

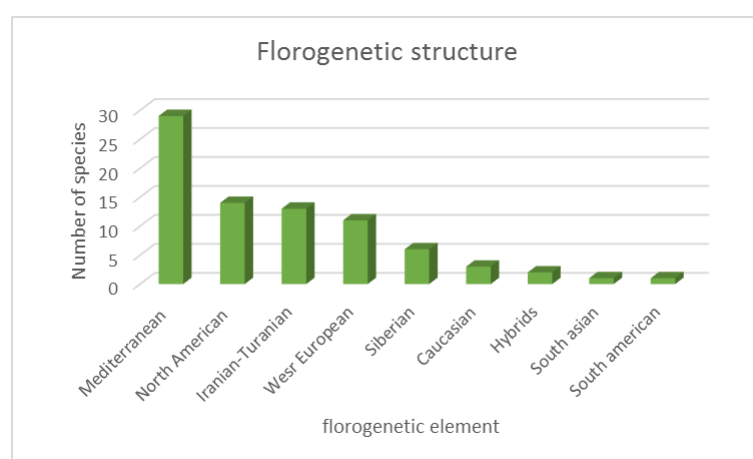
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ADVENTIVE FLORA SPECIES OF THE SOSNEVOMICRODISTRICT

Flora of cities is changing by human activities. One aspect of the transformation is the introduction of alien plant species that may be capable of intrusion and dissemination in both disordered and natural communities. Traditionally, cities are considered main distribution sources of adventive species.

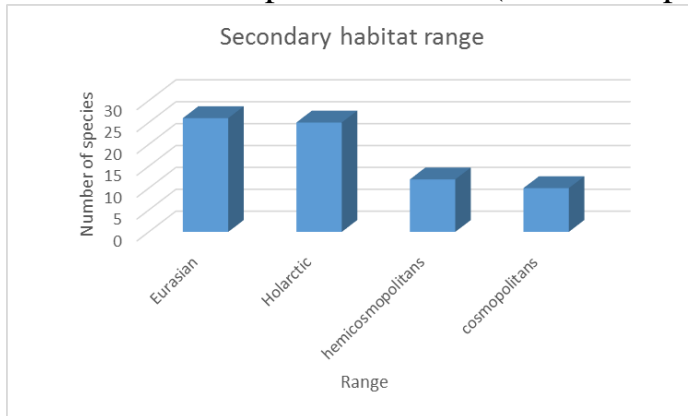
The flora of the Sosnevomicrodistrict (of Ivanovo city) was studied during two field seasons 2018-19. At that time, during the analysis of the species composition, an adventive component was identified and isolated. The determination of species belongs to the adventive component was based on published data (Borisova, 2007). By adventive plants we mean species of plants which presence in the area under review (Sosnevo) is not related to the process of natural florogenesis and the presence is a consequence of anthropogenic impact on the flora (Tuganaev, Puzyrev, 1988, and others).

There are 80 adventive species (39.4% of all) among the flora of the Sosnevomicrodistrict. As many as 11 florogenetic groups were identified being parts of the composition of the microdistrict's (Sosnevo) adventive flora. Mediterranean species dominate (29 species; 36% of the adventive species number) in that composition, for example, *Bunias orientalis*, *Lolium perenne*, *Syringa vulgaris* and others. There are numerous North American species (14 species; 18% of the adventive species number), many of which are listed in studied territory as cultural: *Amelanchier spicata*, *Fraxinus pennsylvanica*, *Physocarpus opulifolius* and others. Some 13 species (16%) have Iranian-Turanian origin, for example, *Puccinellia distans*, *Secale cereale*, *Rosa pimpinellifolia*, and others. Reflected in figure 1.



The analysis of the secondary habitat range of the flora helped identify 8 groups. The leading species present within a wide range of habitat: Eurasian (26 species; 32.5%), Holarctic (25 species; 12.3%), hemicosmopolitans (12 species; 5.9%),

and cosmopolitans (10 species; 4.9%). Reflected in figure 2.



The study found on the territory of the microdistrict Sosnevo the plant species recognized as invasive in the Upper Volga region (Borisova, 2011) and invasive or potentially invasive in Central Russia (Vinogradova et al., 2009).

It is determined necessary to continue monitoring their species composition and distribution due to the possibility of introducing new species, the disturbance of urban phytocenoses as naturalization centres, and the adaptive capabilities of adventive species.