Ruderal vegetation has been traditionally classified into many vegetation units in the Central European syntaxonomy. The units are mostly distinguished on the basis of expert opinion, usually without any detailed analysis. Large data set of phytosociological relevés, extracted from the Czech National Phytosociological Database, was used for revision of the current classification of the vegetation in trampled habitats in the Czech Republic. The relevés belonging to the class *Polygono arenistri-Poëtea annuae* Rivas-Martínez 1975 corr. Rivas-Martínez et al. 1991 were analysed using a procedure of formalized reproduction of an expert-based vegetation classification. To define the associations in a formal way, the Cocktail method was used. The definitions of particular associations were created using the geographically stratified data set of 27 315 relevés of all vegetation types of the Czech Republic. The associations were delimited mostly by dominance of species and also by combinations of ecological species groups created by the Cocktail method. Taking into account the results of the previous cluster analyses, seven associations were defined. Some of the traditionally recognized associations were rejected because of their unclear delimitation and the lack of good diagnostic species.

**Vegetation of trampled habitats**

Vegetation types classified into the class *Polygono arenistri-Poëtea annuae* include pioneer, species-poor, low-growing stands with prevailing therophytes, which tolerate frequent disturbances and adversed environmental conditions of the compacted soils. They colonize trampled habitats or places crossed by vehicles and are very common in human settlements and their surroundings.

**Synoptic table of communities defined by the Cocktail method.** The percentage constancy values are shown. Diagnostic species are ranked by decreasing fidelity (** Phi > 0.50, * Phi > 0.25).** Fidelity was calculated using mean covers instead of percentage constancies. Non-diagnostic species are ranked by decreasing occurrence frequency.

**DCA ordination diagrams of relevés and species.** Relevé groups were created by the Cocktail definitions. Ellenberg indicator values (averages for relevés) and altitude are projected as suplementary variables.