Mossy Spruce Wood Undergrowth Fruit Plant Resources in North Urals Mid-mountain Forest Growing Province

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The paper presents North Urals mossy wood undergrowth fruit plant biological resource study findings. This point is urgent since lack of forest food resource data is one of the reasons of low forest berry commercial harvest rates in Russia. The study was done in sample plots under the known procedures [1, 2]. Woods exposed to none man-made impacts as well as woods aged from 7 to 86 years shaped after clear cut were studied. It was found that key undergrowth fruit species are raspberry (Rubus idaeus L.) and mountain ash (Sorbus aucuparia L.). Dog rose varieties (Rosa acicularis Lindl) (Rosa majalis J. Hermm) are found in all sample plots but produce few fruits. Sub-Arctic honeysuckle (Lonicera subarctica Pojark) and red currant (Ribes rubrum L.) are rare. 1st age category forests were found the most promising for ashberry and raspberry harvests. Raspberry density was 8–10,8 thousand pcs/ha and fresh harvest produce was 19,1–26,6 kg/ha. Mountain ash density was 720–1156 pcs/ha and fresh harvest produce – 40,6–45,1 kg/ha. It should be noted that wild fruit stocks per 1 ha forest area in these woods are inferior to other Russian commercial undergrowths [3, 4]. With aging of forests there is an undergrowth fruit-berry species density drop. Its yield declines as well. Raspberry density drops to 320–2100 pcs/ha in undermature woods and to 120–440 in mature and over-mature ones. Fresh raspberry produce in under 2,4 kg/ha. Mountain ash occurrence under mature and over-mature forest canopy is 118–418 pcs\ha and produces under 3 kg/ha. Undergrowth in these forests is of no commercial value.

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