

Plant Micro-Reserves (PMR) constitute areas of small extent (less than 20 ha) that aim in the protection and management of the population of a rare plant. In the framework of the European Project **LIFE-CRETAPLANT**, a **pilot network of 7 PMR** has been established, for the first time in Greece, in the Prefecture of Chania (on public lands, part of the NATURA 2000 Network) for the protection of 7 threatened plants. Moreover, an additional number of important species of plants and animals as well as habitat types are protected in every PMR. Responsible for the monitoring and management is the Forestry Service, in collaboration with Local Authorities and scientific institutes. **The overall objective of the venture is twofold: the conservation of these little biodiversity treasures and the information – increase of public awareness towards Greek Nature.**



CRETAPLANT

MICRO-RESERVE

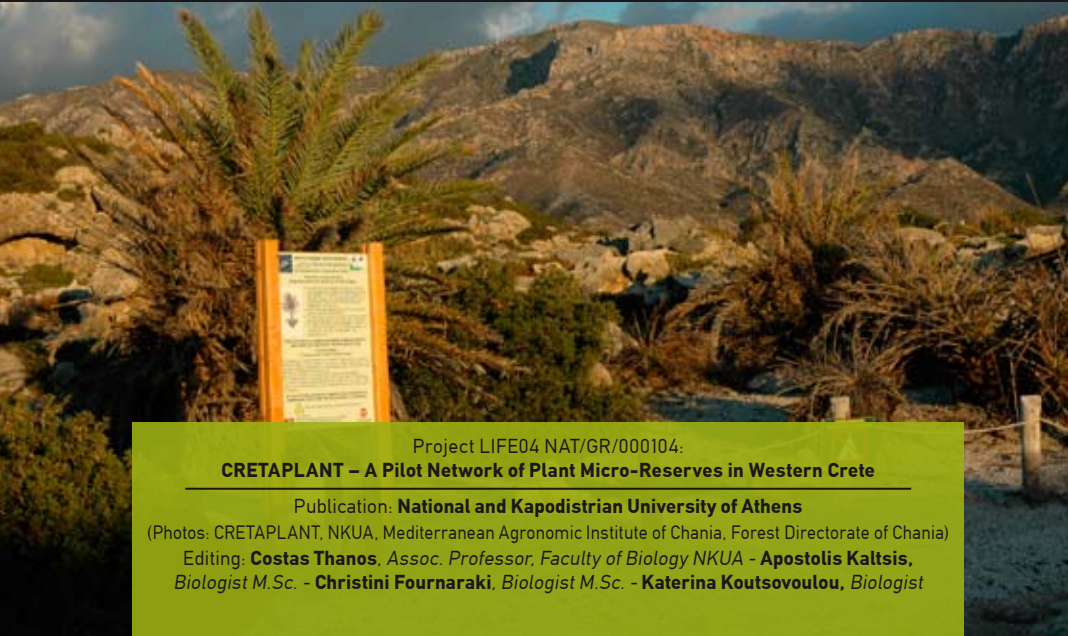
Phoenix theophrasti Greuter



Knowledge - Protection - Conservation



A Pilot Network of Plant Micro-Reserves in Western Crete
Πιλοτικό Δίκτυο Μικρο-Αποθεμάτων Φυτών στη Δυτική Κρήτη



Project LIFE04 NAT/GR/000104:

CRETAPLANT – A Pilot Network of Plant Micro-Reserves in Western Crete

Publication: **National and Kapodistrian University of Athens**

(Photos: CRETAPLANT, NKUA, Mediterranean Agronomic Institute of Chania, Forest Directorate of Chania)

Editing: **Costas Thanos**, Assoc. Professor, Faculty of Biology NKUA - **Apostolis Kaltsis**, Biologist M.Sc. - **Christini Fournaraki**, Biologist M.Sc. - **Katerina Koutsouvelou**, Biologist



Phoenix theophrasti Greuter

CHRYSOskalITISSA
NATURA 2000 GR4340015



Distribution

Theophrastus' palm (*Phoenix theophrasti*, Palmae family) is the only indigenous palm in Europe. It occurs in Crete and SW Turkey (and nowhere else in the world), in coastal areas (usually on sandy and soaked soils).

Description

A dioecious plant (individuals produce either male or female flowers). It can grow up to 10 m high and produces numerous offshoots; it has often more than one trunk. It flowers from April to May and seeds mature in October.



Seeds of *Phoenix theophrasti* (in magnification)

Conservation status

- Included in Annexes II and IV of 92/43 EU Directive
- Protected by the Presidential Decree 67/81
- Protected by the Bern Convention (1979)
- The *Phoenix theophrasti* habitat is included in Annex I of 92/43 EU Directive (priority habitat)
- The Vai palm forest (NE Crete) has been declared Aesthetic Forest (Presidential Decree 121/73) and is protected by forest legislation

Threats

- ▶ Tourism
- ▶ Lack of population regeneration in the area (seeds fail to mature)
- ▶ Grazing
- ▶ Fires
- ▶ Climatic change

The Plant Micro-Reserve of *Phoenix theophrasti* habitat

Locality: Aspri Limni, ChrysoSkalitissa

(at the westernmost edge of the species' world distribution)

Surface: 2.2 ha **Altitude:** 0-10 m

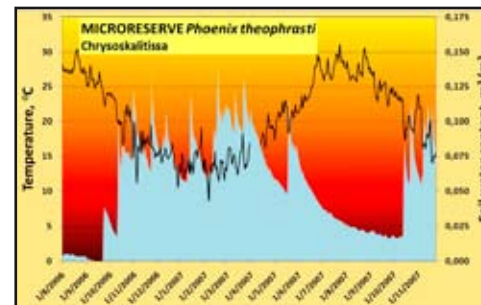
Landscape: Rocky, calcareous coast with phryganic and halophilous vegetation

Other important plant species: *Bellevalia brevipedicellata*, *Campanula saxatilis* subsp. *saxatilis*, *Alkanna sieberi*, *Viola scorpiuroides*



Conservation and monitoring actions

- Wardening
- Placement of information boards
- Recording of climatic parameters (meteorological microstation)
- Artificial pollination of female plants for the production of fertile seeds
- Cultivation of offshoots, from female plants of the PMR, in a nursery and transplanting in the PMR for the enhancement of total population size (currently lower than 50 plants) and number of female individuals
- Storage of seeds from other populations of the species in the Seed Banks of MAICH and University of Athens
- Study of seed germination and the factors regulating regeneration of the species



Phoenix theophrasti offshoot from a female individual

