



## The LIFE Habitats Calanques project

was born out of the desire of local stakeholders of the Calanques National Park to protect natural habitats and their threatened flora along the coastline. Involving inhabitants, associations, scientists and communities, this project implements

- 24 actions over 5 years (2017-2022):
   set up paths to avoid vegetation trampling and erosion.
- plant Astragalus tragacantha and Plantago subulata species
- limit the spread of invasive alien plant species
- raise awareness and share knowledge in France, Europe and beyond.

Aiming to preserve a treasure of biodiversity whose value is internationally recognized, the project receives the support of the European Commission through the financial instrument for the environment (LIFE program).

habitats-calanques.com



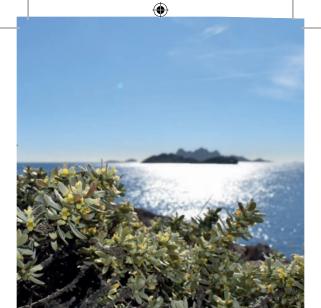
calanques life



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### The flora of the Calangues

10% of the known plant species in the world grow along the Mediterranean rim which cover only 2% of the earth. The Calanques host around 1,000 plant species, of which 30 are protected.

# Which of these plants come from the Calangues?

- a. Asteriscus maritimus
- b. Thymelea tartonrea
- c. Opuncia spp.
- d. Carpobrotus spp.
- e. Plantago subulata







### Correct answers : **a, b, e**

### a: right

Asteriscus maritimus is one of the local plants that has been growing in the Calanques for thousands of years and is adapted to the extreme conditions of this territory.

### b,e: right

In addition to be native to the Calanques, *Thymelea* tartonrea and *Plantago subulata* are protected and emblematic plants of the Calanques coastline.

### c,d: wrong

Carpobrotus spp. is an invasive alien plant species from South Africa.

Opuncia spp. comes from Central America. It escaped from the private gardens where it was used as "natural fence".

Nowadays, these two plants threaten the flora of the Calanques.









### Astragalus tragacantha

It is a protected plant species that grows along the Calanques rim. In France, 90 % of the Astragalus tragacantha grow in the Calanques National Park. It blooms from February to April each year.

### Right or wrong?

- a. Its roots fix heavy metals
- b. It has needles to protect itself against herbivores
- Protecting it means preserving everything around it





correct answers : **a, b, c** 

a:right

Astragalus tragacantha roots, bacteria and fungi get together and fix heavy metals in the soil. This association is an asset for this territory, whose industrial past explains the presence of such pollutants into the ground!

### b:right

It is also to protect itself against drought that Astragalus tragacantha's leaves turn into needles: it limits the loss of water by perspiration and, gathered in a star-shaped way, they catch the slightest drop of humidity in the air that runs down to the roots.

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### c: right

Astragalus tragacantha is an useful plant for the ecosystem. In addition to its stabilizing and adaptive strategies, it boosts fauna-flora relationships (plants, pollinating insects). This is why this plant is so important!







### The threats

It is to protect themselves from the wind, the sea-salt sprays and the heavy sun that some plants of the coastline grow in a round-shaped way at ground level. Despite these incredible adaptatives strategies, they are under strong human and natural pressures that threaten them.

# What threatens the flora of the Calanques coastline?

- a. Trampling
- b. Our household chemicals products
- c. Plant collecting
- d. Invasive alien plants species





Correct answers : a, b, c, d

### a, c: right

Trampling and excessive plant collecting threaten the flora of the Calanques coastline. Such behaviors damage and weaken the flora. They can even lead to its extinction.

### b: right

Our household chemical products threaten the flora of the Calanques. Even after wastewater treatment, some surfactants they contain are released in the sea. Carried by sea-salt sprays on coastal plants, they nibble on the protective layer of their leaves and can cause their death. We call them polluted sea-salt sprays.

### d:right

An invasive alien plants species is a plant that comes from elsewhere AND spreads very quickly invading natural areas. These plants are a threat for the local flora.

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# How many of them will you save?

The flora of the Calanques is rich and fragile. About **6 million human feet** tread upon its soil each year. That's why it is so important that everyone gets the right behavior to preserve it.

# What will be your next ecogesture? Walk on marked paths Collect plants with your eyes Plant local species in your garden Watch out where you put your beach towel on Use ecofriendly household products





### How many answers did you check?









The steps of a walker going away from the paths are the main threat to the flora of the Calangues.

In fact, the marked paths ensure preservation of the flora and the best access to the Calangues

for the greatest pleasure of all!

I collect plants with my eyes. In the wild, I let the plants grow.

I cultivate the difference and local diversity in my garden. I choose local plantations in

my garden.

I watch out where I put my beach towel on because I want to protect the unique plants that grow between the rocks.

I use more ecofriendly household products to avoid polluted sea-salt sprays which damages coastal plants.

