



Mycorrhizal associations: biotic correlates of phylogenetic dispersion patterns in the Sunshine Coast Heathlands, Queensland, Australia?

Hilary R. Pearl (University of the Sunshine Coast); Alison Shapcott (University of the Sunshine Coast).

This study provides the first overview of mycorrhizal functional groups in Queensland Sunshine Coast heathlands, a community of low phylogenetic diversity. Broad proportions of mycorrhizal functional groups in the heathlands were compared with patterns in the surrounding rainforest flora, and across the heath strata. This study found patterns of mycorrhizal associations in the Sunshine Coast flora to be strikingly different between the rainforest and heath communities. Similar to other low-fertility environments, a greater diversity of mycorrhizal strategies and an increased number of plant genera with non-mycorrhizal association were found in the Sunshine Coast heathlands. Mycorrhizal patterns across the heath strata suggest competitive interactions and facilitation are contributing to plant assembly patterns. This may be enabling the coexistence of plant species in the heath and resulting in greater phylogenetic dispersion of the heath community than would otherwise be the case.

Hilary Pearl: hilarypearl1@gmail.com