

食品—研究报告

白叶单枞不同发酵茶中多酚类成分的HPLC-MS/MS分析

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摘要:

采用HPLC-MS/MS对以白叶单枞茶为原料生产的红碎茶、乌龙茶、黑茶进行分析,通过对紫外吸收光谱以及质谱信息进行分析,并参考相关文献,推定出白叶单枞红茶中32个化合物,乌龙茶中30个化合物,黑茶中14个化合物。这些化合物中包括常见的儿茶素类化合物、生物碱。此外还检测到多种以山奈酚、槲皮素、杨梅素为苷元的黄酮醇苷等非儿茶素类茶多酚和茶双没食子儿茶素等儿茶素聚合物。

关键词: 白叶单枞; 发酵类茶; 多酚类; 液质联用

HPLC-MS/MS Analysis of Polyphenols in Different Fermented Type Tea Products Prepared from *Camellia sinensis* ‘Baiye Dancong’

Abstract:

Chemical compositions of broken black tea, oolong tea and dark tea prepared from *Camellia sinensis* ‘Baiye Dancong’ were analyzed by HPLC-MS/MS method. Comparing the UV absorption spectra and mass spectra of the peaks in the obtained HPLC chromatograms with those of the authentic standards and related literatures, 32, 30 and 14 compounds were identified from broken black tea, oolong tea and dark tea respectively. These compounds included catechins, alkaloids. Some non-catechin polyphenol compounds such as flavonol glycosides with kaempferol, quercetin and myricetin as aglycones, and catechin polymers such as theasinensins were also identified.

Keywords: *Camellia sinensis* ‘Baiye Dancong’ fermented type tea polyphenols HPLC-MS/MS

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