

**EAST ASIAN ARBOR CONIFERS WITH CONSERVATION STATUS  
INTRODUCTION TRIAL RESULTS IN THE BOTANICAL GARDEN OF  
THE NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL  
SCIENCES OF UKRAINE**

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Researches was carried out in 2000-2012 years at the plots of arboretumu`s collection the Botanical Garden NUBiP Ukraine. Species composition, conservation status, vitality, hardiness, and adaptation level of rare plants *Pinopsida* originated from East Asia which grows at the collection plots in open ground in the Botanical garden of the National University of Life and Environmental Sciences of Ukraine has been analyzed. To establish the conservation status of species used electronic database The IUCN Red List of Threatened Species version 2012. The level of acclimatization at the plots of collection was determined by the method of O. Kalinichenko (1978). To characterize the level of endemism has been used the information about the natural distributions of species by the method of A. Takhtadzhyan (1978).

Whereas the level of acclimatization introduced plants is largely determined by the level of their reproductive ability, plants from East Asian are less adapted as opposed to a rare conifers collection of that grow naturally in Ukraine (*Abies alba* Mill., *Picea abies* (L.) H. Karst., *Taxus baccata* L. et al.) and North American (*Abies fraseri* (Pursh) Poir., *A. nordmanniana* (Steven) Spach, *Thuja occidentalis* L., etc.). In contrast to protective conifers, introduced from different physiographic regions of Ukraine, which were naturalized and able create reliable stairs and undergrowth regularly, the exotic plants from East Asian, which were researched, features of naturalization has not been detected, but considerable reproductive ability has been observed only for two species (*Pinus koraiensis*, *Platycladus orientalis*).

As a result of investigations found that the most acclimatized in the conditions of arboretum the Botanical Garden are five East Asian species. The highest level of adaptation observed in *Pinus koraiensis*, slightly lower (good) – in *Juniperus squamata*, *Picea obovata*, *Platycladus orientalis*, *Metasequoia glyptostroboides*. The latter species in separate years creates a number of reliable seeds that is a sign of high-level of adaptation. The weak level of acclimatization was found in the 7 species that is more than 41% of all species by investigated group of collection (East Asian).

The initial trials group of East Asian zoological exotic species of dendroflora are the least successful as compared with protective coniferous plants from other large natural distribution centres, which are most represented in the dendrology collection.

Apparently, this is due to the fact that the East Asian region not was influenced of glaciers since ancient times in contrast to other floristic centres that traditionally are the source of introduction of coniferous in forest-steppe of Ukraine.