

**THE CRUCIALS SPECIES COMPOSITION IN COMMUNITIES
WITH THE DIFFERENT LEVEL OF DISTURBANCE
IN THE SYR-DARYA VALLEY**

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SUMMARY

The results of studying (2009 and 2013—2015) the composition and ecological and phytocoenotic relation of Brassicaceae Burnett species in the Syr-Darya valley flora within the Northern Turan (Kyzylorda area of Kazakhstan) were presented in this article. The representation of the Crucials in various habitats (depending on mechanical and chemical composition of soils, their humidity) taking into account the extent of violation of soil and vegetation cover (weak, average and strong) was considered. It was revealed that in the lands with almost undisturbed or feebly disturbed soil-plant cover the qualitative and quantitative composition of Brassicaceae species considerably differed from the territories having the average and strong destruction degree (pasture digression, thrown farmlands — rice checks, melon fields, uneven-aged fallow lands, etc.). With increase of the disturbance degree of vegetable communities the total amount of the Brassicaceae representatives in their structure gradually increases and then (when extent of violations reaches the average, high and very high levels) the number of the Crucials decreased rather quickly. It was shown that 67 species of this family were found in the studied area that forms 38.7 % from 173 species of Brassicaceae from the Northern Turan flora. The most multispecies genera were *Lepidium* L. with 11 species and *Strigosella* Botsch. with 6 species. The vast majority of the Brassicaceae representatives of the analyzed list turned out to be the annual forms (45 species), many of them (30 species) turned out to be the ephemeral plants. In relation to the substratum, the psammophile and hemipsammophile species (60—89.6 %) prevailed. A significant amount of species (20—29.4 %) can inhabit in saline soils. The data of species structure of the Brassicaceae in communities of different types of vegetation are the following: 21 species were found in the halophyte meadows, 20 species were found in tugai phytocenosis, etc. Their smallest number was characteristic for swamps (3 species).

Key words: Brassicaceae, the Syr-Darya valley, the Northern Turan, soil type, verdure type, degree of the destruction of the soil and plant cover.