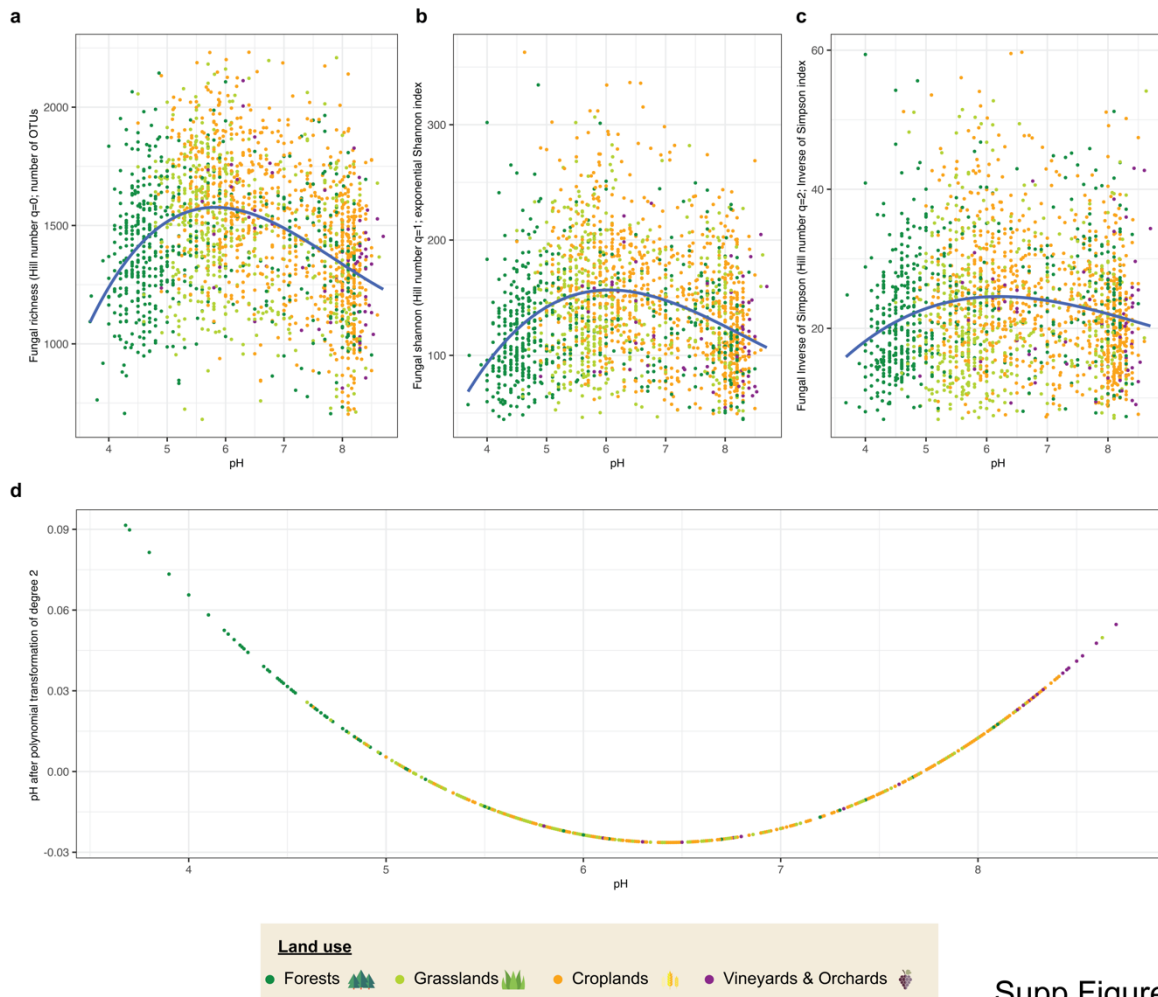
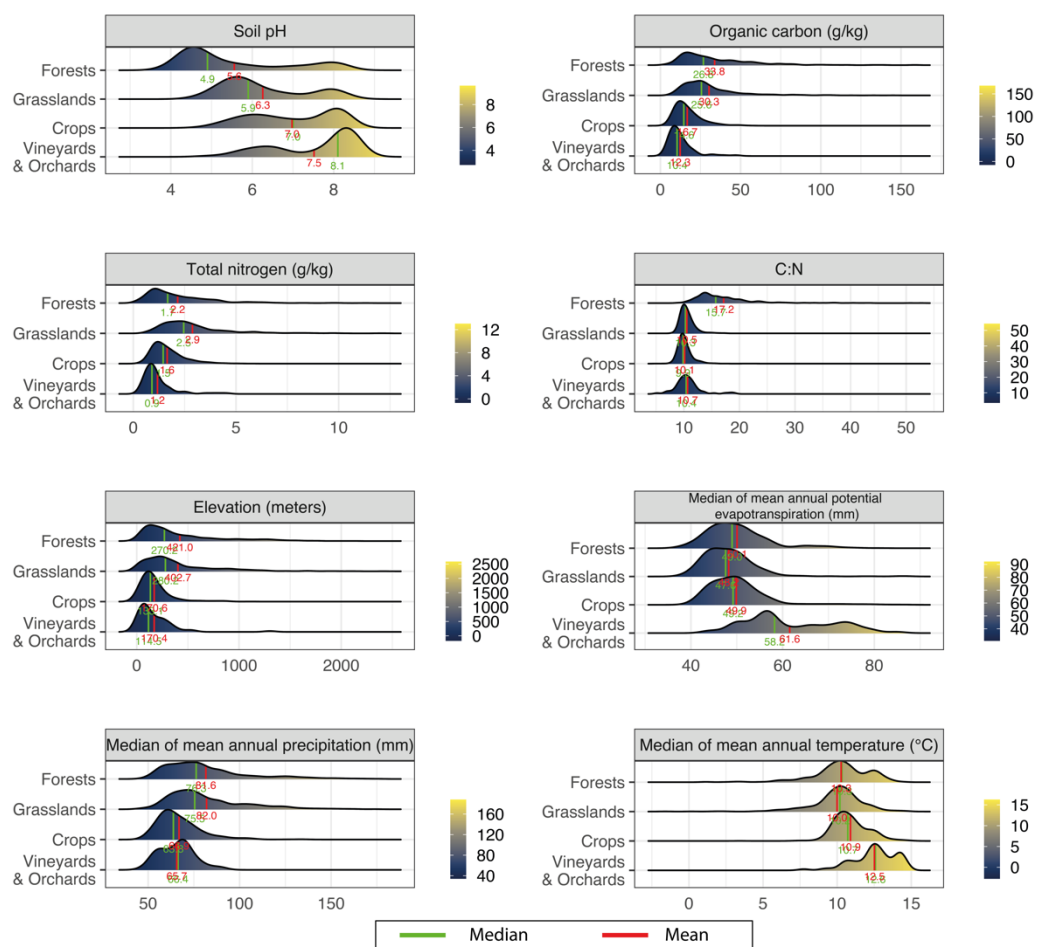


