Večeřa M., Axmanová I., Chytrý M., Divíšek J., Ndiribe C., Mones G. V., Čeplová N., Aćić S., Bahn M., Bergamini A., Boenisch G., Biurrun I., Bruun H. H., Byun C., Catford J. A., Cerabolini B. E. L., Cornelissen J. H. C., Dengler J., Jansen F., Jansen S., Kattge J., Kozub Ł., Kuzemko A., Minden V., Mitchell R. M., Moeslund J. E., Mori A. S., Niinemets Ü., Ruprecht E., Rūsiņa S., Šilc H., Soudzilovskaia N. A., van Bodegom P. M., Vassilev K., Weiher E., Wright I. J. & Lososová Z. (2023) Decoupled phylogenetic and functional diversity in European grasslands. – Preslia 95: 413–445.

Supplementary Data S1. TRY database dataset references

1. Abakumova M, K Zobel, A Lepik, and M Semchenko (2016). Plasticity in plant functional traits is shaped by variability in neighbourhood species composition. *New Phytologist* 211: 455–463. doi:10.1111/nph.13935. **Dataset:** Aboveground Morphological Traits of Grassland Species.
2. Adler PB, DG Milchunas, WK Lauenroth, OE Sala and IC Burke (2004). Functional traits of graminoids in semi-arid steppes: a test of grazing histories. *Journal of Applied Ecology* 41: 653–663. **Dataset:** Functional Traits of Graminoids in Semi-Arid Steppes Database.
3. Adler PB, R Salguero-Gómez, A Compagnoni, JS Hsu, J Ray-Mukherjee, C Mbeau-Ache, and M Franco (2014). Functional traits explain variation in plant life history strategies. *Proceedings of the National Academy of Sciences USA* 111(2): 740-745. doi: 10.1073/pnas.1315179111. **Dataset:** Functional Traits Explaining Variation in Plant Life History Strategies.
4. Atkin OK, KJ Bloomfield, PB Reich, MG Tjoelker, GP Asner, D Bonal, G Bönisch, M Bradford, LA Cernusak, EG Cosio, D Creek, KY Crous, T Domingues, JS Dukes, JJG Egerton, JR Evans, GD Farquhar, NM Fyllas, PPG Gauthier, E Gloor, TE Gimeno, K. Griffin, R Guerrieri, MA Heskel, C Huntingford, FY Ishida, J Kattge, H Lambers, MJ Liddell, CH Lusk, RE Martin, TC Maximov, AP Maksimov, Y Mahli, BE Medlyn, PMeir, LM Mercado, N Mirotchnick, D Ng, Ü Niinemets, OS O'Sullivan, OL Philips, L Poorter, P Poot, IC Prentice, N Salinas, LM. Rowland, MG Ryan, S Sitch, Martijn Slot, NG Smith, MH Turnbull, MC VanderWel, F Valladares, EJ Veneklaas, LK Weerasinghe, C Wirth, IJ Wright, K Wythers, J Xiang, S Xiang, and J Zaragoza-Castells (2015). Global variability in leaf respiration among plant functional types in relation to climate and leaf traits. *New Phytologist* 206(2): 614-636. doi: 10.1111/nph.13253. **Dataset:** Global Respiration Database.
5. Atkin OK, MHM Westbeek, ML Cambridge, H Lambers, and TL Pons (1997). Leaf respiration in light and darkness - a comparison of slow- and fast-growing *Poa* species. *Plant Physiology* 113: 961-965.
6. Aubin I, AD Munson, F Cardou, PJ Burton, N Isabel, JH Pedlar, A Paquette, AR Taylor, S Delagrange, H Kebli, C Messier, B Shipley, F Valladares, J Kattge, L Boisvert-Marsh, and D McKenney (2016). Traits to stay, traits to move: a review of functional traits to assess sensitivity and adaptive capacity of temperate and boreal trees to climate change. *Environmental Reviews* 24: 164-186. doi:10.1139/er-2015-0072. **Dataset:** TOPIC (Traits of Plants in Canada).
7. Baastrup-Spohr L, K Sand-Jensen, SV Nicolajsen, and HH Bruun (2015). From soaking wet to bone dry: predicting plant community composition along a steep hydrological gradient. *Journal of Vegetation Science* 26: 619–630. doi:10.1111/jvs.12280. **Dataset:** Plant Traits from Greby, Oeland, Sweden.
8. Bahn M, G Wohlfahrt, E Haubner, I Horak, W Michaeler, K Rottmar, U Tappeiner, and A Cernusca (1999). *Leaf photosynthesis, nitrogen contents and specific leaf area of 30 grassland species in differently managed mountain ecosystems in the Eastern Alps*. 247-255 pages in A. Cernusca, U. Tappeiner, and N. Bayfield (Eds). Land-use changes in European mountain ecosystems. ECOMONT- Concept and Results. Blackwell Wissenschaft, Berlin. **Dataset:** European Mountain Meadows Plant Traits Database.
9. Bakker C, J Rodenburg, and P Bodegom (2005). Effects of Ca- and Fe-rich seepage on P availability and plant performance in calcareous dune soils. *Plant and Soil* 275: 111-122. **Dataset:** Wetland Dunes Database.
10. Bakker C, PM Van Bodegom, HJM Nelissen, WHO Ernst, and R Aerts (2006). Plant responses to rising water tables and nutrient management in calcareous dune slacks. *Plant Ecology* 185: 19-28. **Dataset:** Wetland Dunes Database.

11. Blonder B, B Buzzard, L Sloat, I Simova, R Lipson, B Boyle, and B Enquist (2012). The shrinkage effect biases estimates of paleoclimate. *American Journal of Botany* 99(11): 1756-1763. **Dataset:** Leaf Structure, Venation and Economic Spectrum.
