

THE GENE POOL OF DESERT PLANTS ON THE DRAINED BOTTOM OF THE ARAL SEA

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Abstract. There are two ways to solve the Aral problem. The first is to give water in such quantity as to restore the sea to its former shores. Under this condition, it will be necessary to abandon irrigated agriculture, which is practically not realistic. The second way is to cover the drained bottom with desert plants that could grow with the smallest amount of precipitation. But it should be taken into account that the drained bottom is represented by different types of bottom sediments both in chemical and granulometric composition. Therefore, it is necessary to clearly understand on which types of bottom sediments one or another type of plant can be planted. In this regard, a gene pool of desert woody and shrubby plants was laid on the drained bottom of the Aral Sea, where there was water and ships sailed 45 years ago. When laying the gene pool, 15 species of desert plants were tested on medium and highly saline soil in order to identify the relationship of plants to their degree of salinity. Seeds and root system of plants were treated with gumimax "double strength" before sowing and planting. The average degree of soil salinization is maintained by such rocks as *Salsola orientalis* S.G.Gmel., *Ceratoides latens* J.F. (Gmel), *Nitrarias choberi* L., *Salsola Richteri* Kar. *Salsola Paletziana* Litw., *Aelenia subaphylla* (C.A.Mey) Aellen, *Aristida Karelini* Trin. Et Rupr. *Roshev*, *Lycium*, *Kochia*, *Halostachys*, *Tamarix*, *Ephedra*, *Ammodendron conollyi* Bge, *Asrtagalus ammodendron* Bge, *Haloxylon aphyllum* (Minkw.), *Calligonum capu tmedusa* (Schrenk), *Calligonum aphyllum* (Pall.) Guerke. The above-mentioned rocks were planted on soils with a strong degree of salinization, however, as our studies have shown, such a strong salinization cannot withstand sandy acacia, candym, ephedra, seline, izen. The scope of application of the results resulting from this work are different types of bottom sediments of the drained bottom of the Aral Sea.

Keywords: gene pool, bottom sediments, drained bottom, plants, permanent forest seed plots, sowing, planting, biometric indicators, assortment

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