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Soil and Taxation Assessment of Modular Protective Forest Strips

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Abstract. *The article deals with the issues related to the characterization of the Kachalinskoye modular protective forest land-use zones in the Volgograd region. The research methodology is described, the spatial orientation of protective forest strips, breed composition, height, undergrowth, mixing scheme, number of rows, distance between rows and seats in a row, density and safety of plantings, width of forest strips, design, openwork of forest strips are considered. The characteristics of soils are considered in detail.In the course of the conducted research, the main characteristics of the protective forest strips were analyzed. Observations showed that in terms of the height of trees and the average diameter in the considered planting variants, in the first years of life in the modular forest strip, woody plants developed better than in the solid forest strip (control), then there was an alignment.*

Also, data on weed vegetation in modules, intermodule space and in a continuous protective forest strip are given. It was revealed that the number of weeds in the module is 2 times less than in a continuous forest belt, and in the intermodule space is 1.5 times more due to better illumination due to sparseness and low height of shrubs. The conditions for the growth and development of trees and shrubs in a modular forest belt are better than in a continuous one, due to the better soil moisture regime, which is due to the shallow-discontinuous profile of the planting (alternating along the length of the strip of sections of trees and shrubs and only shrubs).

Key words: *field-protective forest strip, module, solid forest belt, the openness of the forest belt, granulometric composition of soil*

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