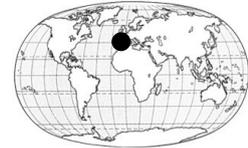


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## **TWO DIFFERENT PATTERNS OF ACACIA SPP. INVASION IN COASTAL DUNE ECOSYSTEMS (PORTUGAL): WITH AND WITHOUT DISTURBANCE**

Alien plant invasion on coastal dunes is a major threat to the indigenous flora and plant communities in Portugal. Coastal dune ecosystems have been identified as susceptible to invasion, due to frequent disturbance and the existence of open spaces, free of plant competition. *Acacia longifolia*, *A. cyclops*, *A. saligna*, native plants from Australia were introduced in the 60s to stabilize sand dunes, and since this time have invaded these ecosystems creating homogenous landscapes and reducing dramatically the biodiversity. It is our aim to understand the invasion pattern of this exotic invasive specie in this type of ecosystem in order to prevent and control further situations. We focused our work in two different localities of Portuguese coast: one in the Centre (Tocha) very disturbed by a fire in 1993; other in the South (Pinheiro da Cruz), here no disturbance occurred since *A. longifolia* was established. In order to obtain the information concerning *Acacia* spp. invasion pattern, remote sensing imagery analysis, field vegetation sampling and seed-bank studies were performed. We identified two different invasion patterns of *Acacia* spp.: One triggered by disturbance (fire) that results in the rapidly increase of the exotic specie after establishment; and another that is triggered under no disturbance, that results in the formation of small invasive clusters below native vegetation, possibly related with facilitation mechanisms between native and invasive plants.

keywords: plant invasion, *Acacia* spp., coastal dunes, facilitation