12. Blonder B, F Vasseur, C Violle, B Shipley, B Enquist, and D Vile (2015). Testing models for the leaf economics spectrum with leaf and whole-plant traits in *Arabidopsis thaliana*. AoB PLANTS 7: plv049 doi:10.1093/aobpla/plv049. **Dataset:** Plant Traits of *Arabidopsis thaliana*.
13. Blonder B, F Vasseur, C Violle, B Shipley, B Enquist, and D Vile. *Arabidopsis thaliana* rejects theories for the origin of the leaf economics spectrum. (in review, *New Phytologist*). **Dataset:** Leaf Structure, Venation and Economic Spectrum.
14. Bond-Lamberty B, C Wang, and ST Gower (2002). Leaf area dynamics of a boreal black spruce fire chronosequence. *Tree Physiology* 22(14): 993-1001. **Dataset:** Plant Traits of Canadian Forests.
15. Bond-Lamberty B, C Wang, and ST Gower (2004). Net primary production and net ecosystem production of a boreal black spruce fire chronosequence. *Global Change Biology* 10(4): 473-487. **Dataset:** Plant Traits of Canadian Forests.
16. Boucher FC, Thuiller W, Arnoldi C, Albert CH, and S Lavergne (2013). Unravelling the architecture of functional variability in wild populations of *Polygonum viviparum* L. *Functional Ecology* 27: 382–391. **Dataset:** Traits of *Polygonum viviparum* L.
17. Bragazza L (2009). Conservation priority of Italian alpine habitats: a floristic approach based on potential distribution of vascular plant species. *Biodiversity and Conservation* 18: 2823–2835. **Dataset:** Italian Alps Plant Traits Database.
18. Burrascano S, R Copiz, E Del Vico, S Fagiani, E Giarrizzo, M Mei, A Mortelliti, FM Sabatini, and C Blasi (2015). Wild boar rooting intensity determines shifts in understorey composition and functional traits. *Community Ecology* 16(2): 244-253. doi: 10.1556/168.2015.16.2.12. **Dataset:** Plant Traits from Circeo National Park, Italy.
19. Byun C, S de Blois, and J Brisson (2013). Plant functional group identity and diversity determine biotic resistance to invasion by an exotic grass. *Journal of Ecology* 101(1): 128-139. doi: 10.1111/1365-2745.12016. **Dataset:** SLA and LDMC for Canadian Wetland Species.
20. Campbell C, L Atkinson, J Zaragoza-Castells, M Lundmark, O Atkin, and V Hurry (2007). Acclimation of photosynthesis and respiration is asynchronous in response to changes in temperature regardless of plant functional group. *New Phytologist* 176: 375-389. **Dataset:** Plant Physiology Database.
21. Campetella G, Z Botta-Dukát, C Wellstein, R Canullo, S Gatto, S Chelli, L Mucina, S Bartha (2011). Patterns of plant trait-environment relationships along a forest succession chronosequence. *Agriculture, Ecosystems and Environment* 145(1): 38-48. doi:10.1016/j.agee.2011.06.025. **Dataset:** Leaf Traits in Central Apennines Beech Forests.
22. Catford JA, WK Morris, PA Vesk, CJ Gippel, and BJ Downes (2014). Species and environmental characteristics point to flow regulation and drought as drivers of riparian plant invasion. *Diversity and Distributions* 20: 1084–1096. http://dx.doi.org/10.1111/ddi.12225. **Dataset:** Traits related to riparian plant invasion in South East Australia.
23. Cavender-Bares J, A Keen, and B Miles (2006). Phylogenetic structure of Floridian plant communities depends on taxonomic and spatial scale. *Ecology* 87: S109-S122. **Dataset:** Floridian Leaf Traits Database.
24. Cerabolini B, S Pierce, A Luzzaro, and A Ossola (2010). Species evenness affects ecosystem processes in situ via diversity in the adaptive strategies of dominant species. *Plant Ecology* 207(2): 333-345. **Dataset:** Malga San Simone Trait Database (MSS).
25. Cerabolini BEL, G Brusa, RM Ceriani, R de Andreis, A Luzzaro, and S Pierce (2010). Can CSR classification be generally applied outside Britain? *Plant Ecology* 210: 253-261. **Dataset:** Flora d'Italia Functional Traits Hoard (FIFTH).
26. Chen Y, W Han, L Tang, Z Tang, and J Fang (2011). Leaf nitrogen and phosphorus concentrations of woody plants differ in responses to climate, soil and plant growth form. *Ecography* 36(2): 178-184. doi: 10.1111/j.1600-0587.2011.06833.x. **Dataset:** Leaf Nitrogen and Phosphorus for China's Terrestrial Plants.

27. Choat B, S Jansen, TJ Brodribb, H Cochard, S Delzon, R Bhaskar, SJ Bucci, TS Feild, SM Gleason, UG Hacke, AL Jacobsen, F Lens, H Maherali, J Martinez-Vilalta, S Mayr, M Mencuccini, PJ Mitchell, A Nardini, J Pittermann, RB Pratt, JS Sperry, M Westoby, IJ Wright, and AE Zanne (2012). Global convergence in the vulnerability of forests to drought. *Nature* 491: 752-755. doi:10.1038/nature11688. **Dataset:** Xylem Functional Traits (XFT) Database.
28. Ciccarelli D (2015). Mediterranean coastal dune vegetation: Are disturbance and stress the key selective forces that drive the psammophilous succession? *Estuarine, Coastal and Shelf Science* 165(5): 247–253. doi: 10.1016/j.ecss.2015.05.023. **Dataset:** Mediterranean psammophytes.
29. Ciocarlan V (2009). *The illustrated flora of Romania*. Pteridophyta et Spermatopyta. Editura Ceres. 1141 pages (in Romanian). **Dataset:** Plant Traits from Romania.
30. Cornelissen JHC (1996). An experimental comparison of leaf decomposition rates in a wide range of temperate plant species and types. *Journal of Ecology* 84: 573-582. **Dataset:** Sheffield Database.
