

# GC-MS Investigation and Acetylcholinesterase Inhibitory Activity of *Galanthus rizehensis*

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GC-MS (gas chromatography-mass spectrometry) analyses of alkaloids in the aerial parts and bulbs of *Galanthus rizehensis* Stern (Amaryllidaceae), collected during two different vegetation periods, was performed. Twenty three alkaloids were identified in four different alkaloid extracts. Acetylcholinesterase (AChE) inhibitory activities of the alkaloid extracts were tested. Both the highest alkaloid diversity and the most potent inhibitory activity (IC<sub>50</sub> 12.94 µg/ml) were obtained in extracts from the bulbs of *G. rizehensis* collected during the fruiting period.

**Key words:** *Galanthus rizehensis*, Alkaloids, GC-MS, Acetylcholinesterase Inhibition