

A NEW QUINONE-METHIDE TRITERPENOID FROM AN UNIDENTIFIED SALACIA SPECIES (CELASTRACEAE)

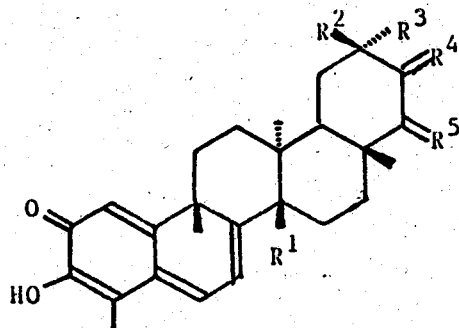
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In continuing our studies on the triterpenoids of Celastraceae we have investigated the triterpenoid constituents of the root outer bark of an unidentified Salacia species and in this paper we report the isolation of nine triterpenoids and characterization of eight of them of which one is a new natural product.

Chromatographic separation of both hot hexane and hot benzene extracts afforded nine crystalline compounds. Three of these were identified as β -amrin, 29-hydroxyfriedelan-3-one and 21 α , 26-dihydroxy-friedelan-3-one by spectroscopic data and direct comparison with authentic samples. Spectroscopic data of the remaining six triterpenoids indicated them to be quinone-methides; four of these have been identified as isoiguesterin (1), tingenone (2), 22 β -hydroxytingenone (3) and celastrol (4). Spectroscopic data of the remaining two natural products did not correspond to any of the known quinone-methides and one of these was identified as (5) with the aid of its spectroscopic data.



- (1) $R^1 = \text{Me}; R^2 = R^3 = \text{CH}_2; R^4 = R^5 = \text{H}_2$
- (2) $R^1 = \text{Me}; R^2 = \text{Me}; R^3 = \text{H}; R^4 = \text{O}; R^5 = \text{H}_2$
- (3) $R^1 = \text{Me}; R^2 = \text{Me}; R^3 = \text{H}; R^4 = \text{O}; R^5 = \beta\text{-OH}, \alpha\text{-H}$
- (4) $R^1 = \text{Me}; R^2 = \text{Me}; R^3 = \text{CO}_2\text{H}; R^4 = R^5 = \text{H}_2$
- (5) $R^1 = \text{CH}_2\text{OH}; R^2 = \text{Me}; R^3 = \text{CO}_2\text{Me}; R^4 = R^5 = \text{H}_2$

(We thank Prof. V. Kumar for some authentic samples and spectral data of some triterpenoids.)

Reference:

Wijeratne, D.B.T. (1983) M. Phil Thesis, University of Peradeniya.