

Where do orchid mycorrhizal fungi come from?

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The distribution and abundance of orchid mycorrhizal fungi (OMF) can influence the establishment and resulting spatial pattern, as well as the population dynamics, of their host plants (McCormick *et al.*, 2016; Rock-Blake *et al.*, 2017). Yet, our understanding of these mycorrhizal associations is currently limited by our restricted knowledge of the ecology and spatial distribution of OMF, especially those belonging to the ‘rhizoctonia’ complex *sensu lato* (McCormick and Jacquemyn, 2014).

In a recent investigation focusing on Mediterranean grassland orchids, some OMF rhizoctonias were undetected even in the soil beneath their orchid hosts, questioning the view of these fungi as unspecialized soil saprotrophs (Voyron *et al.*, 2016). Whereas members of the Sebaciniales and Ceratobasidiaceae are known to establish mycorrhizal or nonmycorrhizal endophytic associations with non-orchid plants, the ecology of the Tulasnellaceae is largely understudied (Selosse, 2014; Selosse and Martos, 2014).

We will present results of an experimental manipulation aimed at assessing the impact of the surrounding non-orchid vegetation on the occurrence of OMF in the roots of the orchid host, by comparing the frequency of the fungal symbionts in the roots of naturally grown *Spiranthes spiralis* plants in either undisturbed soil cores or soil cores in which the neighbouring non-orchid plants had been manipulated or removed.

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