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Optimization of supercritical fluid extraction of asiaticoside from *Centella asiatica* using Central Composite Design (CCD)
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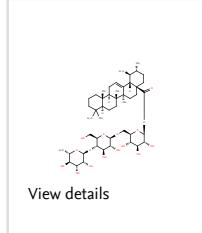
Indexed keywords**SciVal Topics****Metrics****Funding details****Abstract**

The extraction of asiaticoside was performed using supercritical fluid extraction to produce highly concentrated extracts. The effects of three factors (co-solvent percentage, pressure, and temperature) on the asiaticoside content were screened using the Two-Level Factorial design and optimized using the Central Composite Design. Asiaticoside was extracted following the treatment combinations of three parameters, namely co-solvent (5–15%), temperature (70–90°C), and pressure (1–20 MPa). The optimized extraction parameters were identified at 10%, 10.5 MPa, and 80°C for co-solvent percentage, pressure, and temperature, respectively. © 2020 Taylor & Francis Group, LLC.

Author keywordsasiaticoside ; *Centella asiatica* ; extraction ; optimization ; supercritical fluid extraction

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Effluent treatment; Solvents; Supercritical fluid extraction

Engineering uncontrolled terms

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Treatment combinations; Two level factorial designs

Engineering main heading

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Topic name

Centella; Asiatic Acid; Madecassoside

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