Original article

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Combined Restoration Method Oak in the Chuvash Republic

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> Abstract. The possibility of restoring oak in clearings with forest crops created by planting seedlings and sowing acorns of oak with different row spacing, taking into account the natural regeneration of valuable accompanying tree species, is shown. Regular agrotechnical and silvicultural maintenance, taking into account the safety of valuable accompanying tree species, especially small-leaved linden, makes it possible to form stands of mixed composition and high productivity of I and II quality classes (age of clearing). Oak and accompanying species are preserved enough for further formation by thinning of plantations of complex structure: in the first tier there are oak and linden, in the second – maple, elm and elm, in the undergrowth common hazel, warty euonymus and common honeysuckle. The combined method of reforestation of oak in felling areas affects the cost of crops. Depending on the presence of natural regeneration of linden, it is possible to adjust the row spacing of oak crops. Oak crops, created with row spacing of 10 m, are 2 times cheaper than oak crops created with row spacing of 6 m (0.75 m in a row). In addition, oak forest cultures, created taking into account the natural regeneration of linden, are prices from an environmental point of view, since in oak cultures with row spacing of 10 m, the forest environment is better preserved than in oak cultures with row spacing of 6 m or less.

> *Key words:* combined method of oak reforestation, formation of oak forests by thinning, cash costs, crop productivity, plantation composition.

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