

## THE RESEARCH OF EFFECT OF ELEVATION ON THE GROWTH AND BEARING OF TUNGOIL TREE

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**Abstract** At present, the cultivation of tungoil tree (*Aleurites fordii* Hemsl) in hills is a main tendency of development of its production. The effects of different elevation on the growth and bearing of tungoil trees have been determined for five years from 1982 to 1986 in Longju township, Wanxian county, Sichuan Province. The research on variability of sprouting stage, bud appearing stage and flowering stage has been done at different elevations. The relationship between the conditions of soil fertility, different elevation, and yield of tungoil tree, component factors of the yield and tungoil quality has been analysed. The results show that the elevation is negatively related to seed percentage, oil content and the content of tunic acid obviously. It posed that 700 m is the suitable limit and cultivation may be up to 800 m at most in the Sichuan Province.

**Key words** tungoil tree; elevation; growth and fruiting; yield

### “湿地松、火炬松种源试验”成果

#### 接近国际同类研究先进水平

“湿地松、火炬松种源试验”是中国林科院林研所等单位承担的国家“六五”、“七五”科技攻关专题。经过 8 年的系统研究，共营造种源试验林 2 300 亩，建立基因库 4 处，取得了显著成绩：(1)初步摸清了湿地松、火炬松种源遗传变异规律；(2)针对我国南、中、北亚热带不同气候区，分别选出一批湿地松、火炬松优良种源，并提出了适生栽培区。其材积增益较高；(3)营造了 2 300 亩试验林和基因库。该项成果已在 13 个省(区)推广优良种源造林 60 万公顷，也为林业部林木种子进口国外松种子提供了选择优良种源与适宜产地的科学依据。最近该研究在浙江富阳通过了林业部科技司主持的成果鉴定。专家们认为：该研究选题正确，技术路线合理，研究成果接近国际同类研究的先进水平。

(郭 苏)