SUPERCRITICAL CO2 EXTRACTION 29-Jan-2013

Supercritical CO2 extraction is an environmentally 'green' method of extracting oils from plants. It is usually reserved for herbs that contain higher amounts of oils, such as Oregano leaf, Ginger root, Holy Basil leaf, Saw Palmetto berry and Turmeric root (and others). This extraction method involves putting the dried herb in a vessel (a bit like a pressure cooker) with CO2 (carbon dioxide). Then a supercritical temperature of 31 degrees centigrade (or above) is applied, as well as a vacuum....under these conditions the CO2 turns into a solvent and extracts the naturally occurring oils, from the plant material. After the extraction process is complete, the pressure and vacuum are brought back to normal, and the carbon dioxide evaporates back into the atmosphere. Supercritical extraction avoids the use of chemical solvents such as acetone or hexane. Supercritical extracts are broad spectrum oil extracts, in other words, they contain all the compounds in the herb that are **oil** based, including, (but not limited to) volatile oils... for example, carvacrol, found in Oregano leaf. Of course there are no water based compounds found in supercritical extractssupercritical CO2 extracts are concentrated oil based extracts.

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