31. Cornelissen JHC, B Cerabolini, P Castro-Diez, P Villar-Salvador, G Montserrat-Marti, JP Puyravaud, M Maestro, MJA Werger, and R Aerts (2003). Functional traits of woody plants: correspondence of species rankings between field adults and laboratory-grown seedlings? *Journal of Vegetation Science* 14: 311-322. **Dataset:** Sheffield & Spain Woody Database.
32. Cornelissen JHC, HM Quested, D Gwynn-Jones, RSP Van Logtestijn, MAH De Beus, A Kondratchuk, TV Callaghan, and R Aerts (2004). Leaf digestibility and litter decomposability are related in a wide range of subarctic plant species and types. *Functional Ecology* 18: 779-786. **Dataset:** Abisko & Sheffield Database.
33. Cornelissen JHC, PC Diez, and R Hunt (1996). Seedling growth, allocation and leaf attributes in a wide range of woody plant species and types. *Journal of Ecology* 84: 755-765. **Dataset:** Sheffield Database.
34. Craine JM, AJ Elmore, MPM Aidar, M Bustamante, TE Dawson, EA Hobbie, A Kahmen, MC Mack, KK McLauchlan, A Michelsen, GB Nardoto, LH Pardo, J Penuelas, PB Reich, EA G Schuur, WD Stock, PH Templer, RA Virginia, JM Welker, and IJ Wright (2009). Global patterns of foliar nitrogen isotopes and their relationships with climate, mycorrhizal fungi, foliar nutrient concentrations, and nitrogen availability. *New Phytologist* 183: 980-992. **Dataset:** Global 15N Database.
35. Craine JM, EG Towne, TW Ocheltree, and JB Nippert (2012). Community traitscape of foliar nitrogen isotopes reveals N availability patterns in a tallgrass prairie. *Plant Soil* 356: 395-403. **Dataset:** Plant Traits for Grassland Species (Konza Prairie, Kansas, USA).
36. Craine JM, JB Nippert, EG Towne, S Tucker, SW Kembel, A Skibbe, KK McLauchlan (2011). Functional consequences of climate-change induced plant species loss in a tallgrass prairie. *Oecologia* 165: 1109-1117. **Dataset:** Plant Traits for Grassland Species (Konza Prairie, Kansas, USA).
37. Craine JM, WG Lee, WJ Bond, RJ Williams, and LC Johnson (2005). Environmental constraints on a global relationship among leaf and root traits of grasses. *Ecology* 86: 12-19. **Dataset:** Roots of the World (ROW) Database.
38. Dahlin KM, GP Asner, and CB Field (2013). Environmental and community controls on plant canopy chemistry in a Mediterranean-type ecosystem. *Proceedings of the National Academy of Sciences USA* 110(17): 6895-6900. **Dataset:** Jasper Ridge Leaf Chemistry Data.
39. De Frutos A, T Navarro, Y Pueyo, CL Alados (2015). Inferring resilience to fragmentation-induced changes in plant communities in a semi-arid Mediterranean ecosystem. *PLoS ONE* 10: e0118837. doi: 10.1371/journal.pone.0118837. **Dataset:** Traits from Semi-Arid Mediterranean Ecosystems.
40. De Frutos Á, T Navarro, Y Pueyo, CL Alados (2015). Inferring resilience to fragmentation-induced changes in plant communities in a semi-arid Mediterranean ecosystem. *PLoS ONE* 10: e0118837. doi:10.1371/journal.pone.0118837. **Dataset:** Cabo de Gata-Níjar Natural Park.
41. De Vries F, and RD Bardgett (2016). Plant community controls on short-term ecosystem nitrogen retention. *New Phytologist* 210(3): 861-874. doi: 10.1111/nph.13832. **Dataset:** Leaf N-Retention Database.
42. Demey A, J Staelens, L Baeten, P Boeckx, M Hermy, J Kattge, and K Verheyen (2013). Nutrient input from hemiparasitic litter favors plant species with a fast-growth strategy. *Plant and Soil* 371(1): 53-66. doi 10.1007/s11104-013-1658-4. **Dataset:** Traits of Hemiparastic Plants.

43. Díaz S, JG Hodgson, K Thompson, M Cabido, JHC Cornelissen, A Jalili, G Montserrat-Martí, JP Grime, F Zarrinkamar, Y Asri, SR Band, S Basconcelo, P Castro-Díez, G Funes, B Hamzehee, M Khoshnevi, N Pérez-Harguindeguy, MC Pérez-Rontomé, FA Shirvany, F Vendramini, S Yazdani, R Abbas-Azimi, A Bogaard, S Boustani, M Charles, M Dehghan, L de Torres-Espuny, V Falczuk, J Guerrero-Campo, A Hynd, G Jones, E Kowsary, F Kazemi-Saeed, M Maestro-Martínez, A Romo-Díez, S Shaw, B Siavash, P Villar-Salvador, and MR Zak (2004). The plant traits that drive ecosystems: Evidence from three continents. *Journal of Vegetation Science* 15: 295-304. **Dataset:** Sheffield-Iran-Spain Database.
44. Dwyer JM, RJ Hobbs, and MM Mayfield (2014). Specific leaf area responses to environmental gradients through space and time. *Ecology* 95: 399-410. **Dataset:** Specific Leaf Area Responses to Environmental Gradients Through Space and Time.
45. Everwand G, EL Fry, T Eggers, and P Manning (2014). Seasonal variation in the relationship between plant traits and grassland carbon and water fluxes. *Ecosystems* 17: 1095-1108. **Dataset:** The DIRECT Plant Trait Database.
46. Fagúndez J, and J Izco (2008). Seed morphology of two distinct species of *Erica* L. (Ericaceae). *Acta Botanica Malacitana* 33: 1-9. **Dataset:** Seed Characteristics of Ericaceae.
