

ORCHID GERMPLASM COLLECTION, BREEDING AND ASYMBIOTIC GROWTH

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Orchids, breeding

The Floramiata S.p.A. is the biggest Italian company for the production of ornamental plants. One of the most important goals is to create new varieties, to evaluate the Italian wild germplasm and to introduce the selected species in the market.

The orchid breeding programme of tropical and Mediterranean species has been started three years ago, more than 35 botanical species of the genera *Phalaenopsis*, *Cattleya*, *Dendrobium*, *Paphiopedium*, *Phragmipedium* and *Phajus* have been collected and used for the breeding. During that period several grexes have been produced, currently we are cultivating thousands of hybrids and selecting the most promising new phenotypes.

All the Italian species of the genera *Serapias* (*S. cordigera*, *S. lingua*, *S. neglecta*, *S. nurrica*, *S. parviflora*, *S. politisii*, *S. vomeracea*), and many other wild species (*Orchis coriofora*, *Orchis morio*, *Dactiloryza elata*, etc.) have been successfully reproduced by seeds in asymbiotic conditions in vitro and then grown in pots. The results demonstrated that those species could be propagate in industrial manner for the needs of repopulation or as new commercial ornamental plants.