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Phytochemical Study of the Chloroform Extract from the Roots of Salacia grandifolia

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Among the diverse botanical families studied, the Celastraceae family stands out due to its rich variety of phytoconstituents with potential biological activities, such as antitumor, antiviral, and anti-inflammatory.[1] Quinonemethide triterpenes are among the chemical markers found in the roots of these plants,[2] as exemplified by the species *Salacia grandifolia*, which is present in areas of the Atlantic Forest in Brazil. However, there is a notable absence of documented phytochemical research on the roots of *Salacia grandifolia*. Therefore, this study aimed to isolate the phytoconstituents present in 1 kg of dry *Salacia grandifolia* roots.The plant material was subjected to maceration in chloroform, remaining immersed in the solvent at room temperature for 5 days. After each maceration period, simple filtration was performed, followed by solvent removal using a rotary evaporator. This cycle was repeated five times with the same plant material. The extracts were then grouped and designated as ECl (chloroform extract of the roots). Numerous purification steps by column chromatography led to the isolation of Pristimerin (40.3 mg) and Ursan-12-en-3-ol (α-amyrin, 3 mg). Identification of the isolated compounds was performed using Nuclear Magnetic Resonance (NMR) spectroscopy (^{1}H, ^{13}C, and DEPT-135) and comparison with literature data.

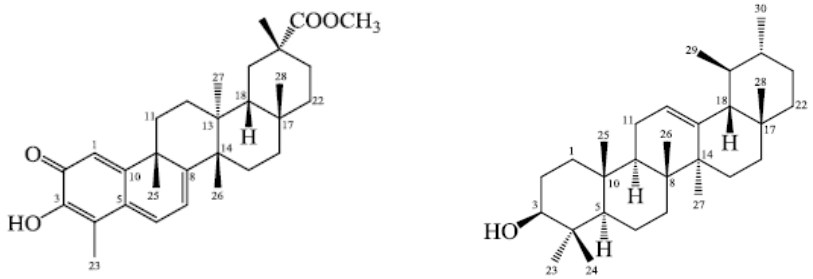

Figure 1: Pristimerin and ursan-12-en-3-ol

Keywords: *Phytochemistry, Celastraceae, quinonemethide triterpene*
References: [1]Camargo, K. C. et al. *Molecules* 2022, 27, 3. [2]Jiang, H., et al. Autophagy 2024, 20.7.
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