

# Volatiles from Four *Astragalus* Species: Phenological Changes and their Chemotaxonomical Application

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This paper shows the changes of the volatile compounds from four *Astragalus* species at three phenological stages: leaf development, flowering and fructification, which might be connected with the plant defense. After GC/MS analyses of *Astragalus glycyphyllos* L., *A. hamosus* L., *A. cicer* L. and *A. spruneri* Boiss., different groups of volatile compounds were found: hydrocarbons, alcohols, aldehydes and ketones, esters, terpenes, chlorinated compounds, etc. Identified volatiles were used for a cluster analysis in order to make chemotaxonomic conclusions for these evolutionary different species.

*Key words:* Volatiles, Phenological Changes, Chemotaxonomy