

用GC/MS测定大葱挥发油中的化学成分

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收稿日期 修回日期 网络版发布日期:

摘要 本工作采用水蒸汽蒸馏法, 分别从大葱的葱白、葱叶、葱花中提取挥发油, 用毛细管气相色谱-质谱法定性鉴别了挥发油中的 18 种化学成分。主要成分有: 二甲基二硫醚、二甲基三硫醚、甲基丙基二硫醚、甲基丙基三硫醚、甲基丙基二硫醚、甲基丙基三硫醚、丙基丙基二硫醚、丙基丙基三硫醚、二丙基三硫醚等含硫化合物, 以及 2-甲基-2-戊烯醛、2-十三酮等含氧化合物。文中还比较了大葱挥发油和洋葱挥发油中化学成分的相对含量。

关键词 [大葱](#) [挥发油](#) [色谱质谱联用](#)

分类号

Abstract Study on the Chemical Constituents of Volatile oil in Green Chinese Onions(*Allium fistulosum* L.) Guo Haichen; Gui Lan; Zhu Qianxiang; Zhou Xiuqing; Wang Ling (Analytical and Testing Center, Jilin University Changchun 130023, China) Received Abstract: Three volatile oils were individually obtained from distillation of stem, leaf and flower of green Chinese onions (*Allium fistulosum* L.). 18 chemical constituents in volatile oils were identified with capillary gas chromatography-mass spectrometry. Main components are sulfur-containing compounds such as dimethyl disulfide, dimethyl trisulfide, methyl propyl disulfide, methyl propyl trisulfide, methyl propenyl disulfide, methyl propenyl trisulfide, propyl propenyl disulfide, propyl propenyl trisulfide, dipropyl trisulfide etc as well as oxygen-containing compounds such as 2-methyl-2-pentenal, 2-tridecanone etc. In the paper, the relative content comparison of chemical constituent between green Chinese onions oil and onion oil was given too. Keywords: *Allium fistulosum* L.; volatile oil, GC/MS

Key words

DOI

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