Flavonoids and Phenolic Acids from the Aerial Parts of Alyssum alyssoides

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Abstract : Most of Alyssum species of Brassicaceae family have been mainly studied for their contribution in ecology. In this study, A. alyssoides was examined for its chemical substitutes. The methanol extract of its aerial parts was fractionated with liquid-liquid extraction (distribution) with four different solvents of increasing polarity: diethyl ether, ethyl acetate, 1-butanol and water. The diethyl ether and ethyl acetate extracts were further studied for their chemical composition. So far, secondary metabolites which belong to phenolics were isolated by using several chromatographic methods (C.C. and HPLC) and were identified by using spectroscopic methods (UV/Vis, NMR and MS): two phenolic acids (p-hydroxy-benzoic acid and 3-methoxy-4-hydroxy-benzoic acid (vanillic acid)), and five flavonoids, which are derivatives of flavonol: kaempferol 3-O- β -D-glucopyranoside (astragalin), kaempferol 3-O-(6"- α -L-rhamnopyranosyl)- β -D-glucopyranoside (nicotiflorin), quercetin 3-O- β -D-glucopyranoside (isoquercetin), isorhamnetin-3-O- β -D-glucopyranoside, and isoramnetin 3-O-(6"- α -L-rhamnopyranosyl)- β -D-glucopyranoside (narcissin).

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