

THE QUERCO-FAGETEA CLASS IN SICILY: AN EXAMPLE OF BOREAL-TEMPERATE VEGETATION IN THE CENTRAL MEDITERRANEAN AREA

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In the frame of phytosociological investigations on the woody vegetation of Sicily, the mesophilous plant communities belonging to the *Quercus-Fagetea* class are examined. This vegetation represents in Sicily an outstanding example of boreal-temperate vegetation, which is floristically characterized not only by the occurrence of a rich pool of Euro-Siberian taxa, but also by some endemic species whose distribution range is circumscribed to the central-southern Apennines and Sicily. The Temperate floristic elements reached the southernmost Mediterranean territories during the late glacial period, thus getting in contact with the Mediterranean flora which was already established in these areas. In particular, *Fagus sylvatica*, together with other mesophilous temperate species, colonized those environments which originally hosted conifers-dominated woodlands. Some remarkable relic examples of these Tertiary woody vegetation are still surviving in the highest mountains of southern Spain, northern Africa, Peloponnisos, Crete, Cyprus, southern Anatolia, and Lebanon. As a consequence of the penetration of these two floristic elements, whose origin is completely different, the Sicilian woody vegetation of *Quercus-Fagetea* class is represented by several peculiar plant communities, mostly exclusive of the island. Actually, such mesophilous woodlands are only found on the Madonie, Nebrodi, Peloritani, and Etna, and they can be ascribed to two different orders: *Fagetalia sylvaticae* and *Quercetalia pubescenti-petraeae*. The first order is represented by the alliance *Geranio versicoloris-Fagion sylvaticae*, which chiefly groups beech-woods or, more rarely, yew-, durmast- and Turkey oak woods. The second order, which seems to be less mesophilous, is represented by the sole alliance *Pino-Quercion congestae*, including deciduous oak-woods, chestnut-, aspen-, pine-, and birch-woods.