XIII International Seminar Management and Biodiversity Conservation
Landscape, vegetation and climate change
Vale do Lobo, Loulé (Algarve – Portugal), 2-7 June 2019

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ACACIA DEALBATA BIOMASS ENERGY RECOVERY: SPECIES CONTROL THROUGH THE CREATING OF A VALUE CHAIN

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In Portugal, some species were considered invasive and have proliferated in the last years, among which Acacia dealbata stands out. This research work investigated the behavior of this species, in order to characterize and evaluate its potential for the biomass pellet production, while controlling its proliferation. It was found that Acacia dealbata has a large raw material supply capacity, since the cut of the 2 hectares resulted in about 140 tones of biomass, at the same time that demand is intensified, allowing the attribution of a market value for this material and, consequently, the reduction of the area occupied by the invasive species. This pressure over the species must be duly accompanied by other control measures and, this way, weakening the species population and mitigate the proliferation. Laboratory tests have shown that both the raw material and the finished product are similar to those obtained with other species normally used for biomass pellets production, such as Pinus pinaster and Eucalyptus globulus. Thus, can be concluded that there is a high potential for this species in the production of biomass pellets for energy, and that this may be an important contribution to the control the proliferation of this invasive species.

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