

Proceedings

# The management of invasive non-native trees in the Mediterranean protected areas: Sicily as a case study<sup>†</sup>

Emilio Badalamenti

<sup>1</sup> Department of Agricultural, Food and Forest Sciences, Università degli Studi di Palermo

\* Correspondence: emilio.badalamenti@unipa.it

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**Abstract:** Invasive non-native trees (INNTs) are increasingly recognized to have negative effects on biodiversity and ecosystem services in protected areas. The management of INNTs is one of the major challenges to preserving native species and ecosystems, to which more and more efforts and resources are bound to be destined in the coming decades. Indeed, the combining effect of climate change and increasing disturbance factors (e.g. wildfires) is likely to aid the spread of many INNTs in the Mediterranean protected areas, as well as favouring their competitive relationships with native species. However, the effective implementation of control measures is far from being fully achieved. I assessed how the problem of INNTs is currently addressed within the Natura2000 sites in Sicily, designed according to the Habitats Directive (92/43/EEC). In particular, I will check the management plans of some selected Special Areas of Conservation searching for the activities provided for the management and control of INNTs. My research will be focused on the most widespread INNTs occurring on the island, such as *Ailanthus altissima* and *Acacia saligna*, along with taxa characterized by a very recent spread such as *Parkinsonia aculeata* and *Vachellia karroo*. Furthermore, some of these non-native trees are included in the list of Invasive Alien Species of Union concern pursuant to Regulation (EU) 1143/2014 on invasive alien species. The study will address some main questions: 1) Are invasive non-native trees well managed in protected sites in Sicily?; 2) Do different protected sites deal with the same non-native species in the same way?; 3) Are planned activities effectively implemented and successful? The result of the study could be used to favour the cooperation and exchange of information about the control of INNTs between the managing bodies of different protected sites, thus increasing the efficacy of the necessary interventions.

**Keywords:** Natura 2000; Mediterranean Forests; Special Area of Conservation; *Ailanthus*; *Acacia*; Invasive management