



SEEDS HackSciArt

SEED 23-Medioambiente

RESEARCHERS

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1. ESSENTIAL DIMENSION

(Objective descriptive information of the scientific seed)

NAME

“Camarina, the pearls of the dunes that walk on the sands”

KEYWORDS

Resist, regrowth, twisted trunks, white berries, edible pearls

BRANCH

Ecology studies the life of organisms in their natural environments and their relationship with the environment and other organisms. In dune environments, sand dynamics are also studied, which is why ecology and geomorphology are closely related.

ABSTRACT

We design sampling methods to count the individuals, their spatial location, their regrowth capacity, fruit production and which animals consume their berries.

METAPHOR

About the camarina, the poet Juan Ramón Jiménez said “they are the pearls of the dunes that filled my entire childhood”. The camarina, with its twisted and helicoidal stems, is covered by the sands and regrows again, spreading over the dunes. The sands also offer protection

against the evil fire so that it can regrow a few months after the fire, as if it were the Phoenix bird that is reborn from its ashes. But, summer after summer, the female plants produce thousands of white berries, like pearls, and rabbits, boars, badgers, foxes come to feed on their fruits.

What is the secret that explains this production in such a hostile environment? The secret seems to be to grow slowly and search for resources in the underground world.

PHASES OF THE USUAL SCIENTIFIC METHOD

1. Ask the question we want to answer.
2. Design a simple sampling method, but one that allows us to approach the problem.
3. Carry out a sampling in the field: from the sea inland, how many plants, sizes, how many fruits, how many animals, camera traps, animal excrement.
4. Once the sampling, analysis of the data, and formulation of new questions to continue delving into the subject, over and over again.

TOOLS

Field material, tape measures, cameras, field notebook and a lot of patience.

RESOURCES

- 1) Bibliographic databases such as Scopus and Web of Science on related topics.
- 2) Experience of the research team in dune species and ecological studies.
- 3) University vehicles, field material and computer support.
- 4) Informative video made by the research team:
<https://www.youtube.com/watch?v=wb6o4NgV2FI>
- 5) Surveys of populations in coastal areas.



Picture of the pearls of the dunes. *Corema album* plant with its berries.

2. ADDITIONAL DIMENSIONS

(The following sections add subjective information from the scientific seed, in order to inspire creatives in the creation of a SciArt work. Some of the sections may not have information if the researcher chose not to specify anything.)

SCIENTIFIC MOTIVATION

I love working on natural ecosystems, on species at risk of extinction, whose role is also important for the conservation of habitats and other species. In the case of the camarina (*Corema album*) my works serve to help in the management and conservation of this species and also serve to favor a trophic resource for many animals.

This species has also been a source of inspiration for poets and artists, such as Juan Ramón Jiménez. On the coast of Portugal there are songs and legends about the berries of the camarina or camariña, for example, there is a legend that says that they are the tears of a queen when she found her husband in the arms of another woman. Another important motivation is the study of the response of the species to disturbances, mainly fire. The regrowth capacity is very important for the maintenance of the species, as was the case of the Doñana fire of 2017.

In this sense, we can think that nature is maintained and life makes its way in adversity.

METAPHYSICS

From a metaphysical point of view, the plants of the dunes make us think about the concept of the passage of time and eternity. How many times have they regrowed? How many plants are there that belong to the same individual that has sprouted again and again? How many centuries do these twisted trunks buried in the sand hide from us?

ETHICS

Coastal ecosystems must be considered as fragile systems, very long-lived, but very susceptible to disturbances. The dunes are not only recreational areas to build urbanizations, they contain a complexity of ecological relationships that offer the observer and the visitor many secrets, if he is willing to know them.

COLORS

The leaves of *Corema album* are dark green and the berries are pearly white, with some pink tones, which reflect ultraviolet radiation, so we don't know if they show other colors for some birds.

AROMAS

A sweet aroma, of the countryside, with a soft touch of honey.

FLAVORS

The berries are slightly tart, with a pleasant flavor when ripe.

SOUNDS

Birds, the wind and the waves of the sea.