

GERMINATION OF *Dianthus deltoides* L. AND *Dianthus pinifolius* Sibth. & Sm. IN EX VITRO AND IN VITRO CONDITIONS

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ABSTRACT

D. pinifolius endemic species of the Balkan Peninsula and *D. deltoides* is non-invasive plant species which grows well on poor, acid soils. Both species are very decorative and suitable for planting around tourist facilities on mountains. Present study investigates *in vitro* and *ex vitro* seed germination. Part of the seed were sown immediately after collection and the other part two years later in order to investigate the loss of germination. The best results were obtained *in vitro* conditions, after surface-sterilization using 4% NaClO solution for 20 min (65% - *D. deltoides* and 86% - *D. pinifolius*). After two years of storing, the seed germinated poorly in the same conditions *in vitro* (18% - *D. deltoides* and 21% - *D. pinifolius*). *Ex vitro* germination percentage were lower (43% - *D. deltoides* and 72% - *D. pinifolius*) when seed were sown immediately.

Key words: endemic species, mountain resorts, *in vitro* germination, seed

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