



厚皮香小孢子与花药的发育及其比较胚胎学特征

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Microsporogenesis and anther's development in *Ternstroemia gymnanthera*

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- 摘要
- 参考文献
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摘要 园艺经济植物厚皮香具有较为特殊的雄花两性花异株现象,对其小孢子与花药的发育情况进行了研究,厚皮香植物花药为四小孢子囊,花药壁发育为双子叶型;花药表皮宿存,次生加厚,并单宁化;药室内壁细胞在散粉时没有次生加厚,但一直宿存到散粉时,绒毡层为分泌型,双核至三核;小孢子孢原细胞2~3列,形成次生造孢细胞后发育为小孢子母细胞;小孢子母细胞减数分裂正常,同时型,形成四分体主要为四面体型,也有交叉十字型等;成熟花粉为三细胞型.同时与已发表的厚皮香亚科其他4个属的胚胎学特征进行了比较,初步探讨了该亚科内各属间差异在系统演化上的意义.

关键词: 厚皮香 厚皮香亚科 小孢子发育 花药 比较胚胎学

Abstract: The development of microspores and anthers in *Ternstroemia gymnanthera*, a special plant in Yunnan with androdioecy was studied. The anther was tetrasporangiate, the wall formation was Dicot type. The epidermis was secondarily thickened and became tanniniferous. The endothecium was not secondarily thickened, but persistent until pollens were mature. The tapetum was glandular type, tapetal cells had 2 or 3 nuclei; the archesporial cells lined up in 2 or 3, the secondary sporogenous cells developed into microspore mother cells; and microsporocyte was simultaneous type, the meiosis was normal, most of microspore tetrads were tetrahedral and had a few other types, such as dilateral and "T" type. Mature pollens were 3-cell. The comparative embryological features were studied after comparing 13 embryological features within four genera of Ternstroemiodeae, and the systematic significance in Ternstroemiodeae was discussed. It is indicated that the sexual reproductive significance of the *Ternstroemia gymnanthera* might be noticed and need a more intensive study.

Key words:

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