

phenone (150 mg) and benzoyl chloride (500 mg) in dry Py were left at room temp. during 24 hr. The mixture was poured on ice, HCl added until pH 6 and extracted with EtOAc. After washing with aq. NaHCO_3 and H_2O , evapn of the extract led to an oily, chromatographically homogeneous benzoate (375 mg) which was dissolved in DMSO (10 ml). Powdered NaOH (800 mg) was added, the mixture shaken during 5 min before addition of ice, left at room temp. for 30 min, neutralized with HOAc and extracted with EtOAc. After washing with NaHCO_3 and H_2O , evapn left a brown residue which was dissolved in C_6H_6 . Impurities were pptd by hexane, filtered and the crude product separated by further addition of hexane. After successive crystallizations in $\text{MeOH-H}_2\text{O}$, $\text{Et}_2\text{O-hexane}$ and C_6H_6 , 38 mg (17%) colorless crystals were obtained, mp 165–167° (lit. 166–167°) undepressed by mixing with natural 3-formyl-2,4,6-trihydroxy-5-methyldibenzoylmethane. IR spectra (KBr) were superimposable and both products gave only one spot (bright yellow under UV, orange with diazotized benzidine without spraying Na_2CO_3) and the same R_f on TLC.

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HESPERETIN 7-RHAMNOSIDE FROM *CORDIA OBLIQUA*

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The ethanolic extract of the roots of *Cordia obliqua* (Boraginaceae) yielded hesperetin 7-O- α -L-rhamnopyranoside. The species is commonly known as 'Lasora' in Hindi and various parts of the plant are used medicinally. Although hesperetin is a well known flavanone, its 7-rhamnoside has not previously been reported in plants.

EXPERIMENTAL

The powdered roots of the *Cordia obliqua* were extracted exhaustively with hot EtOH which on concn and keeping at 0° for 2 days deposited white crystals which are being further

studied. The filtrate was diluted with H_2O and the insoluble portion was extracted with EtOAc to give the reported glycoside, which was crystallised from EtOAc-petrol and shown to be homogeneous by PC and TLC. The glycoside was a yellowish-brown solid, $\text{C}_{22}\text{H}_{24}\text{O}_{10}$, (C = 58.90; H = 5.33; Calc. C = 58.92; H = 5.35%). Acid hydrolysis afforded hesperetin, $\text{C}_{16}\text{H}_{14}\text{O}_6$, mp 222–223° (d) (UV, IR, acetate, methoxyl, alkaline degradation) and L-rhamnose (mp. mmp. PC and osazone). The location of the sugar linkage was established by spectral means and by specific colour reactions.

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