

传递现象

超声场强化中药有效成分提取动力学模型

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摘要

关键词 [超声辅助提取](#) [动力学方程](#) [Fick第一定律](#) [中草药](#) [绿原酸](#)

分类号

KINETIC MODEL FOR ULTRASONIC ENHANCEMENT OF EXTRACTION PROCESS OF CHINESE TRADITIONAL MEDICINE

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Abstract

A kinetic equation for ultrasonic-assisted extraction process was presented based on Fick's first law of diffusion. The kinetics of ultrasonic-assisted extraction process agreed with the first-order rate equation. Experiments for extracting chlorogenic acid from the leaves of *Eucommia ulmoides* were studied under different conditions to evaluate the kinetic equation. Experiment data could partly match the kinetic equation. It provided a theoretical reference for the ultrasonic-assisted extraction of Chinese traditional medicine.

Key words [ultrasonic-assisted extraction](#) [kinetic equation](#) [Fick's first law of diffusion](#) [Chinese traditional medicine](#) [chlorogenic acid](#)

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