

ONTOGENY AND COENOPOPULATION STRUCTURE OF *GAGEA PAUCIFLORA* (LILIACEAE) IN THE CENTRAL YAKUTIA

© 2021 O. A. Nikolaeva, V. V. Semenova[#], and N. S. Danilova

Institute for Biological Problems of Cryolithozone SB RAS

Lenin Ave., 41, Yakutsk, 677980, Russia

#e-mail: vysemenova-8@yandex.ru

The article presents the study of 4 natural coenopopulations of *Gagea pauciflora* growing in various environmental conditions and the introduced and reintroduced populations of the plant in the Central Yakutia. The studied coenopopulations belong to the young normal incomplete type, and have a left-sided type of the ontogenetic spectrum. The assessment of the state of the populations showed that the introduced population grows under favorable conditions. The remaining populations are in passable conditions for growth (13–15 points). It is under cultivation, with a regular care, watering, nutrition, removal of competitors, when the plants show their maximum capacities. One of the surest ways of the *Gagea pauciflora* conservation can be its cultivation. A comparative study of the state of the natural coenopopulations, introduced and reintroduced populations showed the advisability of restoration measures. In the reintroduced population, the flow of seed and vegetative offspring has been maintained at a sufficiently high level for 5 years, that has allowed to increase the density of the restored population 5 times.

Keywords: *Gagea pauciflora*, ontogeny, coenopopulations, ontogenetic spectrum, introduced population, reintroduced population, Central Yakutia

DOI: [10.31857/S0006813621010063](https://doi.org/10.31857/S0006813621010063)

ACKNOWLEDGEMENTS

The study was carried out within the framework of the state assignment of the Institute for Biological Problems of Cryolithozone SB RAS for 2017–2020: “Fundamental and applied aspects of the study of the vegetation world diversity of the Northern and Central Yakutia” (AAAA–A17–117020110056–0).