29	5.33
<i>Galatella inosyris</i>	8.91	0.35	12.71	9.38	2.89	1.30	44.03	21.94	18.69	14.13	432.72	175.51	2.31	0.51	45.74	1.67	20.81	5.35
<i>Galium boreale</i>	3.96	0.35	16.70	4.85	2.29	0.76	53.08	14.08	24.48	6.63	373.85	169.17	2.36	0.48	45.41	0.41	19.96	4.64
<i>Galium mollugo</i>	1.98	0.30	53.85	6.84	2.16	1.18	35.83	10.30	21.53	11.60	460.30	151.35	1.43	0.22	44.25	0.84	31.45	5.50
<i>Galium verum</i>	6.93	0.54	22.24	7.47	1.14	0.46	18.11	8.80	17.97	9.19	519.02	177.38	2.16	0.71	46.37	1.59	23.33	6.58
<i>Gypsophila fastigiata</i>	10.89	1.11	11.94	6.56	13.42	6.54	174.42	63.69	14.25	5.30	255.86	117.51	2.33	0.56	37.09	2.03	16.72	3.87
<i>Helianthemum canum</i>	15.84	1.51	4.22	2.08	4.51	1.95	48.04	15.09	12.55	7.61	463.79	158.92	1.98	0.58	44.76	1.01	24.51	7.42
<i>Helianthemum nummularium</i>	15.84	1.71	10.63	3.30	4.83	2.06	81.58	28.16	18.26	5.68	392.72	151.58	2.31	0.65	44.91	1.19	20.71	4.93
<i>Helictotrichon pratense</i>	11.88	3.56	27.14	6.24	66.85	30.65	490.42	212.16	7.73	2.25	486.50	98.01	1.44	0.19	43.64	1.02	30.92	4.43
<i>Hippocrepis comosa</i>	11.88	2.10	12.27	4.09	29.52	14.69	444.91	211.49	15.94	3.96	282.12	63.30	3.97	0.57	44.32	1.07	11.39	1.66
<i>Hypochaeris maculata</i>	1.98	0.74	18.12	6.26	309.61	118.15	4419.56	1302.76	15.15	3.76	169.39	14.33	2.43	0.82	40.98	0.35	17.88	6.14
<i>Inula hirta</i>	2.97	0.32	17.16	4.28	41.98	19.87	528.08	126.10	14.77	5.60	388.28	97.52	2.34	0.93	45.59	0.17	22.51	11.44
<i>Koeleria macrantha</i>	6.93	0.79	18.87	3.64	18.46	9.95	207.24	97.88	12.35	4.79	598.06	94.34	1.81	0.20	44.19	1.33	24.77	3.16
<i>Medicago falcata</i>	1.98	0.30	30.61	16.92	7.38	2.33	170.79	81.02	24.35	11.26	453.10	131.49	2.42	2.17	37.05	8.59	23.05	17.17
<i>Pilosella officinarum</i>	2.97	0.07	3.58	1.40	20.96	5.39	288.27	132.01	13.46	4.44	371.95	164.95	2.05	0.19	45.68	0.66	22.42	2.00
<i>Plantago media</i>	3.96	0.10	6.48	2.48	98.28	47.84	1401.19	746.92	14.67	5.11	189.49	46.08	1.72	0.29	40.69	3.17	23.99	2.11
<i>Poa angustifolia</i>	3.96	0.69	27.67	7.78	11.78	5.90	135.36	56.15	12.75	4.18	692.89	127.01	1.37	0.04	43.27	1.12	31.70	0.09
<i>Polygonatum odoratum</i>	1.98	0.74	36.13	4.52	78.41	23.67	1632.84	425.95	21.13	1.72	201.89	27.22	2.63	0.41	43.75	1.03	16.88	3.01
<i>Potentilla incana</i>	3.96	0.79	7.49	1.31	80.05	21.62	722.10	236.75	9.00	1.43	478.28	76.61	1.62	0.20	46.21	1.01	28.89	4.12
<i>Prunella grandiflora</i>	2.97	0.20	7.17	1.48	24.71	7.71	432.40	92.95	18.62	5.61	212.19	34.59	1.80	0.35	44.08	0.56	25.06	4.21
<i>Pulsatilla vulgaris</i>	1.98	0.52	11.94	2.57	100.83	24.81	1213.24	310.93	12.65	3.99	259.95	32.42	2.29	0.13	44.91	0.45	19.63	1.31
