

## **Mikropropagacija ogrožene vrste *Hladnikia pastinacifolia* - preliminarni rezultati**

### **Micropropagation of Endangered *Hladnikia pastinacifolia* - preliminary results**

TEREZIJA CIRINGER<sup>1</sup>, MITJA KALIGARIČ<sup>1</sup>, JANA AMBROŽIČ-DOLINŠEK<sup>1,2</sup>

<sup>1</sup> University of Maribor, Faculty of Natural Sciences and Mathematics, Koroška 160 Maribor, Slovenia; rezka.ciringer@uni-mb.si

<sup>2</sup> University of Maribor, Faculty of Education, Koroška 160, Maribor, Slovenia

*Hladnikia pastinacifolia* Rchb. is endemic species in the area of Slovenia with limited distributional range of 4 km<sup>2</sup> within the Trnovski gozd. *H. pastinacifolia* is a red list species in Slovenia, listed also in the Appendix II of Habitat Directive. Its habitats are considered as endangered, in the case of screes also priority habitats (Appendix I of Habitat Directives). An efficient protocol for rapid multiplication of *H. pastinacifolia* for ex situ conservation is described, due to possible degradation of its natural habitats.

We used solid Murashige and Skoog medium for establishment of tissue culture with and without growth regulators: 6-benzylaminopurine (0-20 µM BAP), 2-isopentynyl adenine (0-20 µM 2-iP), thidiazuron (0-10 µM TDZ), kinetin (0-20 µM K), zeatin (0-20 µM K), naphthalene acetic acid (0-1 µM NAA), indol-3-butyric acid (0-3 µM IBA). Development of axillary shoots was most successful with combination of growth regulators respectively: 10 µM BAP/1 µM IBA, follows 2 µM BAP/3 µM IBA, 10 µM BAP/3 µM IBA and 0.5 µM TDZ. The protocol can be applied also for research in the field of population genetics and ecology of species.