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# Functional strategies of native and non-native tree species

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Invasive non-native tree species are a threat to local biodiversity. In Mediterranean ecosystems, riparian floodplains are among the habitats most invaded by non-native trees. In these habitats, water uptake and water use strategies are key for explaining the success of tree species. Although there is an increasing number of studies assessing the impacts of plant invasion on the functional structure of invaded communities, mechanistic traits are under-studied. In this talk I will address some key drivers explaining the invasibility of Mediterranean riparian tree communities (i.e. environmental filtering vs niche divergence). I will also compare the functional diversity of the native riparian communities with those dominated by non-native trees. The importance of particular functional traits, such as SLA, LDMC and wood density, but also others directly linked to water relations, as leaf to sapwood area ratio, iWUE and soil depth of water uptake will be discussed. I will highlight that traits related to water use are key functional attributes that allow to better understand differences in ecosystems' functional diversity. I will further discuss the implications of non-native tree invasions on the water relations of riparian communities.

**Thursday, April 29, 2021**

**12h00-13h00**