

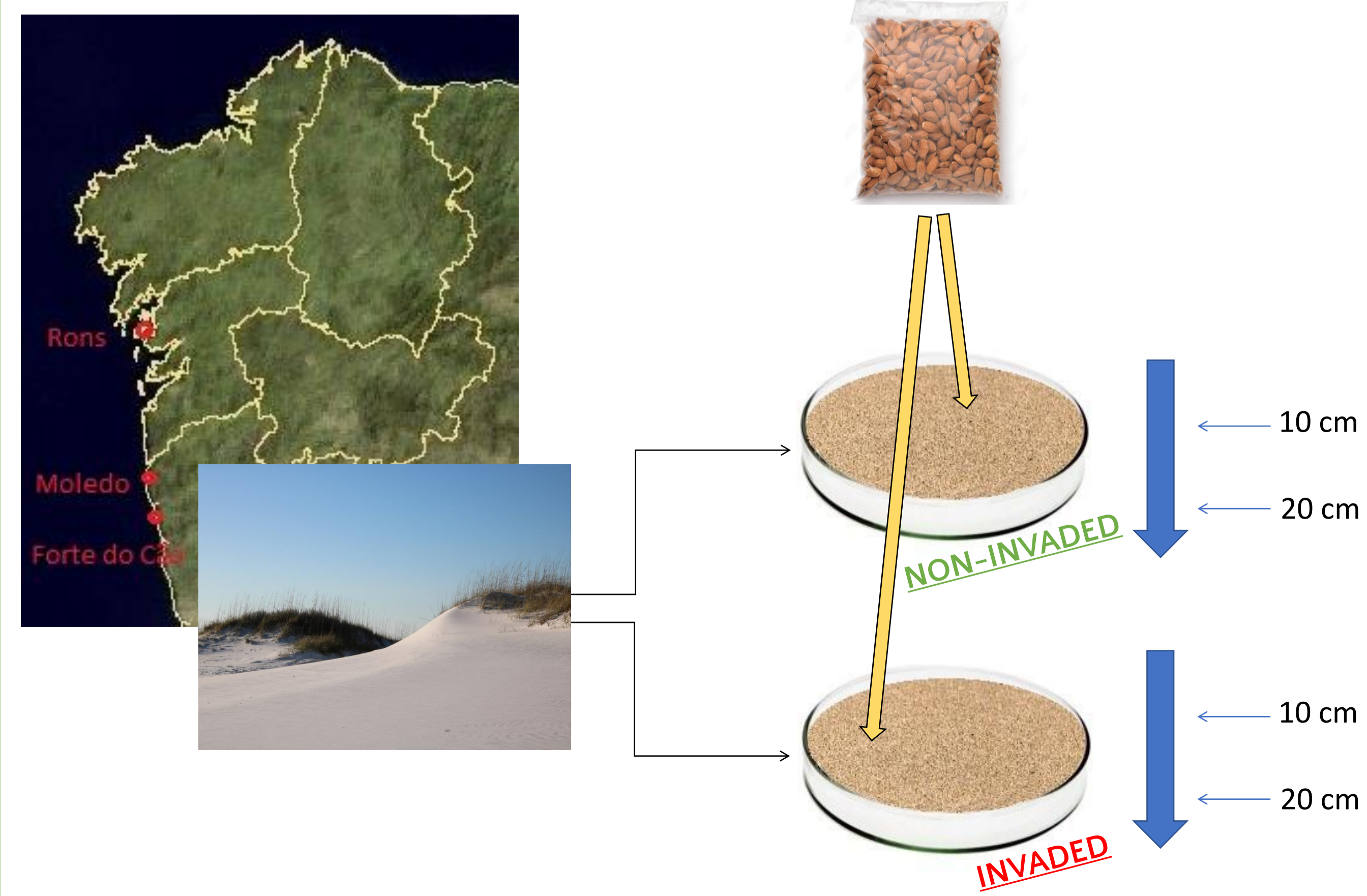
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Introduction

Carpobrotus edulis (L.) N.E. Br is an invasive species widely installed in the dune systems of the Atlantic coast, with many negative effects reported on native ecosystems, because it can modify the soil structure, biotic interactions and physicochemical properties. The release of organic material or chemicals in a sensitive ecosystem, such as coastal dunes, can drive **allelopathic** interactions with native vegetation, altering their germination, distribution and growth.

The objective of this study is to quantify the effect of soil transformation by *C. edulis* on the **germination** and **growth** of native species, in order to determine how much invaded sand continues to alter the germination and growth of native plants, even after the invasive plant has been removed.

