

Extraction of Acanthoside-D from Acanthopanax Senticosus Using Supercritical Fluid

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Supercritical fluid extraction with co-solvent scheme for the extraction of acanthoside-D from Acanthopanax senticosus was developed in this work. Supercritical carbon dioxide was used as the extraction solvent at the flow rate of 20 L/min and water was chosen as the co-solvent in a range from 0.5 to 3.0 mL/mg. Different pressure from 20 to 30 MPa under the extraction temperature 333.15 K were investigated to see their effects on extraction results. The results showed that the yield of acanthoside-D was a little larger under higher pressure. Water additives could improve the yield of acanthoside-D and the best yield was obtained when the water content was 1.0 mL/mg. Moreover, with the pressure of supercritical carbon dioxide increasing, the purity of concentrated components increased.