MOLECULAR ECOLOGY

Supplemental Information for:

The structure of root-associated fungal communities is related to the long-term effects of plant diversity on productivity

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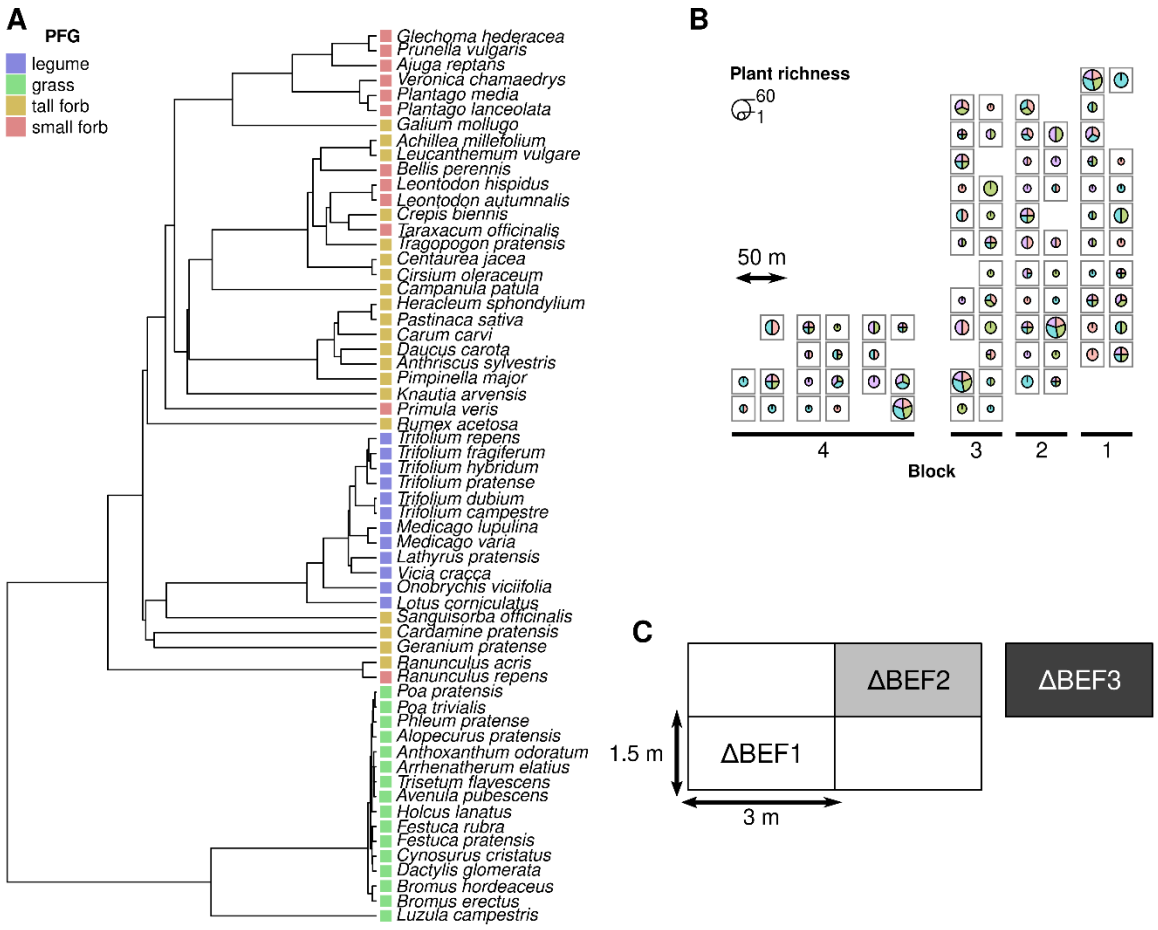

Figure S1. Design of the ΔBEF experiment. A, Phylogenetic tree showing all plant species included in the experiment, with coloured boxes indicating the plant functional group (PFG) to which they belong. B, Map of the Jena Experiment showing the locations of the 80 experimental grassland plots distributed along four blocks that encompass a gradient in edaphic conditions. Pie charts within plots represent the relative composition of PFGs (see colour key in A), and chart sizes represent the plant richness in each plot (logarithmic relationship, see size key). C, Example of the location of the treatment subplots within plots in the main experiment. The location of subplots was randomized across plots on five potential positions.