47. Fitter AH, and HJ Peat (1994). The Ecological Flora Database. *Journal of Ecology* 82: 415-425. **Dataset:** Ecological Flora of the British Isles.
48. Fonseca CR, JM Overton, B Collins, and M Westoby (2000). Shifts in trait-combinations along rainfall and phosphorus gradients. *Journal of Ecology* 88: 964-977. **Dataset:** Fonseca/Wright New South Wales Database.
49. Frenette-Dussault C, B Shipley, JF Léger, D Meziane, and Y Hingrat (2012). Functional structure of an arid steppe plant community reveals similarities with Grime's C-S-R theory. *Journal of Vegetation Science* 23: 208-222. **Dataset:** Plant Functional Traits of Arid Steppes in Eastern Morocco (ECWP-Morocco).
50. Freschet GT, JHC Cornelissen, RSP van Logtestijn, and R Aerts (2010). Evidence of the 'plant economics spectrum' in a subarctic flora. *Journal of Ecology* 98: 362-373. **Dataset:** Traits from Subarctic Plant Species Database.
51. Fry EL, SA Power, and P Manning (2014). Trait based classification and manipulation of functional groups in biodiversity-ecosystem function experiments. *Journal of Vegetation Science* 25: 248-261. **Dataset:** The DIRECT Plant Trait Database.
52. Gachet S, E Véla, and T Tatoni (2005). BASECO: a floristic and ecological database of Mediterranean French flora. *Biodiversity and Conservation* 14(4): 1023-1034. **Dataset:** BASECO: A Floristic and Ecological Database of Mediterranean French flora.
53. Gallagher RV, and MR Leishman (2012). A global analysis of trait variation and evolution in climbing plants. *Journal of Biogeography* 39: 1757-1771. doi: 10.1111/j.1365-2699.2012.02773.x. **Dataset:** Climbing Plants Trait Dataset.
54. Garnier E, S Lavorel, P Ansquer, H Castro, P Cruz, J Dolezal, O Eriksson, C Fortunel, H Freitas, C Golodets, K Grigulis, C Jouany, E Kazakou, J Kigel, M Kleyer, V Lehsten, J Leps, T Meier, R Pakeman, M Papadimitriou, VP Papanastasis, H Quested, F Quetier, M Robson, C Roumet, G Rusch, C Skarpe, M Sternberg, J.-P Theau, A Thebault, D Vile, and MP Zarovali (2007). Assessing the effects of land-use change on plant traits, communities and ecosystem functioning in grasslands: a standardized methodology and lessons from an application to 11 European sites. *Annals of Botany* 99: 967-985. **Dataset:** The VISTA Plant Trait Database.
55. Giarrizzo E, S Burrascano, T Chiti, F de Bello, J Lepš, L Zavattero, and C Blasi (2017). Re-visiting historical semi-natural grasslands in the Apennines to assess patterns of changes in species composition and functional traits. *Applied Vegetation Science* 20 (2), 247-258. doi:10.1111/avsc.12288. **Dataset:** Species and Trait Shifts in Apennine Grasslands.
56. Gos P, G Loucougaray, MP Colace, C Arnoldi, S Gaucherand, D Dumazel, L Girard, S Delorme, and S Lavorel (2016). Relative contribution of soil, management and traits to co-variations of multiple ecosystem properties in grasslands. *Oecologia* 180(4): 1001-1013. doi:10.1007/s00442-016-3551-3. **Dataset:** French Alps Trait Data.

57. Green W (2009). USDA PLANTS Compilation, version 1, 09-02-02. (http://bricol.net/downloads/data/PLANTSdatabase/) NRCS: The PLANTS Database (http://plants.usda.gov, 1 Feb 2009). National Plant Data Center: Baton Rouge, LA 70874-74490 USA. **Dataset:** PLANTS data USDA.
58. Guy AL, JM Mischkolz, and EG Lamb (2013). Limited effects of simulated acidic deposition on seedling survivorship and root morphology of endemic plant taxa of the Athabasca sand dunes in well-watered greenhouse trials. *Botany* 91: 176-181. http://dx.doi.org/10.1139/cjb-2012-0162. **Dataset:** Saskatchewan Plant Trait Database.
59. Han W, Y Chen, FJ Zhao, L Tang, R Jiang and F Zhang (2012). Floral, climatic and soil pH controls on leaf ash content in China's terrestrial plants. *Global Ecology and Biogeography* 21(3): 376-382. doi: 10.1111/j.1466-8238.2011.00677.x. **Dataset:** Leaf Ash Content in China's Terrestrial Plants.
60. Han WX, JY Fang, DL Guo, and Y Zhang (2005). Leaf nitrogen and phosphorus stoichiometry across 753 terrestrial plant species in China. *New Phytologist* 168: 377-385. **Dataset:** Chinese Leaf Traits Database.
61. Hattermann D, C Elstner, M Bernhardt-Römermann, and L Eckstein. Measurements from the project "Relative effects of local and regional factors as drivers for plant community diversity, functional trait diversity and genetic structure of species on Baltic uplift islands" funded by the German Research Foundation - DFG: BE 4143/5-1 and EC 209/12-1. **Dataset:** Leaf traits from Baltic Island species.
62. Hickler T (1999). Plant functional types and community characteristics along environmental gradients on Öland's Great Alvar (Sweden) Master's Thesis, University of Lund, Sweden. **Dataset:** Herbaceous Traits from the Öland Island Database.
63. Hill MO, CD Preston, and DB Roy (2004). PLANTATT - attributes of British and Irish Plants: status, size, life history, geography and habitats. Huntingdon: Centre for Ecology and Hydrology. **Dataset:** PLANTATT - Attributes of British and Irish Plants.
64. Kattge J, W Knorr, T Raddatz, and C Wirth (2009). Quantifying photosynthetic capacity and its relationship to leaf nitrogen content for global-scale terrestrial biosphere models. *Global Change Biology* 15: 976-991. **Dataset:** Leaf Physiology Database.
