

Larix olgensis Henry of 6 provenances, *larix sibirica* Led. of 2 provenances, *larix principis-rupprechtii* Mayr of 9 provenances, and *larix leptolepis* (Sieb. et Zuce.) Gord. of 7 secondary provenances were involved. The analysis of variance suggested that the difference among and within species are high for many characters studied, i. e. height at age 2, 8, survival at age 3 and 8, and phenological phases. Geographic variables of the seed sources, e. g. latitude and longitude were not related to those characters mentioned above, i. e. the genetic variation pattern of larch appeared to be random. Japanese larch had a height advantage over the other four species up to age 8. Auto-correlations of height growth among species and among provenances of each species at different ages are large enough to encourage the use of early results to predict future performances. The high correlation coefficient ($r = 0.9985^{**}$) of tree height between two planting sites established with same seedlots in this provenance test showed that the experimental results were reliable.

Key words: Larch; species; seed source; provenance test; random variation

苗圃毛白杨锈病的防治技术、生长量损失 测定及预测预报研究项目通过鉴定

毛白杨锈病是苗圃毛白杨的重要叶部病害之一。为探讨病害的生长量损失，研究不同病情与生长量的关系，进而寻找一种有效的防治措施，由中国林科院林研所曾大鹏和北京市园林科研所、北京市园林局绿化处、北京市东北旺苗圃有关同志组成的课题组，在掌握毛白杨锈病发生规律的基础上，采用春季展叶初期喷洒800—1000倍粉锈宁内吸杀菌剂铲除病芽的方法，有效地控制了病害的发生。并通过三年定株系统观察，对毛白杨苗木由锈病造成的生长量损失进行了数理分析，提出了一、二、三年生苗的三个数学模型，为研究防治苗圃毛白杨锈病的经济效益和防治指标提供了数据。

最近，该项成果由中国林科院和北京市园林局主持通过了鉴定。专家们认为：该项成果有以下突出特点：①选题从生产需要出发，把科研的长期目标和短期任务有机地结合起来。②以生产防治技术为中心，调动各级科研和生产单位的积极性，共同完成科研任务。③科研单位和生产部门相结合，有利于科研成果的迅速推广。④解决问题快，经济效益高，防治效果好。成果处于国内领先、接近国际同类研究的先进水平。

(郭 苏)