

## 1.5 = TOWARDS A CHECKLIST OF THE ITALIAN GYPSOPHILOUS VASCULAR FLORA

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The strict relationship between plants and particular types of substrate has long been known to botanists and plant ecologists who have dealt with this issue. The peculiar flora growing on Italian gypsum substrates has been underlined since the nineteenth century (1, 2, 3). The concept of plant gypsophily can be defined as the exclusiveness or marked preference for living on gypsum outcropping rocks. Thus, only those plant species which show preference, or even exclusivity, for gypsum substrates, should be classified as gypsophilous (4). The main aim of this research has been to provide a checklist of the Italian gypsophilous flora. The study was made possible through international collaboration between the “Mediterranea” University of Reggio Calabria (Italy) and the University of Almería (Spain).

During this first step, an extensive literature review has been carried out in order to collect all available information about Italian gypsophilous flora and to compile a preliminary list.

Afterwards 18 regional botanists expert on Italian gypsum flora have been asked to rank the gypsum preference of the species from this preliminary list. Following the methodology proposed by Mota *et al.* (5), the degree of gypsophily was ranked on a scale from 1 to 5 (corresponding to low and total dependence on gypsum substrates, respectively). The species list was subsequently amended and improved twice on the basis of peer opinions to obtain a final evaluation. More than 360 species have been taken into account. According to the obtained values, all the plant species, ranking between absolute or preferential gypsophytes (with median values between 5 and 3), will figure in the final checklist of the Italian gypsophytes.

A more detailed study on the gypsophilous flora and plant communities would be required to support an effective conservation action for the Italian gypsum areas and their natural heritage.

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