

Supplemental materials

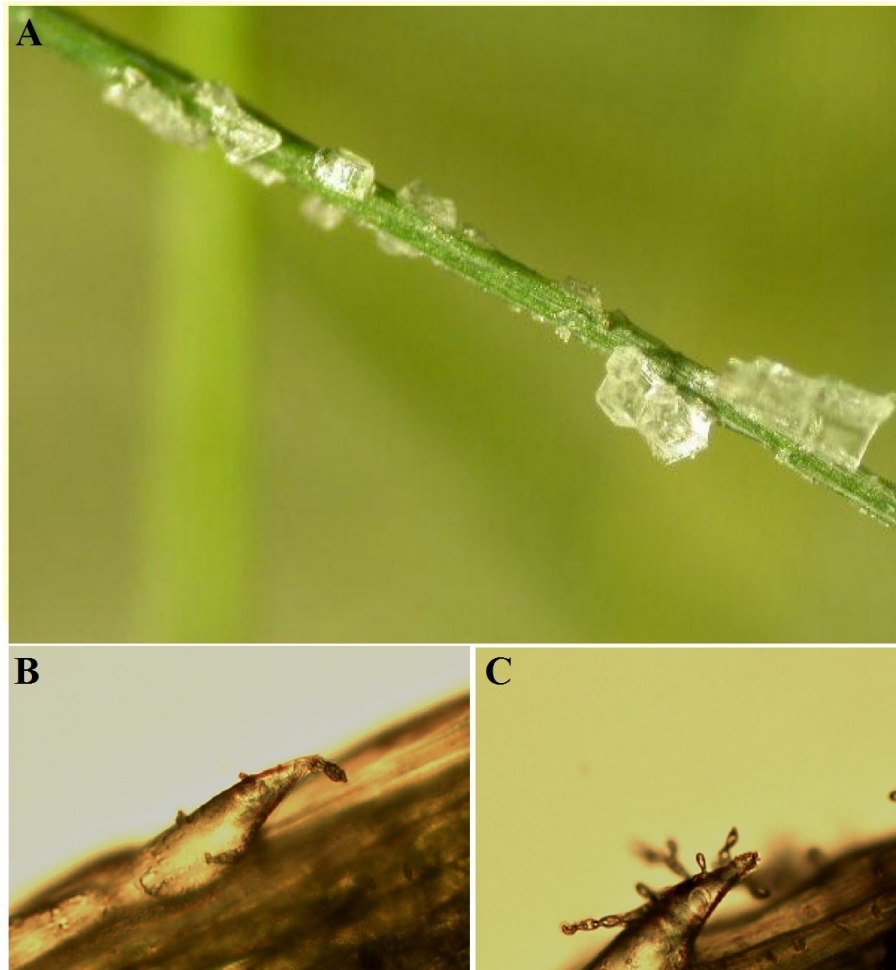


Figure S1. Old leaf from *D. antarctica* exposed at NaCl treatment. **a** leaf with exudation of salt crystals; **b, c** Optical microscopy of a longitudinal section of the adaxial epidermis (400x) of plant exposed at 1.0 M showing trichomes and putative salt exudation.

