

Genetic diversity of rare iris species in the Southern Urals

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Iris scariosa and *I. pumila* are two rare species of iris found in the steppes of the Southern Urals. Both of them are included in the Red Data Book of the Russian Federation. *I. pumila* is an ancestor of many modern cultivars, and *I. scariosa* is known for its drought and salt tolerance and can also be used in breeding. The Republic of Bashkortostan and Orenburg oblast are situated on the eastern border of *I. pumila* habitat and western border of *I. scariosa* habitat, so Southern Urals is the area where these two species coexist. Therefore, it is important to study these unique populations, their morphological and genetic diversity and possibilities of hybridization. We studied DNA samples from 29 populations of iris discovered in Southern Urals using different RAPD and ISSR primers. We observed not only phenotypical, but also genetic interspecific and interpopulation variability. Moreover, several samples distinguished as *I. scariosa* on the basis of external features, genetically showed higher similarity to *I. pumila* and might be hybrids.

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