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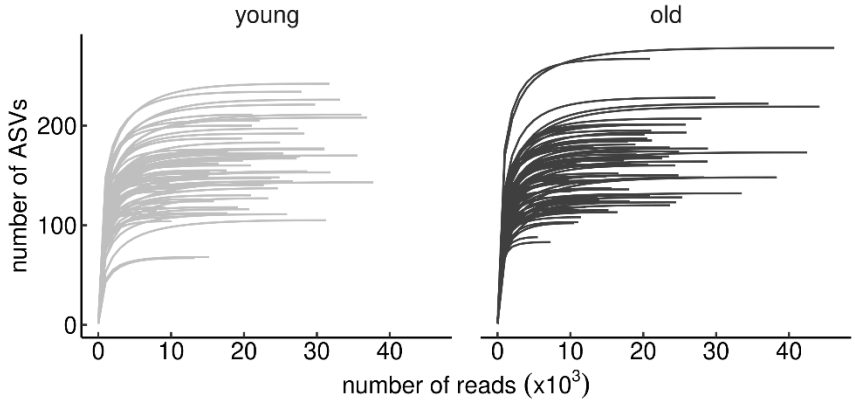

Figure S2. Rarefaction curves of ASVs accumulation with sequence reads. Every line represents the rarefaction curve for one sample within young and old grassland treatments.

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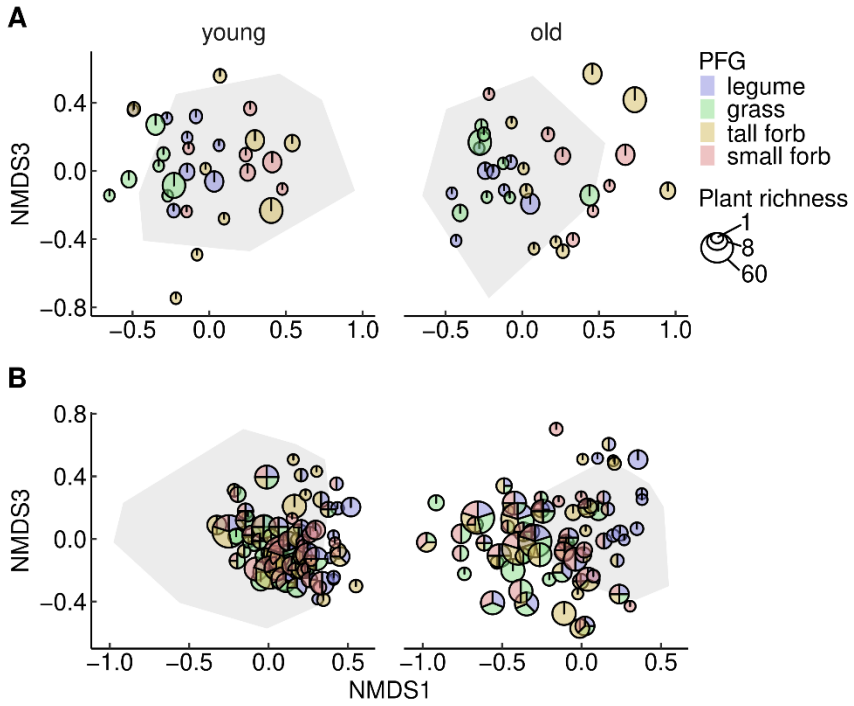

Figure S3. Non-metric multidimensional scaling (NMDS) plots showing variation in fungal community composition along the first and third NMDS dimensions calculated (NMDS3, *y* axis). A, NMDS of fungal communities in experimental plots hosting unique plant functional groups (PGFs; including legumes, grasses, small forbs, and tall forbs), corresponding to the NMDS in Fig. 2A. B, NMDS of fungal communities in all experimental plots, including mixtures of different PFGs, corresponding to the NMDS in Fig. 2B. For clarity, samples from young and old plant communities are shown in separate panels, with grey areas within each panel delimiting the distribution of data points in the other panel. Data points are represented by pie charts, with coloured sectors indicating the proportion of PFGs per sample, and pie sizes representing plant richness.