

FORMATION OF HERBACEOUS CUSHION AND STRUCTURE OF COENOPOPULATION OF *NEPETA LIPSKYI* (LAMIACEAE) ON THE TURKESTAN RANGE

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The mechanism of the formation of an herbaceous cushion in the ontogeny of *Nepeta lipskyi* Kudrjasch. was studied and the state of its coenopopulation in the high-altitude conditions of the Turkestan Range (Tajikistan) was estimated. It is established that the ontogeny is complete and complex, and the individual development follows a sympodial upper-rosette pattern of shoot formation. A squat flat herbaceous cushion is formed due to the aligned length of the residues, an equal height of branching rosette shoots tightly pressed to the substrate, closely spaced axes with a minor annual increase. The cushion begins forming in a young generative state. Both regularly regenerating buds and dormant buds are involved in the shoot formation. Using architectural analysis, it was found that perennial axes (caudicules) are built as a result of a linear successive sympodial articulation of residues of vegetative modules. The first module of any axis is always formed from a dormant bud. Further, the axis is built through the development of modules from the buds of regular renewal. The last annual growth is always generative, after which the axis dies. The ontogenetic spectrum of the studied coenopopulation is centered, complete, and coincides with the characteristic spectrum. Age and efficiency indices ($\Delta = 0.47$; $\omega = 0.69$) characterize the coenopopulation as transitional to mature. The ontogenetic composition and demographic indicators reflect the stable normal state of the coenopopulation.

Keywords: herbaceous cushion, ontogenesis, *Nepeta lipskyi*, architectural analysis, ontogenetic structure, Turkestan Range, Tajikistan

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