

A NEW BIDESMOSIDIC TRITERPENOID SAPONIN
FROM DIPLOCLISIA GLAUDESCENS

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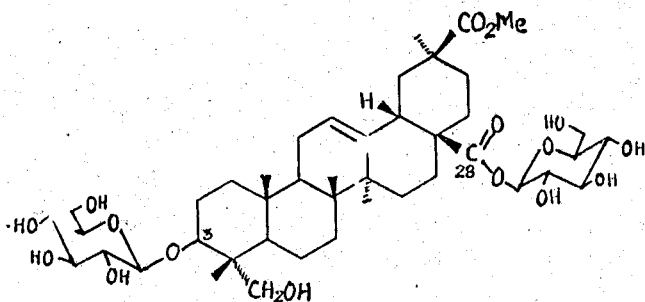
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Diploclisia glaucescens (Sinhala - Ata Thiththa Wel) of the family Menispermaceae is a creeper growing in the mid country region of India and Sri Lanka. The plant is reported to be used in the treatment of biliousness and venereal diseases¹. Five phytoecdysteroids have been reported from the seeds².

We have previously isolated 20-hydroxyecdysone³, vibo-quercitol, serjanic acid and phytolaccagenic acid⁴, from the methanol extract of the defatted mature stem of D. glaucescens.



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Further chromatographic fraction of the methanol extract yielded 3,28-di-O-β-D-glucopyranosylphytolaccagenic acid 1 as a white powder, mp 171-173°, $[\alpha]_D^{25} +25^\circ$ (c 0.12 in MeOH). The structure of this bidesmosidic saponin was established by acid and alkaline hydrolysis, as well as from a detailed spectral analysis of the natural saponin and its derivatives. The observed lack of activity of 1 against the snail Biomphalaria glabrata is consistent with its bidesmosidic nature.

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References:

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