

# Changes in *Citrus hystrix* oil during autooxidation

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## Abstract

The essential oil from *Citrus hystrix* is an interesting new raw material for the food and cosmetic industry. The composition of oil was analyzed by capillary gas chromatography. Changes due to autooxidation were studied at 40°C and 60°C using a headspace autosampler. Volatiles were identified by GC-MS after solid-phase microextraction (SPME) sampling using a Carbowax coated fiber. Changes in the sensory profile of autooxidized oil were determined under conditions specified by ISO standards, using unstructured graphical scales. Influences of a dihydropyridine antioxidant, Diludine, and of rosemary extracts on the course of oxidation of *Citrus hystrix* essential oil were determined; correlations between sensory and chromatographic data were calculated.