Chemical composition of flavor in *Russula virescens* Fr. by gas chromatography – mass spectrometry

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**Abstract:** *Russula virescens* Fr. is considered to be one of the best edible wild mushroom, and is popular food in the North and Northeastern part of Thailand. The flavors of *Russula virescens* Fr. were dominated among wild mushroom hence the research work is aimed to characterize the chemical component of flavor. Chemical component of flavor in fresh and cooked mushrooms were analyzed by HS-SPME-GC-MS using divinylbenzene/carboxen/polydimethylsiloxane fiber. The chemical component of flavor identification were carried out by library searching against Wiley 275.L and their retention indices were compared with those reported by Adams (2001). The major volatile compounds in fresh mushrooms were found benzaldehyde (26.77%), hexanal (24.04%) and 2-amylfuran (18.27%). In the cooked mushroom flavors were found the higher amount of 2-amylfuran (31.41%) but lowered amount of benzaldehyde (8.27%).

**Keywords:** *Russula virescens* Fr.; Gas chromatography – mass spectrometry