

Original article

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Results of Introduction of Species of the Genus *Abies* in Main Botanical Garden Russian Academy of Sciences

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Abstract. The aim of the study was to assess the interspecific and intraspecific variability of species of the genus *Abies* Mill. as an introduction and breeding potential for breeding in the European part of Russia. The objects for the study were collections of 14 species of fir on the territory of Main Botanical Garden Russian Academy of Sciences. The preservation of the collections, the category of condition, the height of the tree and the diameter of the trunk were assessed.

Studies have shown that the species of the section *Abies* (*A. alba*, *A. nordmanniana*) are difficult to adapt to the conditions of introduction, and their widespread use can be considered not promising. Among the species of the section *Balsamea*, the best acclimatization was observed in the Asian fir *A. sachalinensis* and the American fir *A. fraseri*. Their growth rates are average. Fir *A. balsamea*, *A. nephrolepis*, *A. veitchii* have good prospects, taking into account selection. *A. concolor*, belonging to the section *Grandis*, is decorative and promising for landscaping, it has a fairly high breeding potential. The species of the section *Pseudopicea* *A. homolepis* and *A. holophylla* have acclimatized well enough and are promising for introduction when appropriate selection is carried out. Many fir species from rather warm regions (Japan, Korea, east and west of the USA) are acclimatized and grow in Main Botanical Garden Russian Academy of Sciences, which indicates a high introduction plasticity of the genus *Abies* Mill.

Key words: introduction, variability, selection, fir.

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