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Ex Situ Conservation Practices for Rare Plants in Living Collections

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Abstract: The conservation programme of various vascular plant species has been started in the Botanical garden of Eszterházy College in Eger cooperating with two national parks in the Northern mountain region and Botanical garden of Eötvös Lóránd University in Budapest. The seeds of the species were collected in the chosen habitats with the permission determined by the National Parks and the conservation specialists. Now we have different numbers of individuals from mainly endemic and relict species. We took some experiments to know how can we germinate and grow up this species succesfully up to blooming and fruiting. In the temperate zone the majority of species after ripening the seeds or corps get dormancy to avoid the inadequate period to germinate. The seeds of species need variously pre-treatment (for example pre-chill) and suitable environment (for example basic medium) to unlock the seed dormancy and germinate in large scale. This impacts are often similar to in their originally habitat. To bloom the plants need suitable types of soil, but we couldn't grow them in the most fruitful soil of habitat. Suitable microclimate is usually more important for some relict species than the soil, that's why should we make experiments to find the suitable essential conditions for different species and know all of fenological states of them. These experiments can start a method for growing common wild native plants as food materials.

Keywords: ex situ conservation, germination success, soil preference Hungary, regionality, native wild plants

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