

ENSURING PLANT PRODUCTION FOR ECOSYSTEM RESTORATION AND CONSERVATION OF ENDANGERED SPECIES IN THE VALENCIAN COMMUNITY (SPAIN)

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RESULTS (see tab. 1)

In 2022, joint production of CIEF and CAEP yielded 323,905 plants belonging to 278 taxa. 55,5% was mainly focused on ecological restoration and forestation (Forest Seed Bank), excluding the production of *Pinus spp.* and *Quercus spp.*, which is made by a network of 8 forest nurseries depending on the Valencian Forest Service*. The production of new plants represented 54,7% of global data. 45,3% of production was compound by the stock of plants needing to grow for more than 1 year at the nurseries. All plants, both including the specimens of rare, endemic or endangered species produced for reintroductions or other conservation translocations, are submitted to official plant health inspections and provided of plant passports, according to the EU regulations.

In addition, to ensure enough seed production of the rarest and more endangered species, as well as for production of new plants coming from cuttings or plant fragments –especially for riverine plants and helophytes–, more than 30 seed/clonal orchards are maintained by CIEF and CAEP. The seed orchards have been the main tool to save from extinction a large list of Valencian species such as *Cistus heterophyllus* Desf., *Silene hifacensis* Rouy, *S. cambessedesii* Boiss. & Reut., *Limonium albuferae* P.P. Ferrer et al., *L. perplexum* Sáez & Rosselló, *L. irtaense* P.P. Ferrer et al., etc.

*These nurseries produced 853,458 plants in 2022. Adding up the plant production of CIEF and the Forest Service nurseries, the Department of Environment, Water, Infrastructures and Land produced 1,033,261 plants for forestation and ecological restoration projects.

INTRODUCTION

Due to the extensive lack of private nurseries to produce native plants in the Valencian Community (Spain), the regional government -**Generalitat Valenciana**- develops this activity through its **Department of Environment, Water, Infrastructures and Land**, both to provide plants for 1) forestation and ecosystem restoration projects, and for 2) reintroductions and other conservation translocations of endangered species.

The first function is made by the **Forest Seed Bank** line of **CIEF** (Centre for Forestry Research and Experimentation), mainly related to the activity of the Valencian Forest Service and own projects -i.e., LIFE Teixeres-. The second one is mainly performed by units of the **Valencian Wildlife and Natura 2000 Service**, both placed at CIEF (for terrestrial species) and the Aquaculture Centre El Palmar (**CAEP**, for aquatic ones and helophytes). This service also produces plants for habitat restoration focused on species recovery (providing habitats for endangered animal and plant species). In addition, both centres facilitate plants for education, research, conservation and other social purposes to municipalities, NGOs, enterprises performing CSR projects, etc.



Table 1. Plant production at CIEF and CAEP in 2022. For acronyms, see text

| Centre | Main purpose | Plant production (amount) | | | | | | Service |
|--------|--|---------------------------|---------|-------------------------|---------|-------------|---------|----------------------------------|
| | | New production | | Stock from former years | | SUM | | |
| | | Plant units | Species | Plant units | Species | Plant units | Species | |
| CIEF | Forestation, Ecological restoration | 101,197 | 56 | 78,606 | 62 | 179,803 | 81 | CIEF |
| | Species conservation | 33,064 | 114 | 19,984 | 139 | 53,048 | 139 | |
| CAEP | Species conservation, Habitat restoration for species conservation | 42,845 | 42 | 48,209 | 58 | 91,054 | 58 | Wildlife and Natura 2000 Service |
| SUM | | 177,106 | 212 | 146,799 | 259 | 323,905 | 278 | |