Supplementary Figure 1: Maps of the samples removed after the outlier-filtering test, and samples classified as others not used for further analysis.



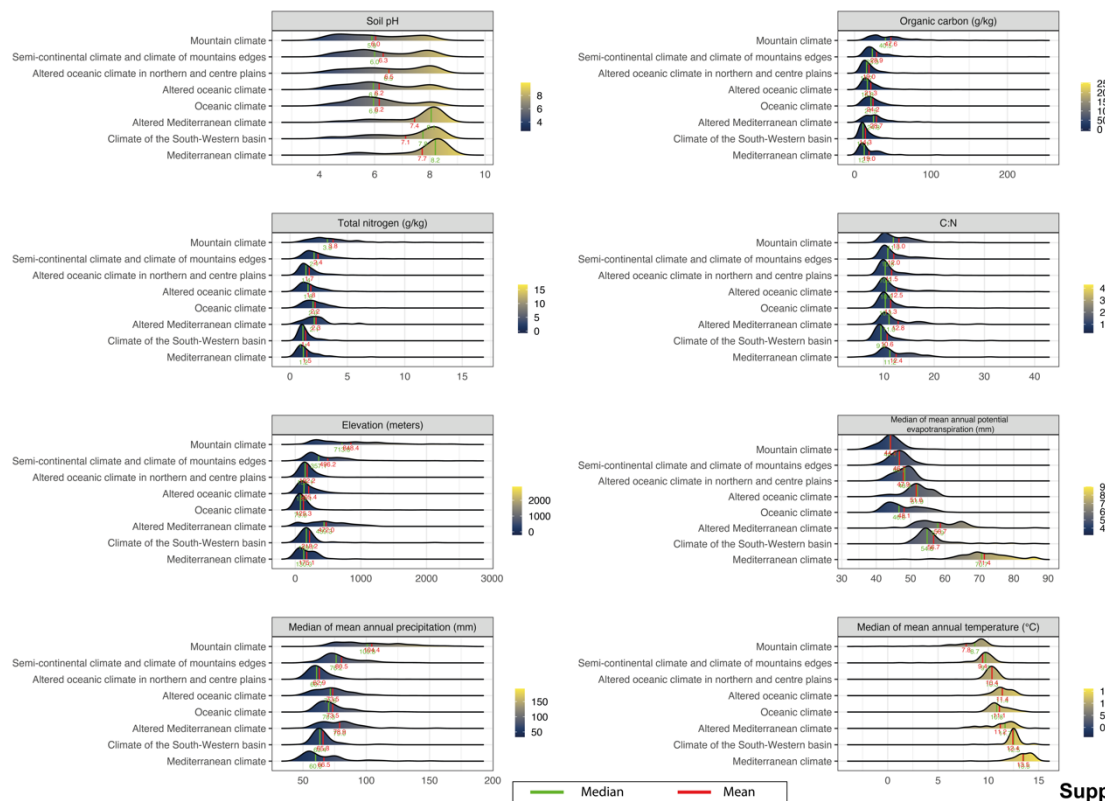
Supplementary Figure 2: Relationship between fungal diversity and the soil pH for fungal richness (a), the exponential of fungal Shannon diversity (b), and fungal inverse Simpson (c).

