



New Constituents from the Rhizomes of Egyptian *Iris germanica* L.

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Abstract:

Chemical investigation of the methanolic extract of the rhizomes of *Iris germanica* L. (Iridaceae) afforded two new compounds; irigenin S (7) and iriside A (12), together with ten known compounds: stigmasterol (1), β -irone (2), α -irone (3), 3-hydroxy-5-methoxyacetophenone (4), irilone (5), irisolidone (6), irigenin (8), stigmasterol-3-O- β -D-glucopyranoside (9), irilone 4'-O- β -D-glucopyranoside (10) and iridin (11). Their structures were established by UV, IR, 1D (^1H and ^{13}C) and 2D (^1H - ^1H COSY, HMQC, and HMBC) NMR spectroscopy, in addition to mass spectroscopic data and comparison with literature data. The methanolic extract was evaluated for its antimicrobial activity. Both the methanolic extract and the isolated flavonoids were tested for their anti-inflammatory activity.

Keywords:

Iris germanica L.; Iridaceae; irigenin S; iriside A; antimicrobial; anti-inflammatory

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