

Moravcová L., Pyšek P., Krinke L., Müllerová J., Perglová I. & Pergl J. (2018): Long-term survival in soil of seed of the invasive herbaceous plant *Heracleum mantegazzianum*. – *Preslia* 90: 225–234.

Electronic Appendix 1. – Location of the burial sites in the Czech Republic.

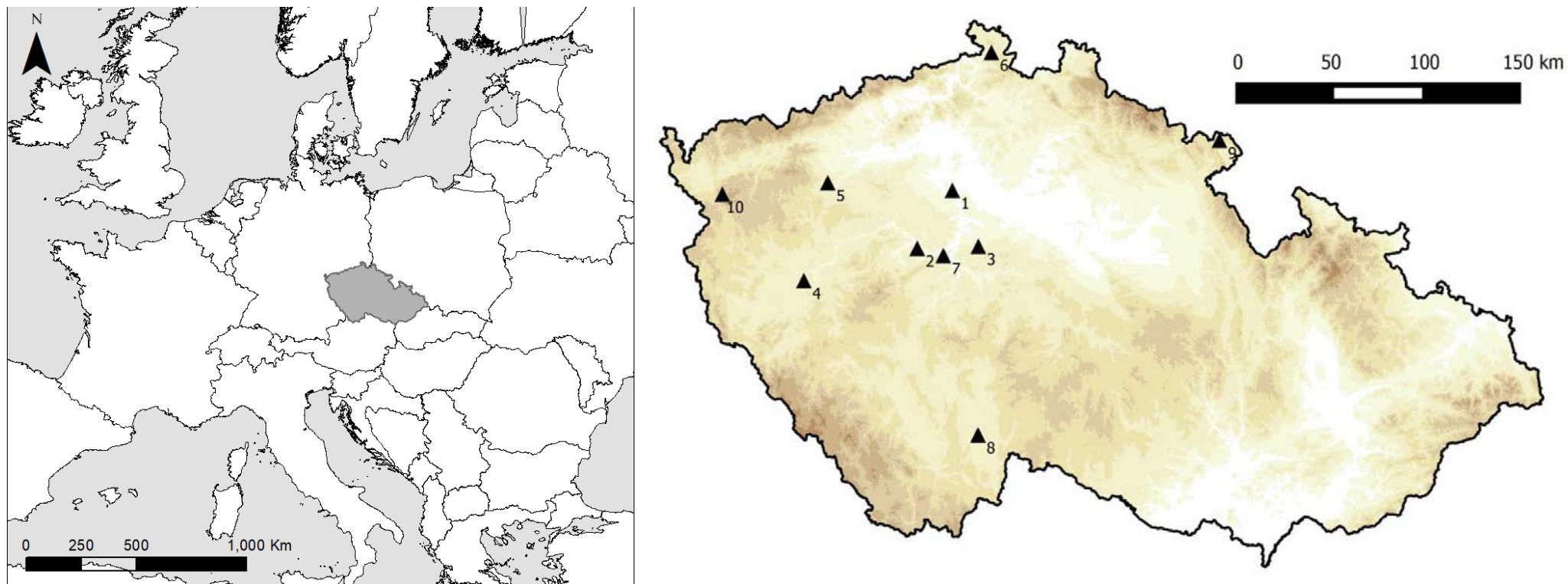


Fig. 1. – Location of the burial sites in the Czech Republic. The numbers correspond to those in Table 1 in the main paper.

Electronic Appendix 2. – References to the methods used in soil analyses

Analysis of the nutrients in the soil extract according to Mehlich II.

References:

Zbiral J. (1986): Analýza půd I, Jednotné pracovní postupy. – SKZÚZ, Brno.

Moore P.D. & Chapman S.B. (1986): Methods in Plant Ecology, Oxford.

Olsen, R.S. (1982): Phosphorus. – In: Page A.L. et al. (eds.): Methods of Soil Analysis. Part 2, Agronomy series 9, ASA, Madison, Wisconsin, pp. 403-430.