<i>Rosa rubiginosa</i>	2.97	0.20	45.87	20.93	59.45	35.05	635.14	330.70	11.22	2.22	427.45	37.18	2.52	0.34	44.20	0.22	17.80	2.54
<i>Salvia pratensis</i>	15.84	1.61	18.95	7.07	272.67	105.91	3433.52	1422.64	13.15	4.79	237.99	41.71	2.17	0.54	42.96	3.73	20.63	4.35
<i>Sanguisorba minor</i>	2.97	0.32	5.32	1.58	39.36	18.75	380.41	166.60	10.11	2.46	547.21	63.77	1.34	0.17	45.45	0.67	34.11	3.76
<i>Scabiosa canescens</i>	21.78	2.57	12.99	6.30	29.37	11.05	412.83	151.98	14.36	2.65	243.60	62.82	1.99	0.69	44.43	2.75	24.03	6.04
<i>Scabiosa ochroleuca</i>	1.98	0.30	4.83	4.55	25.45	13.01	260.35	114.22	10.75	1.57	434.97	89.02	1.04	0.18	41.93	0.47	41.05	7.93
<i>Seseli hippomarathrum</i>	8.91	0.84	6.38	4.04	47.36	22.47	353.51	168.10	7.77	1.80	445.80	110.56	1.99	0.50	45.39	1.66	24.06	5.93
<i>Sesleria caerulea</i>	9.90	1.78	10.36	6.14	34.78	17.37	332.11	173.19	9.60	2.02	498.49	70.99	1.49	0.37	44.90	0.91	31.73	7.49
<i>Silene otites</i>	6.93	0.30	23.78	8.30	13.07	5.61	199.21	68.86	16.12	3.97	228.54	54.85	3.12	0.56	44.37	1.40	14.69	3.06
<i>Stipa capillata</i>	26.73	10.10	49.39	9.21	42.88	16.39	292.68	88.30	7.25	2.28	623.52	69.70	1.73	0.34	46.32	0.82	27.98	6.52
<i>Stipa pennata</i>	1.98	0.40	54.78	10.30	125.64	46.03	533.69	171.63	4.66	1.97	679.59	87.46	1.47	0.20	46.12	0.38	32.00	4.62

<i>Stipa pulcherrima</i>	9.90	2.25	57.03	16.70	122.76	58.13	574.83	224.07	5.29	2.06	686.59	142.68	1.54	0.37	45.86	1.03	31.47	7.68
<i>Stipa tirsa</i>	2.97	1.61	47.46	7.50	37.87	9.55	227.56	55.07	6.30	1.95	782.65	65.98	1.26	0.36	43.72	3.08	38.34	14.20
<i>Teucrium chamaedrys</i>	27.72	4.16	6.15	2.53	6.43	2.64	85.23	24.43	14.43	4.16	467.70	90.61	2.19	0.68	45.96	3.81	23.40	8.99
<i>Teucrium montanum</i>	11.88	2.08	5.13	1.99	2.49	1.04	32.18	16.92	13.08	4.54	530.77	175.78	1.65	0.38	48.52	2.11	31.09	7.99
<i>Thalictrum minus</i>	7.92	1.36	23.00	10.27	158.89	80.04	2090.00	1177.09	15.25	12.36	308.68	112.10	2.64	1.03	47.05	3.75	20.77	9.61
<i>Thesium linophyllum</i>	5.94	0.50	8.77	2.49	4.11	1.77	47.34	15.33	12.96	5.39	548.32	165.53	2.13	0.32	43.75	3.60	21.19	4.86
<i>Thymus praecox</i>	5.94	0.40	2.70	1.44	0.87	0.51	13.88	6.63	21.45	12.69	510.61	236.66	1.51	0.38	48.09	1.48	33.43	7.69
<i>Vicia hirsuta</i>	2.97	0.32	29.17	5.48	36.71	11.81	593.70	177.11	17.37	7.96	417.50	39.98	3.58	0.65	43.58	0.60	12.43	2.19
<i>Vincetoxicum hirundinaria</i>	9.90	1.09	33.83	13.61	55.16	26.07	1154.03	437.53	22.06	5.30	243.77	77.33	3.72	0.67	44.18	0.79	12.26	2.50
grasses	17.68	4.44	32.93	8.32	45.43	19.53	390.15	161.66	10.96	3.33	618.23	108.58	1.66	0.33	44.94	1.23	29.30	6.36
forbs	7.37	0.86	17.91	6.45	75.00	38.63	859.58	386.03	15.31	6.10	372.44	96.25	2.27	0.53	44.08	1.79	21.98	5.18