

研究论文

唇形科植物挥发油化学成分的GC/MS研究

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摘要 在运用GC/MS技术的基础上采用HELP(直观推导式演进特征投影法)方法研究了九种唇形科植物的化学成分,并以唇形科植物半枝莲为例详细介绍了HELP的解析过程.应用总体积分法测定各成分的相对百分含量.鉴定出相对共有成分达70余种,大多数为萜类化合物及其衍生物.不同的唇形科植物的挥发油化学成分与特征成分有明显差异.九种药材挥发性成分中均含有桉油精(Eucalyptol, 含量0.10%~1.01%)和芳樟醇(Linalool, 0.11%~3.05%).

利用GC/MS分析法结合化学计量学分辨方法鉴定挥发油化学成分,比单独使用GC-MS法结果更准确、可靠.

关键词 [唇形科](#) [挥发油](#) [GC/MS](#) [直观推导式演进特征投影法](#)

分类号

GC/MS Study on Chemical Constituents of Essential Oil of *Lamiaceae* Plants

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Abstract This paper aims at detecting chemical components of the volatile oil in nine samples of *Lamiaceae* plants by GC/MS with the help of heuristic evolving latent projection (HELP) resolutions. The analyzing process of HELP was described in detail. Relative contents of oil constituents were computed from the total volume integration. More than 70 relatively common components were identified and the main compounds are terpenes and their derivatives. Eucalyptol (relative content 0.10%~1.01%) and Linalool (0.11%~3.05%) are the common main compounds of the nine plants. Compared to simply using GC-MS, the results of the essential oil obtained by the analysis of GC-MS combined with chemometric resolution method are more reliable and accurate.

Key words [Lamiaceae](#) [volatile oil](#) [GC/MS](#) [heuristic evolving latent projection](#)

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