



Azeroside C: a new phloroacetophenone glycoside from the roots of *Dorema glabrum* Fisch. & C.A. Mey

M.R. Delnavazi^{1*}, N. Yassa¹, A. Hadjiakhoondi¹, A. Delazar²

¹Department of Pharmacognosy, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran.

²Department of Pharmacognosy, Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran.

Background and objectives: *Dorema glabrum* Fisch. & C.A. Mey from Umbelliferae family is a monocarpic species distributed in north-west of Iran, Azerbaijan republic and Armenia. The gum-resin of this species is traditionally used for the treatment of bronchitis, catarrh and diarrhea, as well as for its diuretic properties. Recently, we have reported the isolation of five phloroacetophenone glycosides including echisoside, pleoside, hircanoside, azerosides A and B from the roots of *D. glabrum*. The work is a part of our ongoing research on phytochemical constituents of this medicinal plant. **Methods:** The air dried and ground roots of *D. glabrum* collected from Jolfa region (East-Azerbaijan, Iran) was macerated, successively with *n*-hexane, chloroform, ethyl acetate and methanol-water (8:2). The hydroalcoholic extract was subjected to phytochemical analysis using Sephadex-LH20 and RP-18 column chromatography. Structure of the isolated compound was elucidated by ¹H-NMR, ¹³C-NMR, HMBC, HSQC, EI-MS and CHNS elemental analysis. **Results:** A new structure of 2-O-[β-D-glucopyranosyl-(1"→3')-β-D-glucopyranosyl]-4-O-methyl-phloroacetophenone, which was named azeroside C, was isolated and identified from *D. glabrum* roots. **Conclusion:** The presence of new phloroacetophenone glycosides in *D. glabrum* highlights this species as a source of this group of natural products which can be used for further pharmacological and toxicological studies.

Keywords: Azeroside C, *Dorema glabrum* Fisch. & C.A. Mey, phloroacetophenone, Umbelliferae