

Isolation, Structure Elucidation, and Biological Evaluation of Acetylated Flavonoid Glycosides from *Centaurium spicatum*

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Abstract : Four Acetylated flavonol glycosides were isolated from *Centaurium spicatum* (L.) Fritsch (Gentianaceae). Structure elucidation, especially the localization of the acetyl groups, and complete ¹H and ¹³C NMR assignments of these biologically active compounds were carried out using one- and two-dimensional NMR methods, including CNMR, DEPT-135 and DEPT-90 and gradient-assisted experiments such as DQF-COSY, TOCSY, HSQC and HMBC experiments. The antioxidant activities of the new acetylated flavonoid glycosides using DPPH• assay were determined. The compounds tested showed a good DPPH• activity compared with control, but their activity was lower than that of their corresponding aglycone, quercetin.

Keywords : *Centaurium spicatum*, flavonoids, biological activity, isolation, glycosides

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