Supporting Information to the paper Biurrun I. et al. Benchmarking plant diversity of Palaearctic grasslands and other open habitats. *Journal of Vegetation Science*.

Appendix S3. GrassPlot Diversity Benchmarks, version 2.10

The GrassPlot Diversity Benchmarks enable to explore species richness data included in the GrassPlot database. By using filters in Excel or using a code in the R software, you can get species richness of different vegetation types, biomes, regions, countries or combinations thereof for different grain sizes and taxonomic groups. In addition, you can also select data that were collected with different methods (shoot vs. rooted presence, or number of nested plot series). In the future new versions of the GrassPlot Diversity Benchmarks will be released, while keeping past versions available to allow redoing analyses with the same dataset.

The information in the GrassPlot Diversity Benchmarks can be used under the terms of Creative Commons Attribution-ShareAlike 4.0 International License. If you use data from any version of the GrassPlot Diversity Benchmarks, you are required (a) to indicate the version you used, (b) to provide the URL from which you retrieved the file and (c) cite the following references:

Dengler, J., Wagner, V., Dembicz, I., García-Mijangos, I., Naqinezhad, A., Boch, S. et al. (2018) GrassPlot – a database of multi-scale plant diversity in Palaearctic grasslands. *Phytocoenologia*, 48, 331–347.

Biurrun, I., Burrascano, S., Dembicz, I., Guarino, R., Kapfer, J., Pielech, R. et al. (2019) GrassPlot v. 2.00 – first update on the database of multi-scale plant diversity in Palaearctic grasslands. *Palaearctic Grasslands*, 44, 26–47.

group: Taxonomic group area: Plot area (in m2) biome: Biome (according to Bruelheide et al. (2019), based on Schultz (2005) and Körner et al. (2017)) region: Region (according to Encyclopedia of Biomes) country: Country veg.type: Vegetation type class: Phytosociological class (within Europe, according to Mucina et al. (2016)) recording: Shoot vs. rooted method of species recording within plots sampling: Number of grain sizes in series n.total: Total number of plots n.indep: Number of independent observations min: Minimum richness max: Maximum richness mean: Mean richness Standard deviation (SD) sd: median: Median q25: First quartile (Q1) q75: Third quartile (Q3)

Group:

V: vascular plants

B: bryophytes

L: lichens

C: complete vegetation

Biome:

A: Arctic (Polar and subpolar zone)

B: Boreal

- C: Continental (Dry midlatitudes)
- D: Nemoral (Temperate midlatitudes)
- E: Subtropics with year-round rain
- F: Subtropics with winter rain
- G: Dry tropics and subtropics

0: Alpine

Region:

W.Eur: Western Europe N.Eur: Northern Europe and Baltic States E.Eur: Eastern Europe Med: Mediterranean Basin M.E.: Middle East and Caucasus RU: Russia KZ-M.A.: Kazakhstan and Middle Asia MN: Mongolia CN: China JP-Kor: Japan and Korea

Country: codes according to ISO 3166-1

Recording:

S: shoot R: rooted