Partner choice in ectomycorrhizal symbioses: A case study using the fungal genus Suillus

Despite the well-recognized functional importance of ectomycorrhizal fungi in forest ecosystems, the ecological and evolutionary factors controlling ectomycorrhizal partner choice remain poorly understood. Using an emerging model system for understanding plant-fungal coevolution, I will discuss a set of lab- and field-based experiments exploring the dynamics of ectomycorrhizal partner choice and specificity. Our results suggest that pre-colonization signaling as well as post-colonization sanctioning may both be key parts of mutualism maintenance for ectomycorrhizal symbioses. In addition, I will present evidence that current ectomycorrhizal fungal host associations may reflect “ghosts of mycorrhizal past”, which has important implications regarding host switching in light of forest disturbance and shifting host distributions.

Friday, September 22, 2017
SERF 307 - 3:30 PM
Pre-talk Reception 3:00 PM in Dabney 575