65. Kazakou E, D Vile, B Shipley, C Gallet, and E Garnier (2006). Co-variations in litter decomposition, leaf traits and plant growth in species from a Mediterranean old-field succession. *Functional Ecology* 20:21-30. **Dataset:** Leaf and Whole Plant Traits Database.
66. Kerkhoff AJ, WF Fagan, JJ Elser, and BJ Enquist (2006). Phylogenetic and growth form variation in the scaling of nitrogen and phosphorus in the seed plants. *American Naturalist* 168: E103-E122. **Dataset:** The Americas N&P Database.
67. Kichenin E, DA Wardle, DA Peltzer, CW Morse, and GT Freschet (2013). Contrasting effects of plant inter- and intraspecific variation on community-level trait measures along an environmental gradient. *Functional Ecology* 27(5): 1254-1261. **Dataset:** Leaf Traits Mount Hutt, New Zealand.
68. Kirkup D, P Malcolm, G Christian, and A Paton (2005). Towards a digital African Flora. Taxon 54: 457-466. **Dataset:** KEW African Plant Traits Database.
69. Kleyer M, RM Bekker, IC Knevel, JP Bakker, K Thompson, M Sonnenschein, P Poschlod, JM van Groenendael, L Klimes, J Klimesova, S Klotz, GM Rusch, M Hermy, D Adriaens, G Boedeltje, B Bossuyt, A Dannemann, P Endels, L Götzenberger, JG Hodgson, A.-K Jackel, I Kühn, D Kunzmann, WA Ozinga, C Römermann, M Stadler, J Schlegelmilch, HJ Steendam, O Tackenberg, B Wilmann, JHC Cornelissen, O Eriksson, E Garnier, and B Peco (2008). The LEDA Traitbase: a database of life-history traits of the Northwest European flora. *Journal of Ecology* 96: 1266-1274. **Dataset:** The LEDA Traitbase.
70. Komac B, C Pladevall, M Domenech, and R Fanlo (2015). Functional diversity and grazing intensity in sub-alpine and alpine grasslands in Andorra. *Applied Vegetation Science* 18(1): 75-85. doi: 10.1111/avsc.12119. **Dataset:** Plant traits from Andorra.
71. Kühn I, W Durka, and S Klotz (2004). BiolFlor - a new plant-trait database as a tool for plant invasion ecology. *Diversity and Distributions* 10: 363-365. **Dataset:** BiolFlor Database.

72. La Pierre KJ, and MD Smith (2015). Functional trait expression of grassland species shift with short- and long-term nutrient additions. *Plant Ecology* 216: 307. doi:10.1007/s11258-014-0438-4. **Dataset:** Plant Traits of Grassland Species.
73. Laughlin DC, JJ Leppert, MM Moore, and CH Sieg (2010). A multi-trait test of the leaf-height-seed plant strategy scheme with 133 species from a pine forest flora. *Functional Ecology* 24: 493-501. **Dataset:** Plant Traits for *Pinus* and *Juniperus* Forests in Arizona.
74. Lavorel S, K Grigulis, P Lamarque, M.-P Colace, D Garden, J Girel, G Pellet, and R Douzet (2011). Using plant functional traits to understand the landscape distribution of multiple ecosystem services. *Journal of Ecology* 99: 135–147. doi:10.1111/j.1365-2745.2010.01753.x. **Dataset:** French Alps Trait Data.
75. Lhotsky B, A Csecserits, B Kovács, Z Botta-Dukát (2016). New plant trait records of the Hungarian flora. *Acta Botanica Hungarica* 58(3): 397-400. **Dataset:** Traits of the Hungarian Flora.
76. Louault F, VD Pillar, J Aufrere, E Garnier, and JF Soussana (2005). Plant traits and functional types in response to reduced disturbance in a semi-natural grassland. *Journal of Vegetation Science* 16: 151-160. **Dataset:** French Massif Central Grassland Trait Database.
77. Loveys BR, LJ Atkinson, DJ Sherlock, RL Roberts, AH Fitter, and OK Atkin (2003). Thermal acclimation of leaf and root respiration: an investigation comparing inherently fast- and slow-growing plant species. *Global Change Biology* 9: 895-910. **Dataset:** Plant Physiology Database.
78. Maire V, IJ Wright, IC Prentice, NH Batjes, R Bhaskar, PM van Bodegom, WK Cornwell, D Ellsworth, Ü Niinemets, A Ordońez, PB Reich, LS Santiago (2015). Global soil and climate effects on leaf photosynthetic traits and rates. *Global Ecology and Biogeography* 24(6): 706-717. Maire V, IJ Wright, IC Prentice, NH Batjes, R Bhaskar, PM van Bodegom, WK Cornwell, D Ellsworth, Ü Niinemets, A Ordońez, PB Reich, LS Santiago (2015) Data from: Global effects of soil and climate on leaf photosynthetic traits and rates. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.j42m7. **Dataset:** Photosynthesis Traits Worldwide.
79. Manning P, Houston K, and T Evans (2009). Shifts in seed size across experimental nitrogen enrichment and plant density gradients. *Basic and Applied Ecology* 10 (4): 300-308. **Dataset:** Reproductive Allocation.
80. Mencuccini M (2003). The ecological significance of long distance water transport: short-term regulation and long-term acclimation across plant growth forms. *Plant, Cell and Environment* 26: 163-182. **Dataset:** Whole Plant Hydraulic Conductance.
81. Meziane D, and B Shipley (1999). Interacting determinants of specific leaf area in 22 herbaceous species: effects of irradiance and nutrient availability. *Plant Cell and Environment* 22: 447-459. **Dataset:** Leaf and Whole Plant Traits Database.
