INFLUENCE OF AN ALIEN ELEMENT ON CHOROLOGICAL COMPOSITION OF STEPPE AND FOREST-STEPPE FLORAE IN ALTAY KRAI (RUSSIA)

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In 1995-2009, the flora of higher vascular plants in the Barnaulka river basin (BB) situated on Priobskoye plateau in Altai Krai was studied. The basin (5720 km^2) crosses steppe and forest-steppe zones and integrates pine forests of the ancient flow gully bottom with steppe and forest-steppe landscapes of erosive terraces of the gully. The BB stretches from south-west to north-east and in extreme points latitude changes approximately on 1,5° and longitude - on 3,0°.

The BB native flora numbers 845 species, the alien element - 137, the anthropogenically influenced flora - 982. Within the basin specified are 5 elementary regional florae (F1→F5), in which the alien element share varies within the limits 4,9 -15,4 %.

In the BB native flora in series F1→F5 increases portion of Cosmopolitan (20,1→25,9 %), Eurasian (20,4→22,1 %), West-Eurasian (8,4→9,2 %), East-Eurasian (4,0→6,9 %), Euro-Siberian (5,1→6,9 %), South-Siberian-Mongolian (1,1→1,4 %), Siberian (0,5→1,0 %) and South-West-Siberian (0,9→1,3 %) species. The share of Central-Eurasian (15,9→8,5 %), Iranian-Turanian (0,9→0,3 %), trans-Volga-Kazakhstan-Mongolian (6,2→4,0 %), Pontian-Kazakhstan (5,7→3,1 %), Kazakhstan (2,0→1,1 %) and East-Kazakhstan (0,5→0,4 %) species decreases. The portion of Cosmopolitans in series F1→F4 (8,4→10,8 %) increases, but then falls down in F5 (7,9 %). Although number of native Cosmopolitan species in F4 and F5 is equal (56), but whole species abundance of this florae is differential: F4 (520) and F5 (707).

In contents of alien element dominate Holarctic (36,5 %), Cosmopolitan (24.8 %), Eurasian (13,9 %) and West-Eurasian (9,5 %) habitat types. Drastically less participation have East-Eurasian (2,2), Euro-Siberian (4,4 %), Central-Eurasian (4,4 %) and Pontian-Kazakhstan (2,2 %) species. South-Siberian-Mongolian (*Salix ledebouriana*) and South-West-Siberian (*Corydalis nobilis*) alien species in BB is pointed only in F5, while Siberian (*Setaria viridis* subsp. *glareosa*) - in F1 и F5. Last three habitat types make up 2,2 % of the alien element. Only for BB native flora Iranian-Turanian, trans-Volga-Kazakhstan-Mongolian, Kazakhstan, East-Kazakhstan habitat types is peculiar.

When compared to the BB native flora, the anthropogenically influenced flora shows the disturbance in basic relationships among the chorological groups. The share of Cosmopolitan (7,5→9,9 %), Holarctic (23,8→25,6 %) и West-Eurasian (8,6→8,8 %) species increases, but ehe rest habitat types reduce the participation.

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