

The dendroflora assortment of rare and endangered species recommended for cultivation in restricted use areas in the conditions of Left-bank Polissia

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According to its physical and geographical location (National Atlas of Ukraine, 2009) Chernihiv is located in the region of Left-bank Polissia. The study, analysis and assessment of the current state of Chernihiv vegetation plantations allowed us to pay attention to the need of developing and implementing measures on improvement the quality of various types of vegetation plantations, optimization and use of landscaping means to form a stable eco-surrounding of the city and its conservation. The cultivated dendroflora includes 265 species from 125 genera, grouped into 54 families and 37 orders, 7 subclasses, 4 classes, 2 divisions, 63 of them are native and 202 are introduced species, or 23.8% and 76.2% accordingly of the total number of species and Hybrids.

The recommended assortment of dendroflora for landscaping of Left-bank Polissia territories is compiled on the basis of original research works and materials of M.A. Kokhno, A.N. Kurdiuk (1994); S.I. Kuznetsov, V.V. Pushkar (1986); S.I. Kuznetsov, Y.A. Klimenko, A. Mironova (1994); L.I. Rubtsov (1965, 1977) and Directory "The assortment of trees and shrubs of Ukraine by regions" (1998). In general, the observation of the growth of woody plants' one-year shoots at the territory of arboretum of scientific and educational station of Chernihiv National Pedagogical University Named After T.G. Shevchenko, allowed to determine the adaptability of the studied plants to the conditions of the urban environment and to draw the corresponding conclusions: 1) the intensity of growth depends on the amount of precipitation and temperature during March – May period; 2) species with

early onset of vegetation have a rapid and dynamic growth of shoots; 3) species with the duration of shoot growth (115 days) proved to be winter hardy and promising for creation of landscape compositions in territories of limited use and in parks in the form of monogroups. To assess the success of introductions and the degree of acclimatization, we used the approaches of M.A. Kokhno. To calculate the acclimatization number M.A. Kokhno combined different evaluation criteria, which are the sum of growth indicators, generative development, winter hardiness, plants drought resistance.

Having studied the features of the morphological structure and reproduction we recommend to introduce 24 rare species of woody plants in the conditions of the Left-bank Polissia (3 species from the European Red List (*Crataegus ucrainica* Pojark., *Cotoneaster tauricus* Pojark., *Sorbus pseudolatifolia* K. Pop.), 16 species from the Red Book of Ukraine (*Pinus cembra* L., *Taxus baccata* L., *Juniperus exelsa* M. Bieb., *Caragana scythica* (Kom.)Pojark, *Fraxinus ornus* L., *Syringa josikaea* Jacq., *Sorbus torminalis* (L.) Crantz., *Crataegus pojarkovae* Kossyck., *Crataegus tournefortii* Griseb., *Cerasus klokovii* Sobko., *Salix lapponum* L., *Salix starkeana* Willd., *Staphylea pinnata* L., *Tilia dasystyla* Steven., *Betula humilis* Schrank., *Betula obscura* A. Kotula.) and 5 species of regional protection (*Salix lapponum*, *Salix myrsinifolia*, *Alnus incana* (L.) Moench., *Cerasus fruticosa* (Pall.) Woron., *Juniperus communis* L.), having decorative qualities, a certain scientific and practical interest and can be sustained in the conditions of the territories through the example of the city of Chernihiv.

In the collection at the territory of arboretum of Chernihiv National Pedagogical University Named After T.G. Shevchenko the species are cultivated, which are included into European Red List – *Crataegus ucrainica*, Red Book of Ukraine – *Staphylea pinnata*, *Syringa josikaea*, *Taxus baccata*, and regional level of protection – *Cerasus fruticosa* і *Juniperus communis*.

When selecting the range of woody plants for landscaping of various groups of restricted use territories, it is necessary to take into account the complexity of approaches, natural climatic and acclimatization characteristics and properties of dendroflora.