Blue lines, regression lines from the best fitting model for each Hill number. Relationship between soil fungal diversity and the soil pH after polynomial transformation of degree 2 (d).



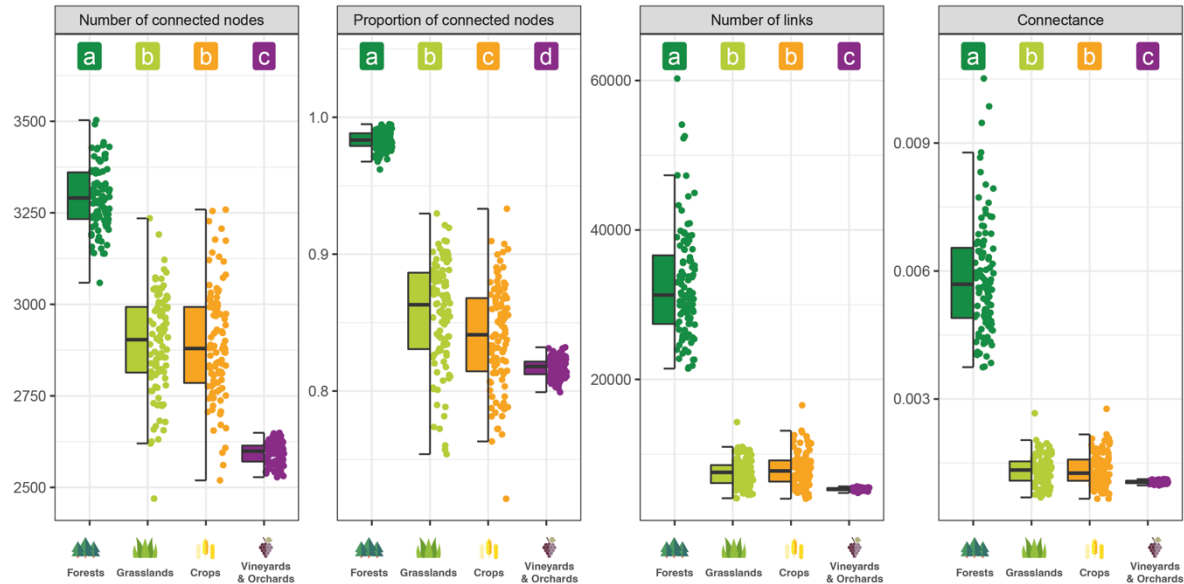
**Supp Fig 3**

Supplementary Figure 3: Density ridgeline of the main environmental characteristics of land uses in France. Red line, median; green line, mean.



Supp Fig 4

Supplementary Figure 4: Density ridgeline of the main environmental characteristics across climate types in France. Red line, median; green line, mean.



Supp Fig 5

Supplementary Figure 5: Fungal co-occurrence network metrics for the four land uses based on four indices. Different letters designate significantly different values following multiple comparisons.