

General Growth Patterns of Korean Pine Plantations

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Korean cedar pine in the Khabarovsk Territory occupies 1,3 million hectares, which is 2,2 % of the area covered by forest. To control age-related changes in cedar stands S.N. Moiseenko in 1966 developed 28 tables of growth progress. The disadvantage of these tables is that they characterize the growth of plantations in the range of 110–330 years. One of the reasons for this age-related “isolation” was the lack of experimental material in this time period. The search for a solution to this problem led to the development of a method for constructing growth progress tables based on taxation indices calculated from trunk analysis data taken during growth. Indexes convey the general patterns of growth of stands of this breed and the interval of their action is 10–290 years. The advantages of this method include a limited number of typical growth lines according to the main taxation indicators – height, diameter, species number, number of trunks. Only one line of indices was developed for them. Minimization of typical growth lines, on the one hand, indicates the uniformity of the conditions for the growth of cedar-deciduous forests, and, on the other hand, allows us to simulate the growth progress of any tree stand we are interested in, regardless of its age, growth conditions, type of forest without felling of model trees. For the cedar formation, the method turned out to be the most relevant and progressive. His test on a high-productive tree stand showed acceptable practical possibilities when constructing growth tables.