Operator manual AAS Spectrometer Unicam.

Operator manual UV-vis Spectrometer Unicam.

Estimation for available phosphorus

References:

Olsen R.S. (1954): Estimation for available phosphorus in soils by extraction with sodium bicarbonate. – U.S.Dept.Agric.Stat., No. 939.

Olsen R.S. (1982): Phosphorus. – In: Page A.L. et al. (eds.): Methods of Soil Analysis. Part 2, Agronomy series 9, ASA, Madison, Wisconsin, pp.403-430.

Murphy J. & Riley J.P. (1962): A modified single solution method the determination of phosphate. – Analytica chimica Acta 27: 31-36.

Determination of carbonate content by volumetric method

References:

Zbiral J. (1995): Analýza půd I, jednotné pracovní postupy. – SKZÚZ, Brno.

ISO/DIS 10693: Soil quality – determination of carbonate content – volumetric method. International Organization for Standardization, 1993

Determination of pH in the soil – actual and replaceable:

References:

Zbiral J. (1995): Analýza půd, jednotné analytické postupy. – SKZÚZ, Brno.

ISO 10390: Soil quality – Determination of pH. International Organization for Standardization, ISO 2000

Determination of the physical soil properties:

Zbiral J. at al. (2010). – Analýza půd I, Jednotné pracovní postupy. – ÚKZÚZ, Brno.

Electronic Appendix 3. – Results of soil analyses and the effect of soil characteristics on survival of seed of *Heracleum mantegazzianum*. Mean \pm S.D. of soil parameters and statistics of their correlation with seed bank depletion is shown.

Locality	Dry matter content (%)	pH(H ₂ O)	pH(KCl)	N %	C _{total} %	C _{carb} %	C _{org} %	P (mg/1000g)	Ca (mg/1000g)	Mg (mg/1000g)	K (mg/1000g)	Na (mg/1000g)	Absorption capacity of the soil (%)	Specific weight (g/cm ³)	soil skeleton (g)
Correlation with depletion rate	n.s.	n.s.	n.s.	n.s.	0.78 p=0.008	n.s.	0.77 p=0.009	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
1. Kralupy	98.2	7.60	7.07	0.71	4.17	0.062	4.11	41.2	2852.3	163.8	437.4	62.8	14.7	0.82	10.55
2. Vroutek	98.9	6.26	6.04	1.73	6.76	0.000	6.76	32.5	852.1	114.1	151.6	57.3	41.5	1.11	0.00
3. Koda	95.1	7.52	7.23	0.65	8.38	0.550	7.83	23.1	8148.5	285.4	296.8	84.0	41.5	0.48	1.90
4. Plzeň	98.4	7.52	7.48	0.48	4.58	0.085	4.50	32.6	3018.1	153.2	152.1	64.0	31.8	1.07	20.98
5. Černolice	98.0	6.71	6.23	0.39	2.74	0.012	2.73	13.8	982.6	108.6	85.4	57.0	53.8	1.08	9.97
6. Průhonice	97.8	7.32	7.22	0.34	3.45	0.019	3.43	21.4	2757.3	295.1	118.0	129.2	41.4	1.09	7.61
7. Lužnice	98.2	7.10	6.97	1.23	11.19	0.041	11.15	100.5	3130.6	251.5	243.4	63.6	34.9	0.94	11.73
8. Kyjov	97.5	5.60	5.01	0.66	4.78	0.000	4.78	93.4	931.8	144.3	336.3	52.5	51.8	0.78	11.57
9. Broumov	98.0	5.39	4.44	0.28	1.69	0.000	1.69	13.3	1166.4	107.8	43.2	61.8	58.0	1.06	1.99
10. Žitný	97.1	7.26	7.23	0.87	7.84	0.118	7.72	68.9	5363.6	486.8	533.9	86.7	37.7	0.99	22.32