In order to make clear the natural volatile composition of frankincense and the differences between fresh frankincense and cooked frankincense, to provide a scientific basis on improving techniques and evaluating qualities of frankincense volatile oil, and to offer a new method to analyse volatile composition from solid for reference, the volatile components of natural fresh and cooked frankincense were extracted and determined directly by thermal desorption and gas chromatography-mass spectrometry(GC/MS). More than 40 components are separated and 20 components are identified by comparing their mass spectra with those contained in the NIST mass spectral database and Mass Works^{TM} software.The results show that the main components includ terpenes, alcohol and esters et al, *n*-octyl acetate is the most important volatile components to frankincense. The normalized peak areas exceed 50% both in fresh frankincense and cooked frankincense,followed by 1-octanol, linalool and bornyl acetate, the normalized peak areas in fresh frankincense are 19.44%,2.27% and 2.64%, in cooked frankincense are 9.12%, 2.61% and 1.33%, respectively.

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热脱附-气相色谱/质谱联用法分析生、炙乳香挥发性成分

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Analysis of Volatile Components of Fresh and Cooked Frankincense by Thermal Desorption and GC/MS

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摘要 图/表 参考文献() 相关文章 (15)