

MANAGEMENT OF “AUGUSTINEGRASS” (*Stenotaphrum secundatum*) IN THE PUNTA BALEA NATURAL AREA (CANGAS, PONTEVEDRA, SPAIN)

INTRODUCTION

Located at the southern tip of the Morrazo Peninsula, the Punta Balea Natural Area is a place of great richness of biotopes. It comprises habitats ranging from rocky areas and dunes to forest and ruderal environments.

Stenotaphrum secundatum (Walt.) Kuntze, is native to America, Asia and Africa. In Spain it arrived intentionally at the beginning of the 19th century as an ornamental plant due to its low water and maintenance requirements. It is a thermophilic species that does not tolerate frost but does tolerate moderate concentrations of salinity and drought, characteristics that favor its installation on the Galicia coast (CABI, 2021)..

MATERIALS AND METHODS

A bibliographic search was carried out on the methods commonly used to control *Stenotaphrum secundatum* (Walt.) Kuntze using the keywords "*Stenotaphrum secundatum*", "Augustinegrass", "Buffalo grass" and "Control measures" as the main ones. It has been found that manual control hardly offers positive results due to the plant's recolonization in the areas managed. The most applied control method is the chemical one, by means of herbicides.



RESULTS AND DISCUSSION

By taking advantage of transition zones between natural habitats and degraded areas, Augustinegrass is successfully established. The stolons production and its high rooting capacity favor the formation of large mats in the ground, preventing the growth of native species (Gutiérrez y de Castro, 2015). . In addition, *Stenotaphrum secundatum* (Walt.) Kuntze invasion is associated with a significant decrease in the fecundity of native plants, as well as with species richness and recruitment both in the vegetation and in the soil's seed bank (Gooden *et al.*, 2015). Once established, its elimination is very complicated since any stolon fragment is capable of generating new individuals.

The application of geotextiles on the cliff's edge to prevent erosion and the use of native species seeding techniques can mitigate the ability of Augustiness to recolonize and favor ecosystem regeneration. In the case of chemical control, we ruled out its use because of the effect it could have on native populations and because of the problems derived from contamination, especially in an area so close to the sea.

CONCLUSIONS

Based on the collected information, it is expected that the best way to fight against the invasion is the application of the following measures. With them, control it is expected to be achieved in the short-medium term and its eradication in the long term.

- 1) Control by manual removal of the plants.
- 2) Installation of geotextiles at the most affected areas to prevent erosion (Giráldez *et al.*, 2015).
- 3) Restoration with native plants typical of the habitat.
- 4) integration of prevention measures in the vicinity of the established populations, especially in the dunes.
- 5) Implementation of an outreach programme to raise public awareness.

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