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VARIATION OF MORPHOMETRIC CHARACTERISTICS OF ANTHEMIS TROTZKIANA POPULATIONS
GROWING IN AKTOBE REGION, KAZAKHSTAN

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Abstract

Anthemis trotzkiana Claus (*Asteraceae*) is perennial 10-30 cm height subshrub, thick root rod-shaped, leaves bipinnatisected, capitula solitary. Corolla tubular, ligula-like, yellow. Flowering time June-August, followed by formation of yellowish-gray achenes in August-September. Obligate calciphyte, thrives in lime rich soil, chalk. Endangered due to grazing, chalk excavation. Populations small. Endemic of the middle Volga and North-Western Kazakhstan. Red book species of Kazakhstan and EU. The study is aimed at evaluation of morphometric parameters of three populations *Anthemis trotzkiana* in Aktobe region (Kazakhstan): Akshatau, Bestau and Ishkaragantau. Field assessment was done in summer 2017, by route-reconnaissance method. Morphometric parameters were recorded following VN Golubeva (1962), GF Lakin (1990), NL Udolskaya (1976) and descriptive statistics done by Microsoft Office Excel 2007. For the populations, Akshatau, Bestau and Ishkaragantau, respectively, mean (SD) was as follows: number of the leaves 27.3 (0.4), 53.3 (0.5) and 21.3 (0.1); length of the leaf 3.8 (0.1), 4.7 (0.2) and 3.4 (0.1) cm; width of the leaf 1.0 (0.8), 1.9 (0.1) and 1.0 (0.1) cm; diameter of the subshrubs 18.3 (0.9), 35.3 (0.9) and 29.3 (0.7) cm; height of the generative shoot 31.2 (0.3), 48.2 (0.9) and 26.2 (0.2) cm; number of generative shoots 3.4 (0.3), 6.1 (0.4) and 2.7 (0.3) cm; number of capitula per shoot 3.6 (0.2), 17.9 (0.3) and 3.1 (0.2); length of the capitulus 14.0 (0.3), 16.0 (0.3) and 12.0 (0.1) cm; diameter of the capitulus 1.9 (0.1), 2.3 (0.1) and 1.3 (0.1) cm. For the species conservation and natural dispersion Bestau population of *Anthemis trotzkiana* had the most favorable morphometric parameters evaluated according to the coefficient of variation.

Keywords: *Asteraceae*, rare species, Aktobe region, West Kazakhstan.