

Appendix I. List of coenological roles of species, traits and trait states considered in the study, their description, and data sources.

		Description	Data source
Coenological role of species	Dominant; subordinate; accidental	Species were aggregated into three groups on the basis of their respective mean cover percent values (dominant species: > 25.0%; subordinate species: 1.1–25.0%, accidental species: ≤ 1.0%)	40 vegetational relevés (10 m x 10 m), 20 in mown, and 20 in unmown meadows. The table with mean cover percent values is reported in the Appendix II
Trait / Trait states	Storage organs - Presence; absence	Occurrence/absence of storage organs in the plant	Klotz et al. (2002), Klimešová & Klimeš (2006); checked and supplemented by field observations
	Type of storage organs - Persistent tap root; epigeogenous stem (rhizome); hypogeogenous stem (rhizome); root tuber; bulb (sometimes with bulbils)	Type of storage organ identified following Klotz et al. (2002) and Klimešová & Klimeš (2006)	Klotz et al. (2002), Klimešová & Klimeš (2006); checked and supplemented by field observations
	Vegetative propagation - Presence; absence	Occurrence/absence of vegetative propagation in all adult plants	Klotz et al. (2002), Klimešová & Klimeš (2006); checked and supplemented by field observations
	Type of vegetative propagation - Epigeogenous stem (rhizome); epigeogenous stem (runner-like rhizome); hypogeogenous stem (rhizome); runner; root tuber; root shoot; root splitter; bulb (sometimes with bulbils)	Type of vegetative propagation, identified following Bell (1991), Klotz et al. (2002), and Klimešová & de Bello (2009)	Klotz et al. (2002), Klimešová & Klimeš (2006); checked and supplemented by field observations
	Plant height (cm) - < 20; 21–40; 41–60; 61–80; 81–100	Plant height (Pignatti 1982) categorized in classes 20 cm wide	Pignatti (1982); checked by measurements of adult plants
	Leaf anatomy - Scleromorphic; mesomorphic; hygromorphic; helomorphic; succulent.	Main structures within the leaves to fulfill specific tasks (e.g., supporting tissues, water storage), identified following Klotz et al. (2002) and Küster et al. (2010)	Klotz et al. (2002); checked and supplemented by own observations
	Leaf persistence - Persistent green; overwintering green; spring green; summer green	Classification of how long a leaf persist on a plant from emergence until cast, according the categories indicated in Klotz et al. (2002)	Klotz et al. (2002); checked and supplemented by field observations made during the year
	Type of horizontal space occupation - Absent; caespitose; caespitose and reptant; pleiocorm and reptant; rosulate; reptant; prostrate; pleiocorm	How plant takes up the space on the horizontal plane (Pignatti 1982; Klotz et al. 2002)	Pignatti (1982); checked by field observations
	Type of vertical space occupation - Leafy stem, narrow leaves (grass); broad leaves equally spaced along the stem (erosulate upright forb); broad leaves either scattered or tightly packed along the stem (hemirosette upright forb); no leafy stem, narrow basal leaves; no leafy stem (sedge); broad basal leaves (rosette forb)	Classification based on the width of leaves and on their position along the stem (Liira & Zobel 2000; Klotz et al. 2002)	Pignatti (1982); checked by field observations
	Seed weight (mg) - 0.01–0.20; 0.21–0.50; 0.51–1.00; 1.01–2.00; 2.01–4.00; 4.01–10.00; > 10.00	Seed weight categorized in classes (Hodgson et al. 1995, modified)	Grime et al. (1988); Klotz et al. (2002); collection and weigh of the seeds in the laboratory

References

- Bell AD. 1991. Plant Form. An illustrated guide to flowering plant morphology. Oxford University Press, Oxford, 341 p.
- Grime JP, Hodgson JG, Hunt R. 1988. Comparative Plant Ecology: a Functional Approach to Common British Species. Unwin Hyman, London, 742 p.
- Hodgson JG, Grime JP, Hunt R, Thompson K. 1995. The electronic comparative plant ecology. Chapman & Hall, London.
- Klimešová J, de Bello F. 2009. CLO-PLA: the database of clonal and bud bank traits of Central European flora. J Veg Sci 20: 511–516.
- Klimešová J, Klimeš L. 2006. CLO-PLA3: a database of clonal growth architecture of Central European plants - [Cited 2012 May 10] Available from: <http://clopla.butbn.cas.cz>.
- Klotz S, Kühn I, Durka W. 2002. Biolflor: Eine Datenbank zu biologisch-ökologischen Merkmalen der Gefäßpflanzen in Deutschland. Schriftenreihe für Vegetationskunde 38. Bonn, Bundesamt für Naturschutz - [Cited 2012 May 10] Available from: <http://www.ufz.de/biolflor/index.jsp>
- Küster EC, Bierman SM, Klotz S, Kühn I. 2010. Modelling the impact of climate and land use change on the geographical distribution of leaf anatomy in a temperate flora. Ecography 33: 1–12.
- Liira J, Zobel K. 2000. Vertical structure of a species-rich grassland canopy, treated with additional illumination, fertilization and mowing. Plant Ecol 146: 185–195.
- Pignatti S. 1982. Flora d'Italia. Voll. 1–3. Edagricole, Bologna.