



### ODESSA CITY DENDROFLORA FORMING, DEVELOPMENT AND STRUCTURE OPTIMISATION

Nemertsalov V.V.

Mechnikov Odessa National University, Odessa, Ukraine

E-mail: wism@ukr.net

Odessa city is situated in the Northern-Western part of the Black Sea shore in the steppe zone of Ukraine. There are a few trees and shrubs species of aboriginal flora here. In the Gramineous steppe of Right Dnieper bank there are 6 species (Крицкая, 1985), in the steppe zone of Ukraine - 18 (Кохно, Курдюк, 1994) and in the Northern-Western part of the Black Sea shore (between Dnister and South Bug rivers) there are 56 (Дубровина, Жаренко, 1968).

Woody-plants introduction has taken place in the region where Odessa is situated now from the ancient times. Grape, plum and apricot plantation began here before or in the V century B.C. (Янушевич, 1976). Their fruit were the food allowance part of nomad and settled peoples in the region. From the XIII century on this place there was settlement named Ginesrtra by Genoas (from the name of aboriginal plants genus *Genista*), Kochibey by Lithuanians and Chadzhibey by Tatars and Turks. In the 1794 the settlement passed to Russian Empire and took name Odessa.

In the middle of the XIX century the city green plantation system started. The first trees on the Odessa streets were *Morus alba* L., *Ulmus minor* L., *Gleditsia triacanthos* L., fruits trees, etc. *Abies nordmanniana* Spach., *A. pinsapo* Boiss. *Paulownia tomentosa* Stend., *Platanus orientalis* L., *Robinia pseudoacacia* L., *Wisteria sinensis* Sweet. had come in Ukraine from Odessa plantations. The most active period of plant introduction was from 1820 to 1848 by the Imperial Odessa Botanical garden work. Directors of the garden Ch. Descemet and A. Nordman introduced about 600 species of trees and shrubs (Descemet, 1845, Нордман, 1848). But now, according to our investigation, only 1/3 of those species are in Odessa dendroflora. Other 2/3 of species were introduced by Botanical garden of the Odessa (Novorussian) University (founded 1867) and by amateurs and commercial structures. There are 725 species from 196 genera of 77 families of Pinophyta and Magnoliophyta in Odessa dendroflora now. Only 97 species are widely used in the city green plantation. Among them 75% are trees, 23% - shrubs and only 2% - lianas. Very often the green plantations are one-layer (only trees) in the city.

The base lines of the dendroflora structure optimisation are: making many-layer plantation, the extension of exotic plant form diversity, the rare species introduction into the green plantation, checking for redundancy of invasion-active species and creation of the general system of the city green plantations and their monitoring.

### ФОРМИРОВАНИЕ, РАЗВИТИЕ И СТРУКТУРНАЯ ОПТИМИЗАЦИЯ ДЕНДРОФЛОРЫ ОДЕССЫ

Немерсалов В.В.

Дендрофлора Одессы формировалась за счёт разных типов интродукции. Сейчас в ней 725 видов из 196 родов 77 семейств двух отделов. 97 видов массово используются в озеленении. Структурная оптимизация дендрофлоры связана с рациональным использованием площадей озеленения и расширением ассортимента зелёных насаждений, в том числе за счёт видов редких в природе.