

**CONIFER COLLECTION TAXONOMIC STRUCTURE DYNAMICS
AND PRESERVATION EXPERIENCE IN OPEN GROUND BOTANICAL
GARDEN OF NUBIP OF UKRAINE**

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Researches have been carried out during 1992-2001 years in the open soil plots of the collection of The Botanical garden NUBIP of Ukraine. The objects of research were plants of department of *Pinophyta*, belonging to the class of *Pinopsida*.

The latest inventory of conifers for open soil the Botanical Garden was carried out in 2006 by employees of the laboratory of introduction and selection of arboreal plants Botanical Garden NUBIP Ukraine.

Changes in the taxonomic structure of conifer collection of the Botanical Garden National University of Life and Environmental Sciences of Ukraine are presented. The comparative analysis of species and forms in structure of the latest inventory are submitted. The perspectives of further introduction conifers are determined.

Research executed by method of route inspection forest stands. Biometric measurement and evaluation of sanitary state are conducted by forest taxation methods (were identified parameters: age, height, trunk diameter at a height of 1.3 meters, number of individuals, and the class by sanitary condition).

Collection of conifers for open soil now has 59 species, 1 variety, 1 hybrid and 94 cultivars (all - 155 collectible units) belonging to 17 genera, 4 families, 3 orders, according to updated data latest inventory.

The number of collectible units is constantly changing by the results of the observation in different years.

The class represented by the families: *Cupressaceae* Bartl. – 15 species, 1 hybrid, 75 cultivars; *Pinaceae* Lindl. – 38 species, 1 variety, 17 cultivars; *Taxaceae* S.F.Gray – 2 species, 1 cultivar; *Taxodiaceae* F.W.Neger – 4 species, 1 cultivar.

The largest number of taxa in genres of plants: *Thuja* L. – 2 species, 33 cultivars; *Juniperus* L. – 7 species, 1 hybrid, 31 cultivars; *Pinus* L. – 13 species, 1 cultivar; *Picea* A.Dietr. – 10 species, 15 cultivars; *Abies* Mill. – 9 species.

In our opinion, in the future the collection of conifers should be formed for implementation the learning process and for scientific purpose, for which systematic principle should be more widely applied.

The vast majority of conifers in the Botanic Garden NUBiP Ukraine well adapted to the conditions of introduction, which allowed increasing collection of conifers at 57 taxonomic units (which is 1/3 of the total collection units' conifers) for the last 5 years.

Change the taxonomic composition of coniferous collection in open soil the Botanical Garden occurred mainly by increasing the number of tested subjects decorative cultivars of the genres of *Thuja*, *Juniperus* and *Picea*.