

NOVEL ISOFLAVONE FROM THE WILD LEGUMINOUS SEEDS OF *ABRUS PRECATORIUS*

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ABSTRACT

The isolation and spectral data of the new 5-hydroxy-6, 4'-dimethoxy isoflavone 7-O- β -D galactopyranoside (1) from the seeds of *Abrus precatorius*.

Table : 00

Figure : 01

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KEY WORDS: *Abrus precatorius*; Isoflavone

Plant. *Abrus precatorius* L. (Fabaceae)^{1,4}, dried seeds, collected from Bundelkhand region, Bohadpura farm. Orai, Jalaun in November 1998 and identified by staff of the Botany Department D.V.College. Orai -285001 (U.P.)

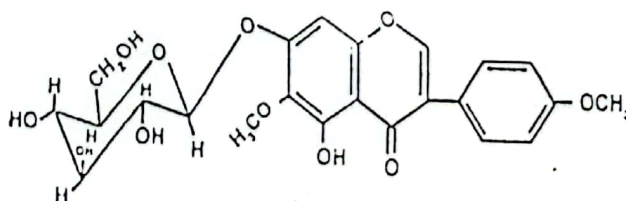
Uses in traditional medicine. Leucoderma, itching, Wounds⁵.

Previously isolated constituents. Triterpenoid sapogenin from seeds⁶.

New-isolated Constituents. 5-hydroxy-6,4'-dimethoxy isoflavone 7 -O- β -D- galactopyranoside (1), 1.08 g from 2.0kg of air-dried powdered seeds.

5-hydroxy-6,4'-dimethoxy-isoflavone-7 -O- β -D-galactopyranoside (1). M.P. 203-204°C; UV max (MeOH): 258, 307; (NaOMe) 256,330; (AlCl₃) 262,342; (AlCl₃+HCL) 263, 340; (NaOAc) 258, 326nm; IR bands (KBr): 3325,2850, 1600, 1555, 1105,825 cm⁻¹; ¹³C-NMR (400 MHz DMSO-d₆): δ 152.50 (C-2), 122.90 (C-3), 181.5(C-4), 157.2 (C-

5), 147.2 (C-6), 180.4 (C-7), 112.2(C-8), 152.9 (C-9), 105.2(C-10), 111.6(C-1'), 108.6 (C-2'), 142.4 (C-3'), 145.5 (C-4'), 95.4 (C-5'), 150.2 (C-6'), 98.5 (C-1"), 71.05 (C-2"), 75.4 (C-3"), 67.5 (C-4"), 71.4 (C-5"), 66.1 (C-6"), 54.8, 54.9, (OMe); MS m/z: 314, 299,183,155,137,135,138. Pentaacetate: m.p. 182°C. H-NMR (400 MHz, Me₂CO-d₆): δ 7.90 (1H, s, H-2), 4.01 (3H, s, OAc-5), δ 7.4 (2H,d, j 8.5 Hz, H-2', 6'), δ 6.58 (2H, d, j 8.5 Hz H-3, 1, 5,1), 65.5 (1H, J 9 Hz 1 H-gal), δ 2.05 -2.16 (12 H, m, 4 x OAc).



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