

Fatty Acid Composition of Raspberry(*Rubus coreanus*) Seed Oil

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Studies were conducted on fatty acid composition of raspberry seed oil extracted by hexane and supercritical carbon dioxide. Raspberry seeds are one of the major byproducts from the manufacture of raspberry wine. Some unsaturated fatty acids that cannot be synthesized in the human body must be obtained through the diet. Seed oil was extracted from dried byproduct using Soxhlet apparatus with hexane for 8 h at 60°C and supercritical carbon dioxide for 1 h at 55°C, 160 bar. Yields of oil extraction by hexane and supercritical carbon dioxide were 15.07 and 10.8%, respectively. The main fatty acids by hexane extraction were linoleic acid(47.36%), arachidic acid(18.66%), heneicosanoic acid(12.47%), and behenic acid (3.90%). And fatty acid composition with supercritical fluid were linoleic acid(59.02%), heneicosanoic acid(8.86%), arachidic acid(7.49%) and eicosenoic acid(4.79%). These data suggest that raspberry seed oil might serve as potential functional food applications.