

星点设计-响应面法优选身痛逐瘀汤中挥发油的提取工艺

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**中文摘要:**目的: 优选身痛逐瘀汤中挥发油的提取工艺。 方法: 以微波功率、料液比、提取时间为自变量,挥发油得率为因变量,通过对自变量各水平的多元线性回归及二项式拟合,采用星点设计-响应面法选取最佳工艺,并进行预测分析。 结果: 最佳提取工艺条件为微波功率266.77 W,料液比1 : 7.29,提取时间4.215 h,在此条件下,身痛逐瘀汤中挥发油提取得率的最大估计值为1.06%,试验结果与模型预测值相符。 结论: 该方法简便合理,稳定,可预测性较好。

中文关键词:[身痛逐瘀汤](#) [挥发油](#) [星点设计](#) [响应面法](#)

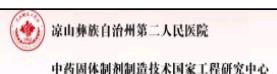
## Optimization of Extraction Technology for Volatile Oil from Shentong Zhuyu Decoction by Central Composite Design and Response Surface Methodology

**Abstract:**Objective: To optimize extraction technology of volatile oil from Shentong Zhuyu decoction. Method: With microwave power, liquid-material ratio and extraction time as independent variables,yield of volatile oil as dependent variable,multiple linear regression and binomial of each level of independent variables were fitted. Optimum technology was selected by central composite design and response surface methodology, and prediction was carried out through comparing the observed and predicted values. Result: Optimum extraction technology parameters were as follows: microwave power 266.77 W, liquid-material ratio of 7.29 : 1,extraction time 4.215 h. Under this conditions,maximum estimated value of volatile yield was 1.06% which was agreed with model predicted value. Conclusion: Optimized extraction technology was simple,reliable and high predictive.

**keywords:**[Shentong Zhuyu decoction](#) [volatile oil](#) [central composite design](#) [response surface methodology](#)

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