82. Milla R, and PB Reich (2011). Multi-trait interactions, not phylogeny, fine-tune leaf size reduction with increasing altitude. *Annals of Botany* 107(3): 455-465. **Dataset:** Altitudinal Vicariants in Spain.
83. Minden V, and M Kleyer (2011). Testing the effect–response framework: key response and effect traits determining above-ground biomass of salt marshes. *Journal of Vegetation Science* 22: 387-401. **Dataset:** Traits of Halophytic Species in North-West-Germany.
84. Minden V, and M Kleyer (2014). Internal and external regulation of plant organ stoichiometry, *Plant Biology* 16: 897-907. **Dataset:** Element Contents of Plant Organs of Halophytic Species, NW-Germany.
85. Minden V, and M Kleyer (2015). Ecosystem multifunctionality of coastal marshes is determined by key plant traits. *Journal of Vegetation Science* 26: 651-662. **Dataset:** Traits of Halophytic Species.
86. Minden V, S Andratschke, J Spalke, H Timmermann, and M Kleyer (2012). Plant trait–environment relationships in salt marshes: Deviations from predictions by ecological concepts. *Perspectives in Plant Ecology, Evolution and Systematics* 14: 183-192. **Dataset:** Traits of Halophytic Species in North-West-Germany.
87. Moretti M, and C Legg (2009). Combining plant and animal traits to assess community functional responses to disturbance. *Ecography* 32: 299-309. doi: 10.1111/j.1600-0587.2008.05524.x. **Dataset:** Traits from the Wildfire Project.
88. Mori AS, T Shiono, TF Haraguchi, AT Ota, D Koide, T Ohgue, R Kitagawa, R Maeshiro, TT Aung, T Nakamori, Y Hagiwara, S Matsuoka, A Ikeda, T Hishi, S Hobara, E Mizumachi, A Frisch, G Thor, S Fujii, T Osono, and L

Gustafsson (2015). Functional redundancy of multiple forest taxa along an elevational gradient: predicting the consequences of non-random species loss. *Journal of Biogeography* 42: 1383–1396. doi:10.1111/jbi.12514. **Dataset:** Hokkaido Leaf Traits.

89. Muller SC, GE Overbeck, J Pfadenhauer, and VD Pillar (2007). Plant functional types of woody species related to fire disturbance in forest-grassland ecotones. *Plant Ecology* 189: 1-14. **Dataset:** ECOQUA South American Plant Traits Database.
90. Niinemets U (2001). Global-scale climatic controls of leaf dry mass per area, density, and thickness in trees and shrubs. *Ecology* 82: 453-469. **Dataset:** Global Leaf Robustness and Physiology Database.
91. Onstein RE, RJ Carter, Y Xing, and HP Linder (2014). Diversification rate shifts in the Cape Floristic Region: The right traits in the right place at the right time. *Perspectives in Plant Ecology, Evolution and Systematics* 16(6): 331–340. doi:10.1016/j.ppees.2014.08.002. **Dataset:** Plant Traits from Fynbos Forests in the Cape Region.
92. Ordonez JC, PM van Bodegom, JPM Witte, RP Bartholomeus, JR van Hal, and R Aerts (2010). Plant strategies in relation to resource supply in mesic to wet environments: does theory mirror nature? *American Naturalist* 175: 225-239. **Dataset:** The Netherlands Plant Traits Database.
93. Pahl AT, J Kollmann, A Mayer, and S Haider (2013). No evidence for local adaptation in an invasive alien plant: field and greenhouse experiments tracing a colonization sequence. *Annals of Botany* 112 (9): 1921-1930. doi: 10.1093/aob/mct246. **Dataset:** *Impatiens glandulifera* Dataset.
94. Paula S, M Arianoutsou, D Kazanis, Ç Tavsanoglu, F Lloret, C Buhk, F Ojeda, B Luna, JM Moreno, A Rodrigo, JM Espelta, S Palacio, B Fernández-Santos, PM Fernandes, and JG Pausas (2009). Fire-related traits for plant species of the Mediterranean Basin. *Ecology* 90: 1420. **Dataset:** BROT Plant Trait Database.
95. Peco B, I de Pablos, J Traba, and C Levassor (2005). The effect of grazing abandonment on species composition and functional traits: the case of Dehesa. *Basic and Applied Ecology* 6(2): 175-183. **Dataset:** Plant Traits of Acidic Grasslands in Central Spain.
96. Pierce S, A Luzzaro, M Caccianiga, RM Ceriani, and B Cerabolini (2007). Disturbance is the main α-scale filter determining niche differentiation, coexistence and biodiversity in an alpine community. *Journal of Ecology* 95(4): 698-706. **Dataset:** Leaf Structure and Economics Spectrum.
97. Pierce S, G Brusa, I Vagge, and BEL Cerabolini (2013). Allocating CSR plant functional types: the use of leaf economics and size traits to classify woody and herbaceous vascular plants. *Functional Ecology* 27(4): 1002-1010. **Dataset:** Leaf Structure and Economics Spectrum.
98. Pierce S, G Brusa, M Sartori, and BEL Cerabolini (2012). Combined use of leaf size and economics traits allows direct comparison of hydrophyte and terrestrial herbaceous adaptive strategies. *Annals of Botany* 109(5): 1047-1053. **Dataset:** Hydrophytes Traits Database.
99. Pierce S, I Vagge, G Brusa, and BEL Cerabolini (2014). The intimacy between sexual traits and Grime's CSR strategies for orchids coexisting in semi-natural calcareous grassland at the Olive Lawn. *Plant Ecology* 215(5): 495-505. **Dataset:** Olive Lawn Orchid Trait Database (OLO).
100. Pierce S, RM Ceriani, R De Andreis, A Luzzaro, and B Cerabolini (2007). The leaf economics spectrum of Poaceae reflects variation in survival strategies. *Plant Biosystematics* 141(3): 337-343. **Dataset:** Leaf Structure and Economics Spectrum.
