

Formation of Undergrowth in the Beech Forests in the Mountainous Crimea

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The publication is devoted to study of condition, formation of natural regeneration in beech forests in the mountainous Crimea.

Beech fruiting fairly regularly in the prevailing forest types. Vintage of beech nuts range from 76.5 to 328.3 kg/ha. The average number of beech undergrowth under the canopy amounts to 1.01 ± 0.15 thousand pcs/ha. In conditions D_2 the number of beech undergrowth is 1.12 thousand pcs/ha, and in a C_2 – 0.91 thousand pcs/ha. On the northern slopes of the observed 2.7 times more of beech undergrowth, than in the south. On slopes up to 20° number of beech undergrowth is 1.22 thousand pcs/ha, on steeper slopes of the amount 1.5 times less.

Max beech undergrowth occurs with an average canopy cover $0,69 \pm 0,04$ in the «windows», the average size of which is equal to $163 \pm 28,1$ m².

In the stands, which growing to a height of 550 m above sea level and at an altitude of more than 1150 m above sea level, the number of beech undergrowth is smallest (0.25–0.4 thousand pcs/ha). The best conditions for natural regeneration of beech are at an altitude of 750–1150 m above sea level.

With increasing age of the stand occurs a definite increase in the number of beech undergrowth, and the closeness of the relationship is moderate ($r = 0,492$).

Completeness of the parent stand, in which the calculated amount of beech undergrowth more than 1.0 thousand pcs/ha of 0.40–0.73, and the highest number of young growth is observed in the stands completeness $0,54 \pm 0,05$.

Household activities aimed at the reproduction of beech forests, should be carried out as close to the natural processes taking into account silvicultural and ecological characteristics of the formation of undergrowth.