

# BIOLOGICAL ADAPTATION OF THE FLOWERING PLANTS TO THE MARITIME ANTARCTIC CLIMATE CONDITIONS

## Summary

Two species native to the Antarctic, *Colobanthus quitensis* (Kunth) Bartl. and *Deschampsia antarctica* Desv., and one alien species, *Poa annua* L., are currently the only flowering plants in the Maritime Antarctic. They inhabit a wide range of habitats characterized by varied topographic, trophic and topoclimatic conditions.

Histological, cytological and embryological analyses of plants growing under different microhabitat

conditions in King George Island (South Shetland Islands, Maritime Antarctic) and under greenhouse conditions revealed their high morphological plasticity. Close correlations were observed between habitat and weather conditions and plant size and habit, the number and size of vegetative and generative organs that develop during a short growing season, and protoplast structure.