

REINTRODUCTION OF SOME PROTECTED PLANT SPECIES OF MARI

EL REPUBLIC

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SUMMARY

The purpose of our research was testing techniques to create artificial populations of rare and endangered plants species and monitoring of them in the Mari El Republic conditions. The reintroduction of the regional Red Books species was started in the Republic at first. The objects of research were the following species: *Acorus calamus* L., *Dianthus superbus* L., *Laser trilobum* (L.) Borkh., *Salvia tesquicola* Klok. et Pobed., *Serratula coronata* L. The reintroduction of the studied species was carried by live plants. The propagation and production of planting material was held at the introduction nursery of the Botanical garden-institute (BGI). The seeds of *Laser trilobum* and *Serratula coronata* were brought from natural habitat areas on the territory of the republic. The seeds of *Dianthus superbus* were collected from plants grown in BGI from seeds were raised earlier from the natural population. The seeds of *Salvia tesquicola* were collected from plants seized from natural habitats. Cuttings of *Acorus calamus* were taken from the plants of BGI collection. The planting was carried in 2010—2013 in four administrative republic districts to the natural habitats where the studied species used to grow before but later their populations were reduced. The monitoring researches of newly created artificial populations were conducted in order to receive the experimental data and use them for restoration of the studied species population. The plants survival of the studied species for the next year after planting had the following values: *Acorus calamus* — 33 %, *Dianthus superbus* — 11 %, *Laser trilobum* — 41 to 93 % in 4 sites with different ecological conditions, *Salvia tesquicola* — 95 %, *Serratula coronata* — 70 %.

Key words: *Acorus calamus*, *Dianthus superbus*, *Laser trilobum*, *Salvia tesquicola*, *Serratula coronata*, reintroduction, rare and endangered plants, artificial population.