

Workshop 2

Poster

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Tissue culture as a potential method for preserving of various threatened plant species of Latvia

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Field collection of rare and endangered species in National Botanic Garden was started in 1981 and now 70 species of threatened plants were collected. To elaborate tissue culture technology for species conservation explants of 40 threatened plant species from natural habitats were collected. 37 species were introduced in sterile conditions. For 20 species aseptic culture was initiated by seed germination and for 6 species – from shoot apex. Murashige & Skoog basal medium (with full or half nitrate concentration) was used for culture establishment and prior cultivation. Normal organogenesis was observed in medium without hormones. Cytokinin and auxin compounds were used in minimal concentrations to produce plantlets true to type. Species had different growth potential *in vitro*. Development of germplasm conservation technique by minimal growth storage was started for species with high multiplication rate.