

Chemical composition of essential oils of purple perilla (*Perilla frutescens*) from Korea

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This study was carried to investigate the volatile oil components in *P. frutescens* strains collected from different regions in South Korea and identify the chemotype based on the contents of major volatile oil components.

Thirty kinds of volatile components were identified, and the major components out of 30 compounds were limonene, perillaldehyde, perillaketone, isogomaketone, beta-caryophyllene, beta-farnesene, myristicin, and dillapiole. *P. frutescens* collections were classified as four chemotype: PA type (limonene 57.7% and perillaldehyde 19.8%), PK type (perillaketone 89.8%), ST type (sesquiterpene 82.4% such as beta-caryophyllene 54.5% and beta-farnesene 27.9%), and PP type (phenylpropenes 40.3% and sesquiterpene 37.8%) based on their differences in major volatile oil components. The majority of *P. frutescens* collections in this study belongs to PA type (41.9%) and PK type (38.8%).

References

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