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Isolation and structural elucidation of secondary metabolites from *Eremurus persicus*

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Eremurus persicus (Jaub. & Spach) Boiss., belonging to Xanthorrhoeaceae family is an endemic medicinal plant widely distributed in Iran. The leaves have been traditionally used as a remedy of constipation and diabetes, and to treat of different disorders of liver, stomach and the genitourinary system [1, 2], to cure of atherosclerosis, inflammation-related diseases, as well as against fungal skin diseases, and as diuretic [1, 3,4]. Regarding the widespread application of *E. persicus* in Iranian folk medicine, and the insignificant investigation of its phytochemicals, this study was aimed at the isolation and identification of the major secondary metabolites of this plant. Five pure compounds were isolated from EtOAc and CHCl₃ soluble-extracts. All the identified phytoconstituents were reported for the first time from *Eremurus* genus. By applying various chromatography techniques rare compounds corchoionoside A, and 4-amino-4-carboxychroman-2-one from EtOAc fraction; along with isoorientin, auraptene, and imperatorin from CHCl₃ extract were isolated. Structure elucidation of the pure compounds was performed by NMR spectroscopy. Due to the extensive utilization of *E. persicus* in folk medicine, more investigation is needed to study the phytochemicals of the plant.

References

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