

响应面法优化药王茶总黄酮提取工艺^{*}

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摘要: 目的 利用响应面法优化药王茶总黄酮的提取工艺条件。方法 在单因素试验的基础上,选取提取浓度、液料比、提取时间为自变量,以总黄酮提取率为响应值,进行三因素三水平的响应面分析法,优化药王茶中总黄酮的提取条件。结果 最佳提取工艺条件如下:65%乙醇、液料比16:1、提取60min,药王茶总黄酮的最佳提取率24%。结论 响应面法可以有效优化药王茶总黄酮的提取工艺。

关键词: 药王茶;总黄酮;响应面法

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Optimization of Extraction Process of Total Flavonoids from Yaowang Tea by Response Surface Analysis

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Abstract: **Objective** To optimize the extraction conditions of total flavonoids from Yaowang tea by Response Surface Analysis(RSA). **Methods** On the basis of single factor experiment, the extraction concentration, liquid – to – material ratio and extraction time were selected as independent variables, and the extraction rate of total flavonoids was the response value. Response Surface Analysis (RSA) with three factors and three levels was carried out to optimize the extraction conditions of total flavonoids in Yaowang Tea. **Results** The optimum extraction conditions were as follows: 65% ethanol, 16:1 ratio of liquid to material, 60 min extraction, and 24% extraction rate of total flavonoids from Yaowang tea. **Conclusion** RSA can effectively optimize the extraction conditions of total flavonoids from Yaowang tea.

Keywords Yaowang tea; total flavonoids; RSA

药王茶,又名观音茶,为薔薇科委陵菜属落叶灌木白毛银露梅(华西银腊梅、华西银露梅)Potentilla glabra Lodd. var. mandshurica (Maxim.) Hand. - Mazz 的叶和花,为秦岭特色药材^[1-2]。药王茶

生于海拔2300~3000米山谷、岩石坡灌丛中,主产于秦岭南北坡^[3]。其味微甘,性平,具有清暑热、健胃、调经的功效,用于治疗暑热眩晕、两目不清、胃气不和、滞食及妇女月经不调等症,长期代

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