

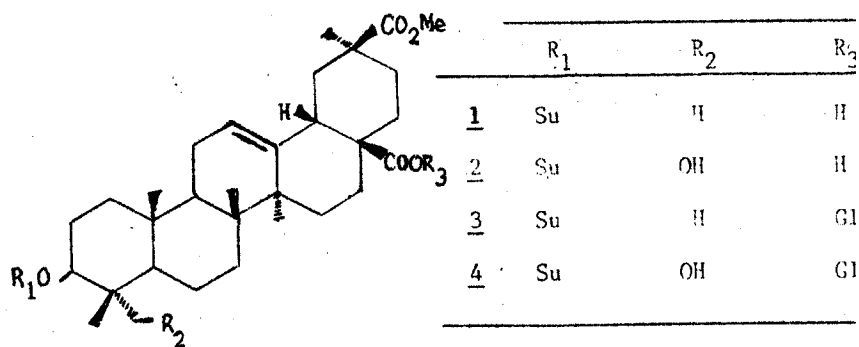
FOUR SAPONINS FROM DIPLOCLISIA GLAUDESCENS

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Diploclisia glaucescens (Menispermaceae) is a creeper growing in the mid country regions of India and Sri Lanka. The leaves of the plant are reported to be used in the treatment of biliousness and venereal diseases¹.

Previous work led to the isolation of stepharine, serjanic acid, phytolaccagenic acid, stigmasterol, ecdysterone, a new monodesmosidic saponin 3-O- β -D-glucopyranosylphytolaccagenic acid, a new bidesmosidic saponin 3,28-di-O- β -D-glucopyranosylphytolaccagenic acid and vib-quercitol from the plant.^{2,3}

Four more saponins 1, 2, 3 and 4 have now been isolated from the plant. Excluding the identity of the sugar at C-3, the structures of 1, 2, 3 and 4 have been established (see table below). The sugar (Su) at C-3 appears as glucose on acid hydrolysis.



Only saponin 1 showed acceptable molluscicidal activity. Saponins 2 and 3 showed weak activity, saponin 4 showed no activity.

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3. Bandara, B.M.R., Jayasinghe, U.L.B., Karunaratne, V., Wannigama, G.P., Kraus, W., Bokel, M. and Sotheeswaran, S. (1989) Phytochemistry 28, 1073; ibid, 1989, 28, 2783.