

# **Sub-critical EtOH extraction of Rose Hip Seeds: Chemical composition and process optimization**

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Using supercritical fluids in plant extraction is very powerful and green approach and widely used over decades. In this study, Rosehip seed oil has been extracted by subcritical ethanol. Extraction conditions were decided as temperature of 125° C, pressure of 80 atm and 60 min static 30 min dynamic extraction time and 1 mL/min. Chemical composition of seed oil of sub-critical ethanol extraction (SbCEtOHE) was identified by GC-MS analysis. Oil of SbCEtOHE mainly contained oleic acid (56.0%) as the most abundant followed by linoleic acid (36,4%), palmitic acid and isostearic acid (2,5%). The authors are continue the optimization study of SbCEtOHE conditions. It's also expected that the extraction conditions can influence the fatty acids composition. Hence, selective extraction of most wanted any component of the fatty acids will be succeed.