Materials & methods



Preliminary results

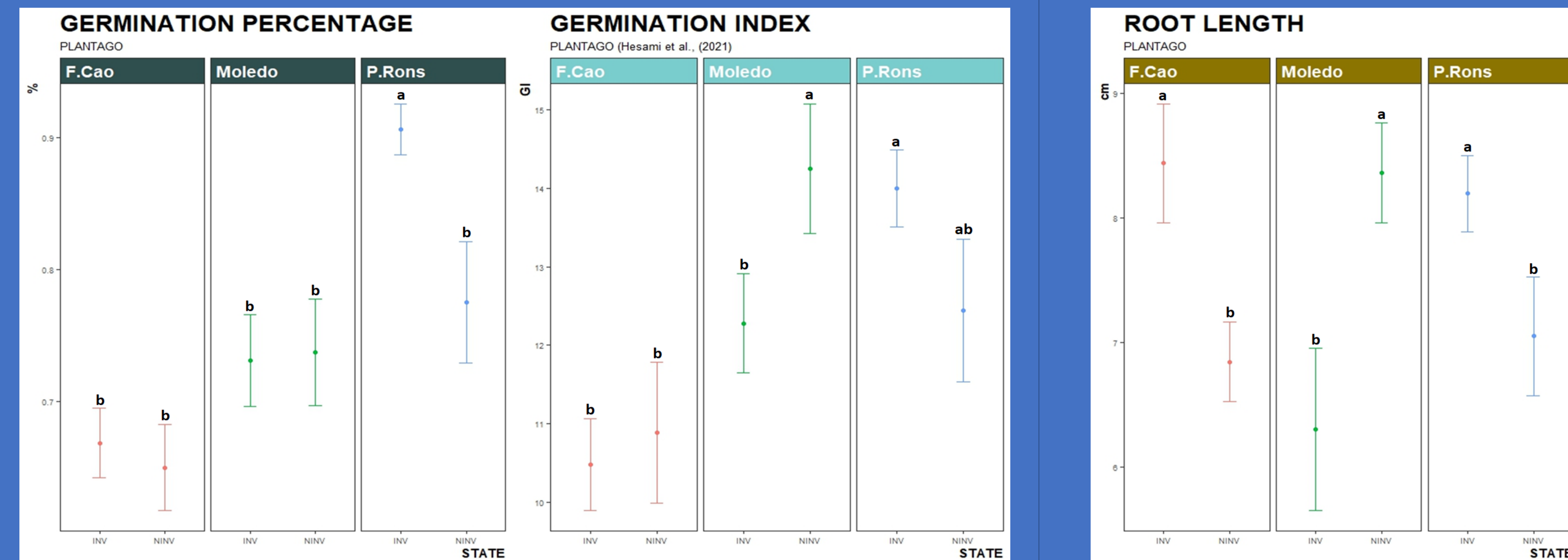


Figure 1. Seed and seedling parameters from *Plantago maritima*, from left to right: germination percentage, germination index (Hesami *et al.*, 2021), root length. Different letters means statistical differences (P ≤ 0.05) between locations and state. C_INV: Forte do Cao invaded; C_NINV: Forte do Cao non invaded M_INV: Moledo invaded; M_NINV: Moledo non invaded; R_INV: Punta Rons invaded, R_NINV: Punta Rons non invaded.

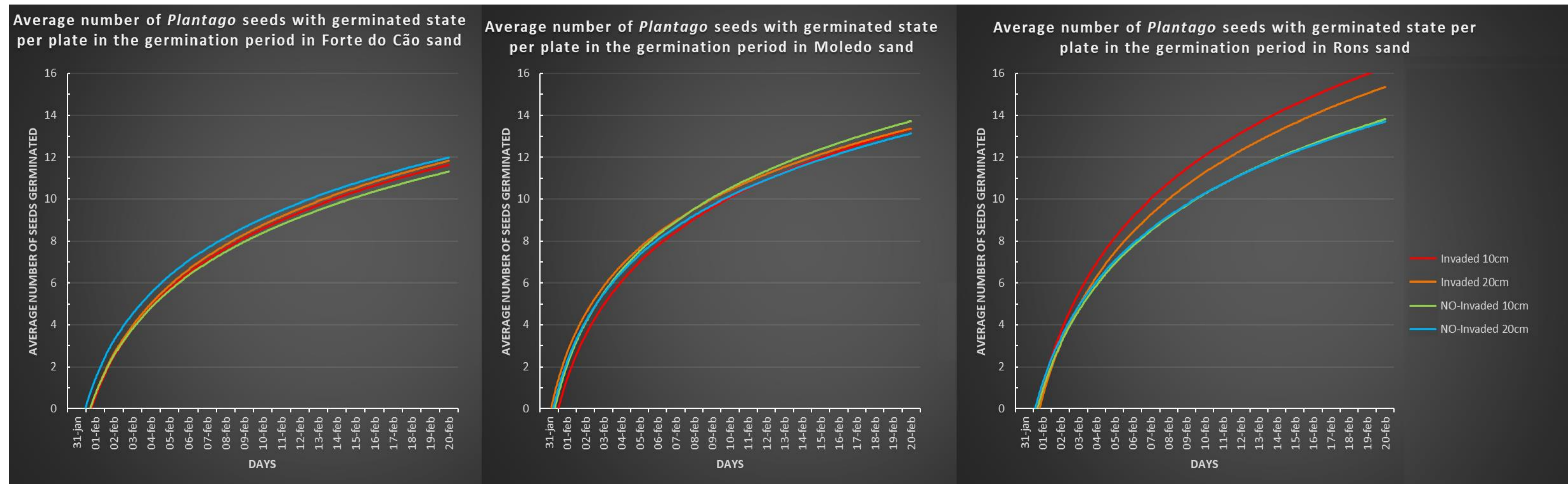


Figure 2. Germinated seeds of *Plantago maritima* per day in all sampled beaches' sand.

Conclusion

This study seems to indicate that at least one autochthonous plant (*Plantago maritima*) shows **more alteration in root growth** than in germination when it is subjected to an invaded substrate.