

## Plant landscape and phytodiversity in the archeological area of Segesta (NW Sicily)

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In the system of Sicilian archaeological parks, the area of Segesta - an ancient city of western Sicily referring to the Carthaginian eparchy, - represents, together with Selinunte, Erice and Mothia, another integrated hotspot of biodiversity and archaeology. The current plant landscape is strongly influenced by a millenary anthropic transformation. There are no residual expressions of the original plant covering that, with reference to the environmental potential of the area, can be traced back to the evergreen Mediterranean forest dominated by *Quercus ilex*, presently only sporadically occurring in the area of the ruins, together with other species related to associations and upper syntaxa referable to the class *Quercetea ilicis* (*Olea europaea* subsp. *sylvestris*, *Ceratonia siliqua*, *Pyrus spinosa* s.l., *Rhamnus alaternus*, *Chamaerops humilis*, *Crataegus laevigata*, *Ruscus aculeatus*, *Asparagus albus*, *A. acutifolius*, etc.). Sporadic is the presence of *Celtis australis* and *Ficus carica*.

The whole area of Segesta is included in the potential belt of both maquis and Mediterranean evergreen forest, formations once present but progressively replaced with classical Mediterranean tree crops (olive, almond, carob and vines). The abandonment of these crops allowed the advent of grasslands, sometimes with trees, until the introduction of new plants scattered to further mark the anthropization of the area. Quite widespread in the hill next to the theatre is the garrigue with *Chamaerops humilis* and *Ampelodesmos mauritanicus*, here diversified by the presence of *Plumbago europaea* which, due to its high degree of coverage, sociability and frequency, is a good unpublished plant association. The whole area is rich in aromatic (*Phoeniculum vulgare*, *Origanum vulgare*, *Mentha pulegium* and *M. rotundifolia*, *Salvia sclarea*) and medicinal species (*Atractylis gummifera*, *Hypericum perforatum*, *H. perforatum*, *Sylbium marianum*, *Urginea maritima*).

Elements of landscape importance in spring-summer are *Asphodelus ramosus*, some spiny *Asteraceae*, such as *Cynara cardunculus* subsp. *cardunculus* and *Onopordum illyricum*, and other *Apiaceae*, as *Magydaris tomentosa*, *Thapsia garganica* and the most frequent and expressive *Ferula communis*.

There are several exotic plants introduced in the last century (*Eucalyptus* sp. pl., *Cupressus* sp. pl., *Pinus* sp. pl.), or naturalized since longer time (*Agave americana*, *Opuntia ficus-indica*, *Myoporum serratum*). The presence of the invasive *Ailanthus altissima*, widespread even in the most sensitive areas, has negative repercussions on the stability of the already precarious monuments and on the landscape in general, away from the stereotypical images of Segesta.

Some iconographic documents, dating back to the illustrations of the travellers of the *Grand Tour*, give a representation of the vegetation covering this area before its transformations. It would be advisable inspiring to this period the actions of landscape restoration to be undertaken in this area.