

Global distribution patterns of mycorrhizal associations: abundance, environmental drivers and ecological impacts

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STELLINGEN

(Propositions)

Behorend bij het proefschrift

Global distribution patterns of mycorrhizal associations

van Milagros Barceló

- 1. At a global scale, the distribution patterns of plants featuring different mycorrhizal types is mainly driven by climate (this thesis).
- 2. A shift in attention towards a belowground perspective is crucial to complete our understanding of mycorrhizal impacts on ecosystems (this thesis).
- 3. The use of relative abundance of a given type of mycorrhizal vegetation as a proxy of specific biogeochemical syndromes is not applicable in all environmental contexts (this thesis).
- 4. Understanding the abundance patterns of key mycorrhizal functional traits might be of a greater relevance than focusing on traditional mycorrhizal types (this thesis).
- 5. Mycorrhizal associations are key components of terrestrial ecosystems, whose influence goes far beyond plant nutrition (Van der Heijden, 2002).
- 6. Quantifying mycorrhizal biomass across ecosystems is key to determine the global mycorrhizal impact on ecosystem functioning (Tedersoo, 2017).
- 7. Evaluating differences between mycorrhizal types on ecosystem functioning across biomes remains a major knowledge gap (Tedersoo and Bahram, 2019).
- 8. A better mechanistic understanding of mycorrhizal mediation of ecosystem processes will help to predict, and possibly ameliorate, some of the consequences of the human-induced environmental changes that we currently face (Johnson, 2013).
- 9. The importance of soil microbiomes in preserving a healthy soil for future generations cannot be overstated (Jansson & Hofmockel, 2020).
- 10. Soils are extremely complex systems that make soil ecology a difficult but fascinating field of research (Baldrian, 2019).