

RESEARCH NOTES

有机溶剂原位萃取法提高悬浮培养中国红豆杉细胞紫杉醇产量

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摘要 The production of paclitaxel from suspension culture of *Taxus chinensis* var. *mairei* was improved by in situ extraction with organic solvents to avoid feedback repression and product degradation. Oleic acid and dibutyl phthalate were proved to be suitable solvents. The optimal volumetric percentage of organic solvents in the culture medium was found to be around 8%, and the favorable time for their introduction was at the exponential phase of cell growth. Paclitaxel production with the in situ extraction was ca 3-fold of that without extraction.

关键词 [extraction](#) [organic solvent](#) [paclitaxel](#) [Taxus chinensis var. mairei](#) [two-liquid-phase culture](#)

分类号

Improved Production of Paclitaxel from Suspension Culture of *Taxus chinensis* var. *mairei* by in situ Extraction with Organic Solvents

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Abstract

The production of paclitaxel from suspension culture of *Taxus chinensis* var. *mairei* was improved by in situ extraction with organic solvents to avoid feedback repression and product degradation. Oleic acid and dibutyl phthalate were proved to be suitable solvents. The optimal volumetric percentage of organic solvents in the culture medium was found to be around 8%, and the favorable time for their introduction was at the exponential phase of cell growth. Paclitaxel production with the in situ extraction was ca 3-fold of that without extraction.

Key words [extraction](#) [organic solvent](#) [paclitaxel](#) [Taxus chinensis var. mairei](#) [two-liquid-phase culture](#)

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