

AVOCADO OIL EXTRACTION (*Persea americana* Mill) GROWN IN COLOMBIA, BY SUPERCRITICAL FLUID TECHNOLOGY: AN ALTERNATIVE TO RECOVERY OVERPRODUCTION

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The importance of avocado has grown in national and international market steadily, ceasing to be an exotic fruit to be incorporated in the diet of many countries. This is mainly due to new properties found in avocado oil, and more especially the Hass variety. The objective of this research was to obtain a avocado oil fraction rich in tocopherol semindustrial scale through supercritical fluid technology. To do this, Hass avocado pulp production surpluses was lyophilized and treated with supercritical carbon dioxide to analyze the possibility of obtaining tocopherol concentrates. Oil quality and tocopherol concentrates were determined as a function of pressure (30–40 MPa) and temperature (313–323 K). The optimal extraction conditions were determined, considering the maximum recovery or concentration criterion. Those conditions led to a 90.5% (w/w) tocopherol concentration. Results obtained were compared to hexane soxhlet extraction and cold-pressed.

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