101. Poorter H, U Niinemets, L Poorter, IJ Wright, and R Villar (2009). Causes and consequences of variation in leaf mass per area (LMA): a meta-analysis. *New Phytologist* 182: 565-588. **Dataset:** The Tansley Review LMA Database.
102. Prentice IC, T Meng, H Wang, SP Harrison, J Ni, and G Wang (2011). Evidence for a universal scaling relationship of leaf CO_2 drawdown along a moisture gradient. *New Phytologist* 190: 169–180. **Dataset:** Chinese Traits.
103. Price CA, and BJ Enquist (2007). Scaling of mass and morphology in dicotyledonous leaves: an extension of the WBE model. *Ecology* 88(5): 1132–1141. **Dataset:** Leaf Allometry Dataset.
104. Pyankov VI, AV Kondratchuk, and B Shipley (1999). Leaf structure and specific leaf mass: the alpine desert plants of the Eastern Pamirs, Tadjikistan. *New Phytologist* 143: 131-142. **Dataset:** Leaf and Whole Plant Traits Database.

105. Quested HM, JHC Cornelissen, MC Press, TV Callaghan, R Aerts, F Trosien, P Riemann, D Gwynn-Jones, A Kondratchuk, and SE Jonasson (2003). Decomposition of sub-arctic plants with differing nitrogen economies: A functional role for hemiparasites. *Ecology* 84: 3209-3221. **Dataset:** Abisko & Sheffield Database.
106. Reich PB, J Oleksyn, and IJ Wright (2009). Leaf phosphorus influences the photosynthesis-nitrogen relation: a cross-biome analysis of 314 species. *Oecologia* 160: 207-212. **Dataset:** Global A, N, P, SLA Database.
107. Reich PB, MG Tjoelker, KS Pregitzer, IJ Wright, J Oleksyn, and JL Machado (2008). Scaling of respiration to nitrogen in leaves, stems and roots of higher land plants. *Ecology Letters* 11: 793-801. **Dataset:** Global Respiration Database.
108. Rolo V, ML López-Díaz, and G Moreno (2012). Shrubs affect soil nutrients availability with contrasting consequences for pasture understory and tree overstory production and nutrient status in Mediterranean grazed open woodlands. *Nutrient Cycling in Agroecosystems* 93(1): 89-102. **Dataset:** Leaf Nutrient Concentrations.
109. Royal Botanical Gardens KEW (2008). Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/ (May 2008). **Dataset:** KEW Seed Information Database (SID).
110. Royal Botanical Gardens KEW (2008). Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/ (May 2011). **Dataset:** KEW Seed Information Database (SID).
111. Royal Botanical Gardens KEW (2008). Seed Information Database (SID), http://data.kew.org/sid/ accessed May 2014. **Dataset:** Seed Information Database (SID) Seed Mass 2010.
112. Sack L (2004). Responses of temperate woody seedlings to shade and drought: do trade-offs limit potential niche differentiation? *Oikos* 107: 110-127. **Dataset:** Leaf and Whole-Plant Traits Database: Hydraulic and Gas Exchange Physiology, Anatomy, Venation Structure.
113. Sack L, PD Cowan, N Jaikumar, and NM Holbrook (2003). The 'hydrology' of leaves: co-ordination of structure and function in temperate woody species. *Plant Cell and Environment* 26: 1343-1356. **Dataset:** Leaf and Whole-Plant Traits Database: Hydraulic and Gas Exchange Physiology, Anatomy, Venation Structure.
114. Sandel B, JD Corbin, and M Krupa (2011). Using plant functional traits to guide restoration: a case study in California coastal grassland. *Ecosphere* 2(2): 1-16. doi:10.1890/ES10-00175.1. **Dataset:** California Coastal Grassland Database.
115. Schroeder-Georgi T, C Wirth, K Nadrowski, ST Meyer, L Mommer, and A Weigelt (2016). From pots to plots: hierarchical trait-based prediction of plant performance in a mesic grassland. *Journal of Ecology* 104: 206–218. doi:10.1111/1365-2745.12489. **Dataset:** Traits of 59 Grassland Species.
116. Schweingruber FH, and Landolt W (2005). The Xylem Database. Swiss Federal Research Institute WSL Updated. **Dataset:** The Xylem/Phloem Database.
117. Shipley B (1995). Structured interspecific determinants of specific leaf area in 34 species of herbaceous angiosperms. *Functional Ecology* 9: 312-319. **Dataset:** Leaf and Whole Plant Traits Database.
118. Shipley B (2002). Trade-offs between net assimilation rate and specific leaf area in determining relative growth rate: relationship with daily irradiance. *Functional Ecology* 16(5): 682-689. **Dataset:** Leaf and Whole Plant Traits Database.
119. Shipley B, and M Parent (1991). Germination responses of 64 wetland species in relation to seed size, minimum time to reproduction and seedling relative growth-rate. *Functional Ecology* 5: 111-118. **Dataset:** Leaf and Whole Plant Traits Database.
120. Shipley B, and MJ Lechowicz (2000). The functional co-ordination of leaf morphology, nitrogen concentration, and gas exchange in 40 wetland species. *Ecoscience* 7: 183-194. **Dataset:** Leaf and Whole Plant Traits Database.
121. Shipley B, and TT Vu (2002). Dry matter content as a measure of dry matter concentration in plants and their parts. *New Phytologist* 153: 359-364. **Dataset:** Leaf and Whole Plant Traits Database.
122. Siefert A (2012). Spatial patterns of functional divergence in old-field plant communities. *Oikos* 121: 907-914. **Dataset:** New York Old Field Plant Traits Database.

123. Siefert A, JD Fridley, and ME Ritchie (2014). Community functional responses to soil and climate at multiple spatial scales: when does intraspecific variation matter? *Plos ONE* 9: e111189. **Dataset:** Eastern US Old Field Plant Traits Database.
