

## ECOLOGICAL AND BIOLOGICAL CHARACTERISTICS OF SHRUBS IN THE URBAN ECOSYSTEMS OF KHERSON (UKRAINE)

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*Inventory of the shrubs species composition in the urban ecosystems in the city of Kherson revealed 129 species belonging to 65 genera, 26 families, 2 classes and 2 divisions. Major families of the studied shrub dendroflora are Rosaceae Juss. (36 species representing 27.9% of the total number of species), Caprifoliaceae Juss. (15 species, 11,6%), Oleaceae Lindl. (15 species, 11,6%), Fabaceae Lindl. (10 species, 7,8%), Berberidaceae Juss. (6 species, 4,7%), Hydrangeaceae Dumort. (4 species, 3,1%). Other families are represented by fewer species. The most represented here are genera Lonicera (10 species, 7,8%), Spiraea and Syringa (8 species both, 6,2%), Cotoneaster (6 species, 4,7%), Berberis (5 species, 3,9%), Viburnum (5 species, 3,9%). The analysis of growth patterns has established 7 types. The group of upright deciduous shrubs (98 species, 76,0%) and upright evergreen shrubs (17 species, 13,2%) are the largest ones. Amongst the life form groups, the woody plants sharply dominate with their share of 94,6%, while the semi-woody plants are represented by 7 species only (5,4%) in the plantation of Kherson. Most plants are upright. The predominant plants are deciduous ones (106 species), while the group of evergreen shrubs are represented by 23 species (17,8%). It is established that according to the geographical structure the species of the South Palaearctic (34 species, 26,4%), European-Mediterranean-Iranian-Turanian (19 species, 14,7%), European (12 species, 9,3%), European-North American (11 species, 8,5%) and Euro-Siberian (11 species, 8,5%) origin dominate. The assessment of winter-hardiness showed the predominance of species resistant to low temperatures (117 species, 90,6% of the total), which little or almost no damage survive the complex of adverse factors in winter. 6 species (4,7%) have been identified as winter-hardy and the same quantity (6 species) as low-winter-hardy plants. The assessment of drought tolerance showed that most shrub species are drought-resistant (105 species, 81,4% of the total species) in landscaping. The number of moderately drought-tolerant species that partially lose their ornamental features during dry periods as well as drought-susceptible species is negligible.*

Keywords: shrubs, undersized woody and semi-woody plants, winter hardiness, drought tolerance, city landscaping