

## THE STUDY OF THE GEOGRAPHICAL DISTRIBUTION OF THE *BETULA* IN CHINA

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**Abstract** Based on the study of the evolutionary tendency and the geographical distribution of Chinese birch, we obtained some results as follows:

1. The *Betula* is a north temperate genus in distribution, there are 31 native species in China. Among them, 2 species belong to Tropical Asian distribution pattern, 2 Old World Temperate, 7 Temperate Asian, 5 East Asian (1 Sino-Himalayan, 4 Sino-Japanese), and 13 endemic to China. It is obvious that the endemic component is dominant in Chinese birch flora.

2. There are 15 species in the adjacent area of the Qinghai-Xizang plateau and the subtropical evergreen broad-leaves forest zone, 10 endemic to this area; 10 in northeast China, the cool-temperate needle-leaves forest zone, the temperate mixed needle-and deciduous broad-leaves forest zone, and the east area of the temperate grassland zone, 5 endemic species; 6 in the Aitai Mountain and the Tianshan Mountain in Xinjiang, all endemic to the area. Therefore, the 3 areas are the 3 centres of the differentiation of the *Betula* in China.

3. There are the most primitive Sect. *Betulaster* (Spach) Regel and 3 subsections of Sect. *Betula* in Southwest China. They reflected the main stages of the systematic evolution of the *Betula*. We consider that the *Betula* originated in the mountain area of Southwest China, and then dispersed along mountain ranges and rivers.

**Key words** *Betula* L.; distribution; origin

### “竹卵圆蟥研究”达到国内领先水平

竹卵圆蟥是我国竹子上新发现的一种突发性害虫，蔓延快、危害严重。1977年在浙江省初次采得标本。1987年，全省受害面积达22万亩，毛竹枯死率高达76%，新竹眉围下降13.18%~54.78%，造成严重经济损失。中国林业科学研究院亚热带林业研究所积极承担了林业部“竹卵圆蟥研究”重点课题，经四年研究，在观察竹卵圆蟥生物学特性、生活史、天敌、竹子受害机理的基础上，筛选出竹杆药物注射法等有效防治措施，经在10万多亩竹林应用，已取得明显的防治效果。虫株减退率95.2%~97.9%，相对效果99.5%，控制了毛竹的死亡，直接挽回和增加经济收入1423.87万元。并保护了浙江省莫干山旅游区的生态环境。

该项成果通过现场测定和书面评审认为达到国内同类研究领先水平。

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