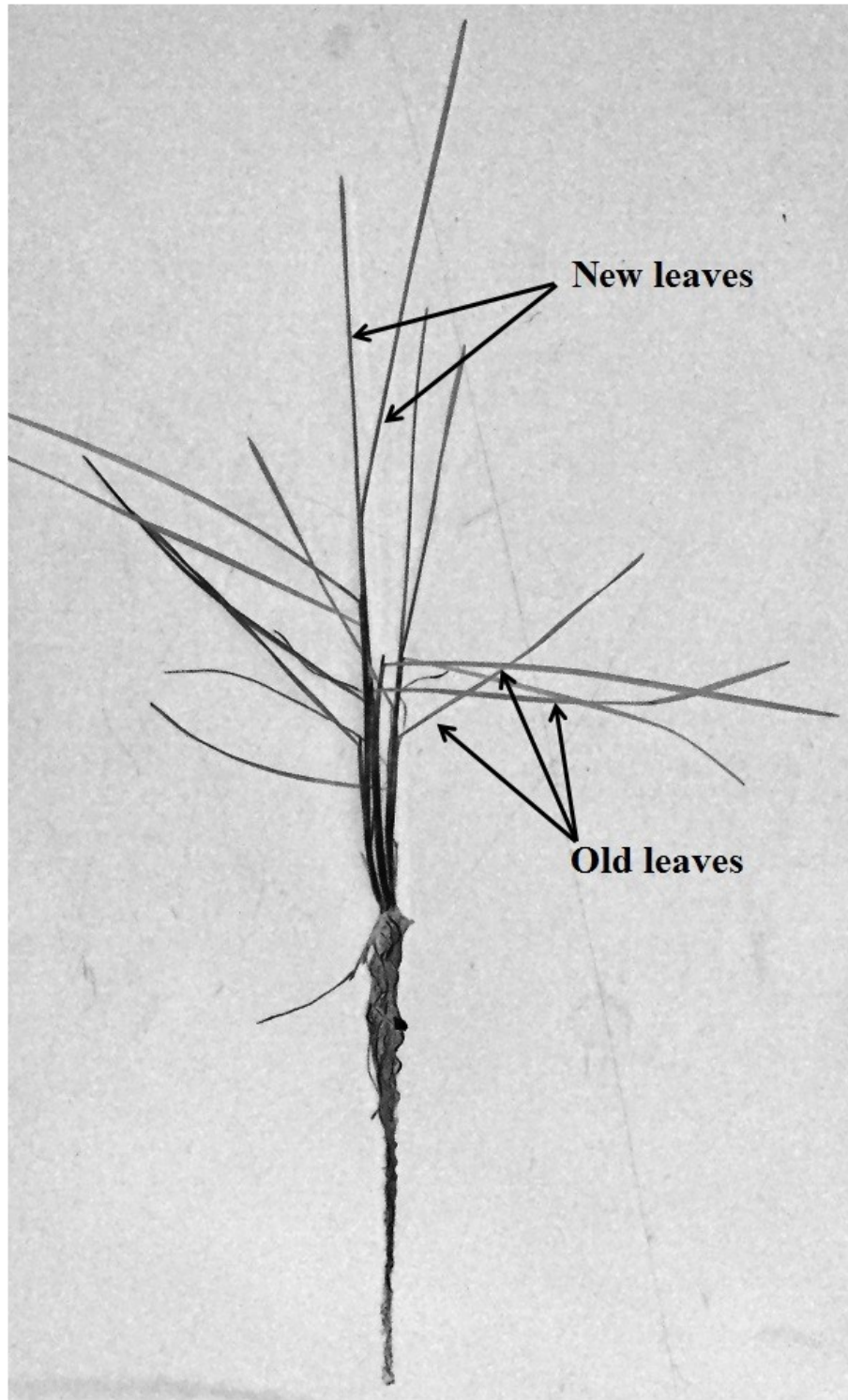


Figure S2. Leaves classification for the transcriptomic analysis in *Deschampsia antarctica* plants.

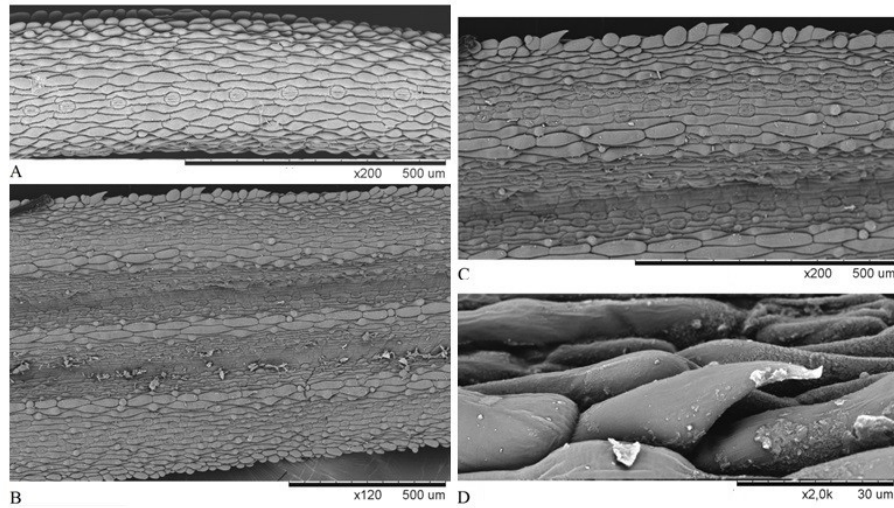


Figure S3. Scanning electronic microscopy of epidermis of *Deschampsia antarctica* plant growing in situ on Collins Harbor on the south beach of Fildes Peninsula on King George Island, maritime Antarctic. **a**, abaxial epidermis; **b**, **c** adaxial epidermis with trichomes; **d**, trichome.

