

TITLE

Characterization of Volatile compounds of *Eremostachys laevigata* using Headspace-Solid phase microextraction combined with GC-MS

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Head-space volatiles from leaves and flowers of *Eremostachys laevigata* were collected using ultrasonic-assisted solid-phase microextraction (UA-HS-SPME) method. Identification of chemical composition was carried out by Gas Chromatography-Mass Spectrometry (GC-MS). Two solid phase microextraction fibers (PDMS/DVB/CAR and PDMS) in present and absence of 200 μ L water were applied for the extraction of volatile compounds. The results showed that 1-octen-3-ol (28.9-57.9%), apiol (29.2-54.8%), hexadecane (7.3-18.8%), α -terpineol (2.9-12.8%) and heptadecane (2.5-10.9%) were the main component in the leaves of *Eremostachys laevigata*. Also the major constituents of flowers were apiol (37.1-58.8%), hexadecane (11-14.8%) and 1-octen-3-ol (0-20.3%).

Keywords: SPME; Ultrasonic-Assisted; *Eremostachys laevigata*; Volatile Compounds; GC-MS.