

Community Priority plant species in Crete: fieldwork April – May 2014

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The island of Crete hosts an amazingly large fraction of the Greek endemic flora, especially when regarded in relation to its size. Therefore, it is not surprising that among the 64 Community Priority plant species (listed under Annexes II and IV of the 92/43 Directive of the European Community) occurring in Greece, 12 are found in Crete. The biological and ecological features of these 12 species vary significantly, from plants specialized in islet ecosystems to plants limited in the highest peaks of the Cretan mountains, from bulbs and annuals to trees, from plants flowering during the winter to others with a flowering period covering summer and autumn. Greece, as a member state (MS) of the European Union is obliged to submit every 6 years an updated report regarding the conservation status of these priority species. At present, the project of the evaluation of the conservation status of the 64 Community Priority plant species is funded by the Operational Programme "Environment and Sustainable Development" – Greek Ministry of Environment, Energy & Climate Change. The task of assessing the conservation status of the priority plant species in the Cretan area is undertaken by the Department of Botany (Faculty of Biology) of the University of Athens, in collaboration with the Mediterranean Agronomic Institute of Chania (MAICh).

During the period between the 24th April and the 3rd May, the research group of the University of Athens and MAICh conducted field work in Crete regarding the following priority species:

Anthemis glaberrima

Anthemis glaberrima is an annual daisy, known only from two small uninhabited islets, Imeri Gramvousa and Agria Gramvousa, at the NW tip of Crete (Gramvousa peninsula). It grows on soil thickets among coastal calcareous rocks, with a flowering period from the end of April to mid-May. Despite the persistent strong winds both islets were visited and the fieldwork included mapping of the subpopulations and estimation of the total number of individuals. It should be noted that the northern coastal area of Agria Gramvousa has been declared as a Micro-Reserve for this rare plant species, as part of a 4-year conservation project (CRETAPLANT project, www.cretaplant.biol.uoa.gr).



***Anthemis glaberrima* plants in bloom, growing in cavities with soil among maritime rocks.**



The rocky coastal area of Agria Gramvousa is the typical habitat of *Anthemis glaberrima*.

Crepis pusilla

Crepis pusilla is a very small annual plant, growing typically on plain sites with clayey soils, often near grazed sites and livestock farms. The flowering season is April and May. It is not considered as rare in Crete, since it occurs in several locations throughout the island and in relatively large numbers. During this field mission, several locations were visited in order to confirm literature citations, while the size of the subpopulations was estimated in selected sites.



***Crepis pusilla* plants in late flowering - early fruiting stage.**



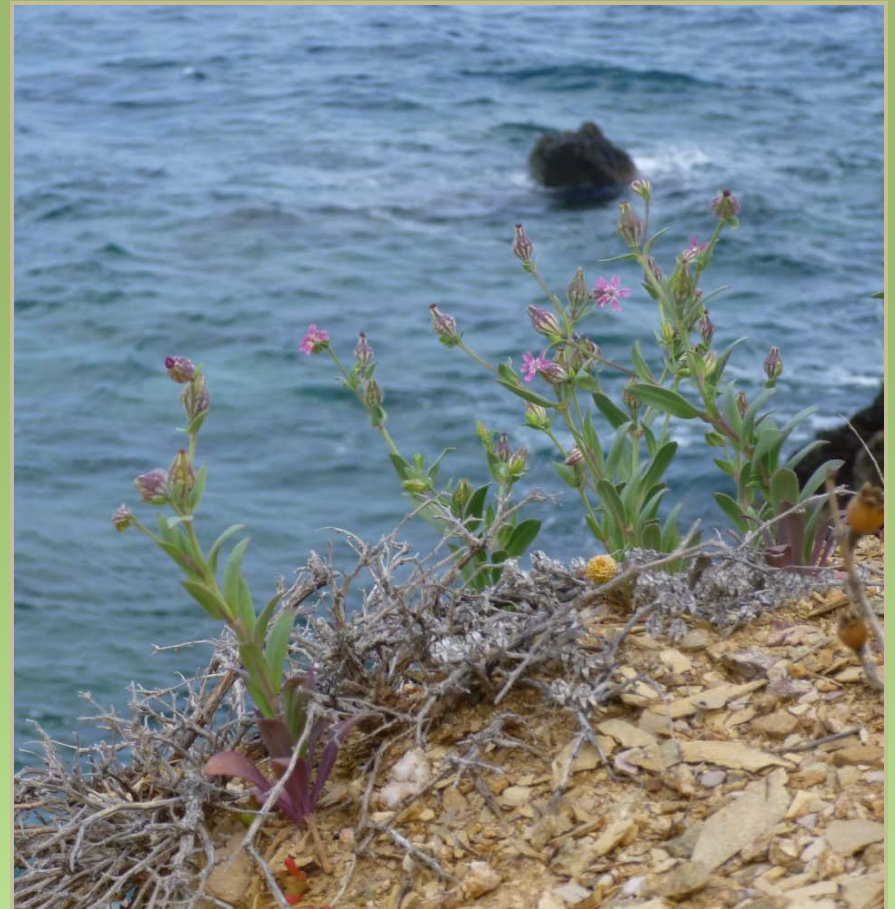
Typical habitat of *Crepis pusilla* in Rodopos peninsula (W. Chania)