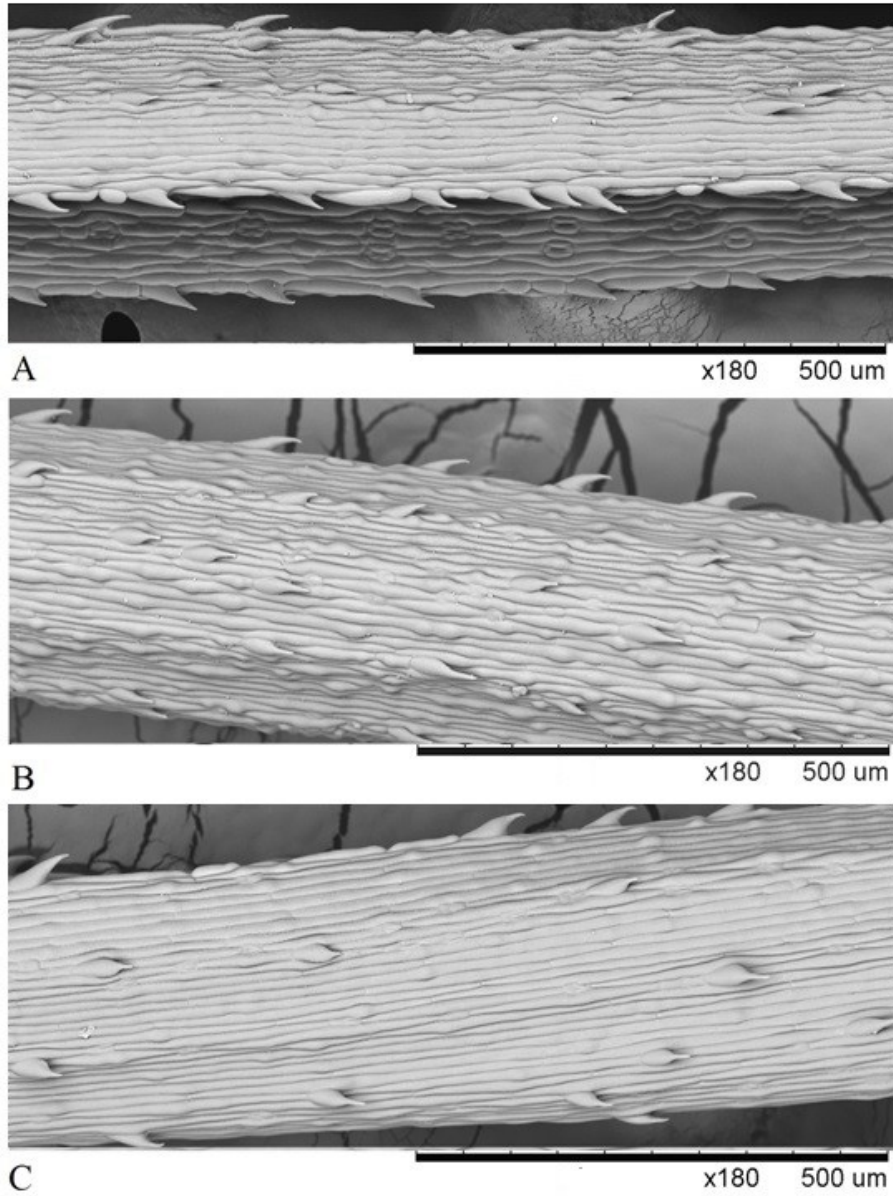


Figure S4 Scanning electron microscopy *Deschampsia antarctica* plant with osmotic treatment. **a**, plants treated with PEG; **b**, plants treated with ABA (10 mM); **c**, plants treated with cool (4 °C).