

Original article

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Soil-Taxational Survey of Roadside Forest Strips of Squat Elm (*Ulmus Pumila*)

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Abstract. To conduct research on the Volgograd – Salsk – Tikhoretsk highway (R-219), test sites were laid within the Volgograd region. The condition of the stands of roadside forest stands was determined by the forest suitability of the soil cover in the right-of-way lanes of highways. The main forest-forming species in the composition of roadside forest strips on light chestnut saline soils in dry sub-grass conditions is squat elm. They have a dense structure, are represented by stands of pure composition, the age of which on average ranges from 25 years and older.

The studies were carried out on 5 test areas (VPP) laid in roadside forest strips of squat elm. The density of the remaining trees on the PP is from 80 to 630 pcs/ha with the same dense structure of the forest belts. They were created according to the planting scheme of 3 × 1.5 m. The initial density of seedlings in the forest belt was 2 200 pcs/ha. The preservation of stands in roadside forest strips varies from a maximum of 28,2% to 3,6%. According to their structure, the bands are represented by 5–8 rows. The width of which is mostly 15–30 m. In elm stands of the third age period, which have reached the age of ripeness (n 11 years), the relative completeness does not exceed 0,7.

On light-chestnut soils in the composition of roadside forest strips, farming should be focused more on elm trees. It should be taken into account that elm reaches ripeness in these forest-growing conditions already older than 11 years, in connection with which regular renewable logging in biologically stable stands is necessary for the formation of a growth generation. In decaying elm trees, continuous sanitary logging is necessary, followed by artificial restoration.

Key words: structure of the soil cover, light chestnut soils, roadside forest strips, logging, reconstruction.

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