



## 天目山第三纪孑遗植物缺萼枫香的群落特征及其生态学意义

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Tertiary relict plant *Liquidambar acalycina* Chang on Mt. Tianmu in Eastern China: Characteristics of the community and the ecological significance

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- 摘要
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**摘要** 通过选择代表性地段, 设置第三纪孑遗植物缺萼枫香群落样方, 开展群落学调查, 分析群落的物种组成、外貌及结构特征等。研究结果表明, 群落中生长维管束植物177种, 分属65科128属, 科属组成较为复杂。在该地区, 物种的区系地理成分丰富多样, 以温带成分占优势, 并含有较多古老属种。群落外貌由中、小型草质单叶的高位芽植物占优势, 其中落叶成分所占比例相对较高。群落垂直结构分化明显, 可以分为乔木层、亚乔木层、灌木层和草本层, 树冠分布较为连续。天目山缺萼枫香群落是以落叶成分为主的、由中小型草质单叶的高位芽植物决定的常绿落叶阔叶混交林, 具有古老性和残遗性。缺萼枫香林集中分布在中亚热带南部和中亚热带北部, 种类组成表现较强的替代规律, 随纬度升高落叶成分比例增加, 常绿树种由适生冷凉气候的种类替代, 常伴生有丰富的第三纪孑遗植物。应进一步研究缺萼枫香林群落的演替规律和演变历史, 探讨枫香属植物的起源和进化以及冰期对第三纪森林的影响。

**关键词:** 枫香属 种类组成 区系特征 外貌 群落结构 枫香属 种类组成 区系特征 外貌 群落结构

### Abstract:

The floristic composition, physiognomy and community structure of *Liquidambar acalycina* forests at the typical sites have been studied in this paper. The results showed that a total of 177 species of vascular plants were recorded, belonging to 128 genera and 65 families. The analysis of floristic geographical elements indicated that the areal-types are complicated and the dominant elements are of the temperate type. An analysis of life form spectrum and leaf characters showed that the physiognomy of these communities was characterized by phanerophytes with meso- and microphyllic-herbaceous simple leaves. In these forests, four distinct layers were distinguished from the forest floor to the canopy, namely the herb layer, the shrub layer, the subtree layer and the tree layer, respectively. In conclusion, the *L. acalycina* communities were remnant forests that characterized by deciduous phanerophytes with meso- and microphyllic-herbaceous simple leaves. The biogeography of *L. acalycina* forests were divided into the southern and northern part of mid-subtropical zone. The ratio of deciduous elements and cool-tolerated evergreen elements were increased while the latitude was raised. There were more Tertiary relict tree coexisted in the *L. acalycina* forests at higher latitude. Hence, more studies on evolution history and community dynamics of *L. acalycina* forests should be developed for explaining the origin and evolution of *Liquidambar* genus and the effects of ice age on Tertiary forests.

**Key words:** FONT-SIZE: 10pt mso-hansi-font-family: 'Times New Roman' mso-font-kerning: 0pt

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