

Original article

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Functional Connections of Morphometric Characteristics of Spruce Trees of the Sub-Canopy Population in Birch Forests of the Southern Taiga

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Abstract. The article considers the possibility of establishing a static relationship between the morphometric characteristics and the age of trees of the spruce population under the canopy of birch forests of the southern taiga, which are at the stage of maturation and maturity. The relationship analysis was based on measurements on 581 spruce trees. The measurements were performed only on normal (healthy) trees with no visible damage. The established dependencies are subdivided into three groups: connections of the characteristics of the trunk; connection of morphometric characteristics with age; connection between the parameters of crowns and trunks. The article presents specific regression equations that can be used, when conducting research in populations under the canopy of spruce, while it is advisable to choose equations characterized by higher values of the determination coefficient and lower values of approximation errors.

Key words: spruce under the canopy of birch forests, morphometric characteristics, age, pair correlation, dependences, regression equations, southern taiga

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