Silene holzmannii

This beautiful endemic annual plant is, like *Anthemis glaberrima*, considered as an 'islet specialist': the vast majority of its subpopulations occur on small islets all over the southern Aegean Sea. On the numerous small islets of the Aegean, competition with other plant species is much more reduced, while the plants have adopted special adaptations to the harsh environmental conditions (i.e. fleshy stems and leaves). In Crete, *Silene holzmannii* has only been found on the small islet of the Vai bay, at the NE coast of Crete. The islet was visited in late April in order to confirm the presence of the species there and count all individuals.



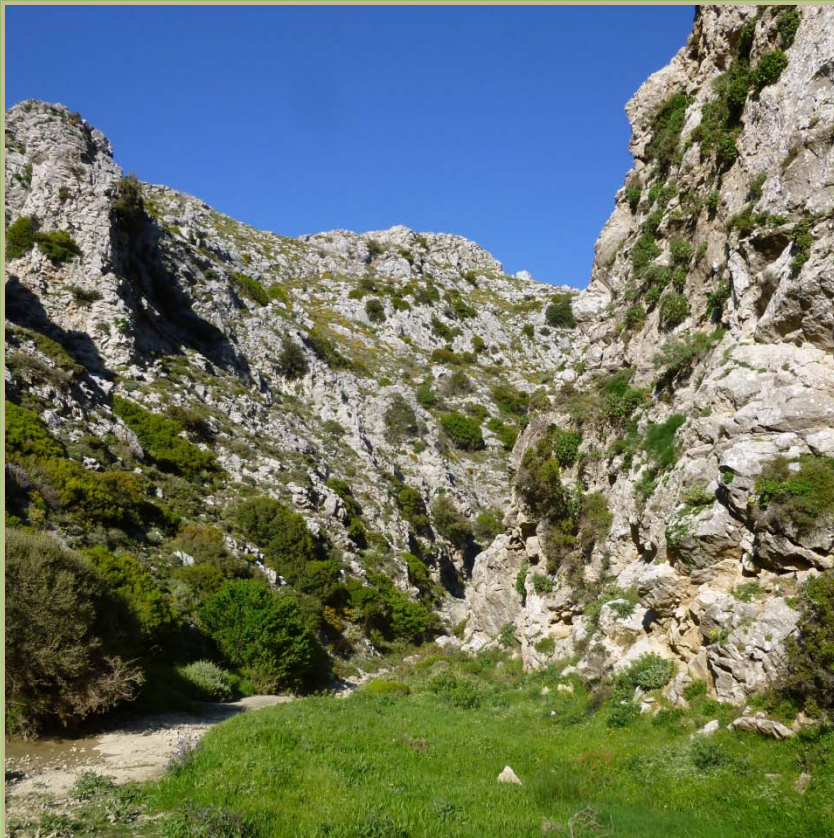
The small islet of the Vai bay (left) hosts a robust subpopulation of *Silene holzmannii*.



Silene holzmannii plants in bloom.

Origanum dictamnus

Origanum dictamnus is the famous 'diktamos' (dittany), known since ancient times due to its aromatic and medicinal properties. It is a Cretan endemic, growing on calcareous cliffs and surfaces throughout the island, with at least 45-50 distinct locations reported. During the project, all locations known from literature will be visited to confirm the presence of the species. Field visits can take place even before the flowering period (late June to early August), as dittany plants are easy to distinguish due to their unique scent and texture. In this field trip several sites were examined in the wider Rethimnon area. In a later stage, population estimation in selected sites will be conducted.



Origanum dictamnus plants are easily distinguished by their unique scent and texture.

The vertical cliffs of the numerous gorges of Crete (such as this one, Kissiano gorge near Spili, central Rethimnon) are the typical habitat of *Origanum dictamnus*.

Please keep in mind!

- Collection of rare and endangered plant species, even in a small scale, might become a damaging factor for their long-term conservation.***
- Collection of plant material for scientific and/or commercial purposes is only permitted with a special license from the Greek authorities.***
- Enjoy the Cretan and Greek landscape and natural environment leaving the minimum possible footprint.***

Thank you!



Locality: Gious Kampos, Central Rethimnon