

عنوان مقاله:

Extraction of Flavonoid from Achillea wilhelmsii by Supercritical carbon dioxide

محل انتشار:

اولین همایش ملی گیاهان دارویی و کشاورزی پایدار (سال: 1392)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

The flavonoid compounds of Achillea wilhelmsii obtained by using supercritical carbon dioxide (sc-co₂) extraction were investigated and the obtained crude extract yields were compared in order to select the best operation parameters. It must be noted that CO₂ was used as the supercritical fluid because it has a moderate critical temperature and pressure. The studied parameters were pressure (150, 170 and 190 bar), temperature (35, 40 and 45°C) and dynamic extraction time (10, 30 and 40 min). The optimum extraction condition occurred at 190 bar, 45°C and 30 min. Based on the mean value, pressure had a dominant effect on the extraction yield. In addition, the components of the flavonoid from Achillea wilhelmsii were identified by chromatography analysis. The main components were 43.10% of comphore and 10.01% of carvacrol.

کلمات کلیدی:

Achillea wilhelmsii, Flavonoid, Supercritical carbon dioxide extraction, Chromatography analysis

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