

COMPARATIVE ASSESSMENT OF THE SUITABILITY OF SOME SOILS IN THE REPUBLIC OF MOLDOVA REGARDING THE CULTIVATION OF SEA BUCKTHORN

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The soil as support for sea buckthorn is a main component of the plantation, interspersed with multiple human actions in correlation with other important subsystems for the plant. Therefore, the establishment of sea buckthorn plantations in the Republic of Moldova (RM) would be imperative for perspective. If the location of plantations with sea buckthorn in the northern part of the RM, made on lands with more homogeneous soil cover and higher fertility creates problems and impediments, sometimes even elements of Ecopedological risk, LLC „Preamble”, Singerei district, Dobrogea Veche, the foundation of sustainable plantations in the central part of cantry, requires a more detailed comparative research of the specific soil cover.

In the Center Agricultural Area, Orhei and Calarasi districts, in some peripheral regions of the Central Codru–Ungheni, Hancesti, including the 14th Ecopedological district (Pohrebea locality, Dubasari district) were located 6 research polygons on the suitability of soils for plantations with sea buckthorn: Leordoiaia, Calarasi district, 7th Ecopedological district; Puținței, Clișova, Orhei district and Hancesti locality, 8th Ecopedological district; Valea Mare, Ungheni district, 10th Ecopedological district; Pohrebea, Dubasari district, 14th Ecopedological district.

Based on the research of 5 soil profiles, it was established that the good development of the plantation (LLC „Big Cuker”, Clisova, Orhei district, 4th year of vegetation, May 2022) corresponds to typical clay-loamy chernozems and unclogged clay carbonate chernozem (0-70 cm), with humiferous layer of abt. 0-70 cm and average fertility capacities. The assessment of the influence of soil carbonate depth on varieties shows that „Clara” tolerates soil carbonates better than „Mara” variety.

Some areas of heavy clay and clay soils, highlighted on the polygon in Putintei, Orhei district, induce problems on aeration and water regime, create conditions of inhomogeneity for the development of the root system of plantations, even toxicosis and diseases. Therefore, creating a homogeneous and uncompacted edaphic layer are some aspects in creating sustainable plantations with sea buckthorn in the RM.

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