124. Smith SW, SJ Woodin, RJ Pakeman, D Johnson, and R van der Wal (2014). Root traits predict decomposition across a landscape-scale grazing experiment. *New Phytologist* 203(3): 851-862. doi: 10.1111/nph.12845. **Dataset:** Root Traits of Grassland Species.
125. Soudzilovskaia NA, TG Elumeeva, VG Onipchenko, II Shidakov, FS Salpagarova, AB Khubiev, DK Tekeev, and JHC Cornelissen (2013). Functional traits predict relationship between plant abundance dynamic and long-term climate warming. *Proceedings of the National Academy of Sciences USA* 110(45): 18180-18184. **Dataset:** Plant Traits from Alpine Plants on Mt. Malaya Khatipara.
126. Spasojevic MJ, and KN Suding (2012). Inferring community assembly mechanisms from functional diversity patterns: the importance of multiple assembly processes. *Journal of Ecology* 100: 652-661. **Dataset:** Niwot Alpine Plant Traits.
127. Takkis K (2014). Changes in plant species richness and population performance in response to habitat loss and fragmentation. Dissertationes Biologicae Universitatis Tartuensis 255, 2014-04-07. Available from: http://hdl.handle.net/10062/39546. **Dataset:** Grassland Plant Trait Database.
128. Takkis K, L Saar, M Pärtel, and A Helm. Effect of environment and landscape on the traits of six plant species in fragmented grasslands (in preparation). **Dataset:** Grassland Plant Trait Database.
129. Tribouillois H, F Fort, P Cruz, R Charles, O Flores, E Garnier, and E Justes (2015). A functional characterisation of a wide range of cover crop species: Growth and nitrogen acquisition rates, leaf traits and ecological strategies. *PLoS ONE* 10(3): e0122156. doi:10.1371/journal.pone.0122156. **Dataset:** Leaf Traits and Seed Mass of Cover Crops.
130. Tucker SS, JM Craine, and JB Nippert (2011). Physiological drought tolerance and the structuring of tallgrass assemblages. *Ecosphere* 2(4): 48. **Dataset:** Plant Traits for Grassland Species (Konza Prairie, Kansas, USA).
131. Van Bodegom PM, BK Sorrell, A Oosthoek, C Bakke, and R Aerts (2008). Separating the effects of partial submergence and soil oxygen demand on plant physiology. *Ecology* 89: 193-204. **Dataset:** Wetland Dunes Database.
132. Van der Plas F, and H Olff (2014). Mesoherbivores affect grasshopper communities in a megaherbivore-dominated South African savannah. *Oecologia* 175: 639. doi:10.1007/s00442-014-2920-z. **Dataset:** Traits of Savannah Trees in the Hluhluwe-iMfolozi Game Reserve, South Africa.
133. Vergutz L, S Manzoni, A Porporato, RF Novais, and RB Jackson (2012). A global database of carbon and nutrient concentrations of green and senesced leaves. Data set. Available on-line (http://daac.ornl.gov) from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, U.S.A. http://dx.doi.org/10.3334/ORNLDAAC/1106. **Dataset:** Nutrient Resorption Efficiency Database.
134. Vile D (2005). Significations fonctionnelle et ecologique des traits des especes vegetales: exemple dans une succession post-cultural mediterraneenne et generalisations, PhD Thesis. **Dataset:** Leaf and Whole Plant Traits Database.
135. Walker AP (2014). A global data set of leaf photosynthetic rates, leaf N and P, and specific leaf area. Data set. Available on-line (http://daac.ornl.gov) from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, USA. http://dx.doi.org/10.3334/ORNLDAAC/1224. **Dataset:** A Global Data Set of Leaf Photosynthetic Rates, Leaf N and P, and Specific Leaf Area.
136. Willis CG, M Halina, C Lehman, PB Reich, A Keen, S McCarthy, and J Cavender-Bares (2010). Phylogenetic community structure in Minnesota oak savanna is influenced by spatial extent and environmental variation. *Ecography* 33: 565-577. **Dataset:** Cedar Creek Savanna SLA, C, N Database.
137. Wirth C, and JW Lichstein (2009). *The imprint of species turnover on old-growth forest carbon balances - insights from a trait-based model of forest dynamics*. 81-113 pages: In Wirth C, G Gleixner, and M Heimann (Eds). Old-Growth Forests: Function, Fate and Value. Springer, New York, Berlin, Heidelberg. **Dataset:** The Functional Ecology of Trees (FET) Database – Jena.

138. Wright IJ, PB Reich, M Westoby, DD Ackerly, Z Baruch, F Bongers, J Cavender-Bares, T Chapin, JHC Cornelissen, M Diemer, J Flexas, E Garnier, PK Groom, J Gulias, K Hikosaka, BB Lamont, T Lee, W Lee, C Lusk, JJ Midgley, ML Navas, U Niinemets, J Oleksyn, N Osada, H Poorter, P Poot, L Prior, VI Pyankov, C Roumet, SC Thomas, MG Tjoelker, EJ Veneklaas, and R Villar (2004). The worldwide leaf economics spectrum. *Nature* 428: 821-827. **Dataset:** GLOPNET - Global Plant Trait Network Database.
139. Wright JP, and A Sutton-Grier (2012). Does the leaf economic spectrum hold within local species pools across varying environmental conditions? *Functional Ecology* 26(6): 1390-1398. doi: 10.1111/1365-2435.12001. **Dataset:** Leaf Economic Traits Across Varying Environmental Conditions.
140. Yu Q, JJ Elser, N He, H Wu, Q Chen, G Zhang, and X Han (2011). Stoichiometric homeostasis of vascular plants in the Inner Mongolia grassland. *Oecologia* 166 (1): 1-10. doi:10.1007/s00442-010-1902-z. **Dataset:** Shoot N/P stoichiometry of Inner Mongolia grassland species.