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IJBLS 2023; 2(2):299-299



International Journal of
BioLife Sciences

Abstract

Research and Structural Determination of Secondary Metabolites of *Linaria scariosa* (Scrophulariaceae)

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Received: 16 September 2023

Revised: 22 September 2023

Accepted: 28 September 2023

Abstract

Background and aim: The genus *Linaria* (Scrophulariaceae) shows that this genus is reputed to accumulate a diversity of secondary metabolites, in particular iridoids and flavonoids, molecules known for their various biological activities.

In this work, our interest focused on the phytochemical study of an Algerian species, *Linaria scariosa* (Scrophulariaceae).

Materials and methods: The phytochemical investigation of extracts of the species *Linaria scariosa* was carried out using different chromatographic techniques; it allowed the obtaining of 10 compounds. The identification of these compounds was carried out by combining different spectral methods, namely UV-Visible spectrophotometry, 1D NMR (1H, 13C and DEPT) and 2D (HSQC, HMBC, COZY and NOESY).

Results: The phytochemical study of this species permitted the separation and identification of 4 iridoids, 5 flavonoids and 1 sterol.

Conclusion: These products are isolated for the first time from the species *L. scariosa*. These results confirm the richness of the genus *Linaria* in phenolic and iridoid compounds.

Keywords: *Linaria scariosa*, Phytochemical study, Iridoids, Flavonoids

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