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Chemical Investigation of the Dry Fruits of *Schrebera swietenioides*

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SCHREBERA swietenioides Roxb. (Oleaceae) is a plant of average height (2-3 m) occurring in the tropics of Telangana and yields fruits in summer. The roots of this plant are reported to be used in the treatment of leprosy[1]. In this communication we report the isolation of two known triterpene acids from the fruits of *S. swietenioides* which has not been previously investigated chemically.

Experimental

Plant material : The plant material was collected from Mananoor forest, 150 km south-east of Hyderabad.

Extraction and isolation of the constituents : The ground dry fruits of *S. swietenioides* were extracted with methanol by percolation. The extract on concentration and cooling furnished a solid residue. Silica gel chromatography of the solid resulted in the isolation of oleanolic acid and that of the mother liquor furnished betulinic acid.

The isolated compounds were identified by spectral data[2,3] and comparison with authentic samples (superimposable ir, co-tlc). Derivatives of the isolated compounds, prepared to aid the identification of the structures, included oleanolic acid acetate, methyl ester of oleanolic acid acetate, betulinic acid acetate and its methyl ester. Full details of the isolation and identification of the compounds are available on request.

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Extractive Spectrophotometric Determination of Trace Amounts of Tin(IV) with Diphenylcarbazone

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NUMEROUS reagents have been proposed for spectrophotometric determination of tin but a few are suitable for common use. A simple, sensitive and selective extraction-photometric method for the determination of tin with diphenylcarbazone is described in this paper. The use of diphenylcarbazone as an analytical reagent has long been known. It forms chelate complexes with many heavy metals[1-4]. Balt and Dalen[4] found that Mn^{2+}, Ni^{2+}, Zn^{2+}, Pb^{2+}, Fe^{2+}, Co^{2+}, Cu^{2+}, Cd^{2+} and Sn^{2+} form 1 : 2 complexes with diphenylcarbazone while Cu^{+} forms 1 : 1 and Fe^{3+} 1 : 3 complexes. In the present investigation, it is found that tin(IV) reacts with diphenylcarbazone in 1 *N* hydrochloric acid medium forming a rose-red coloured complex which is extractable into isobutyl methyl ketone. This forms the basis of the method.

Experimental

Absorbance measurements were made with a Beckmann DK-2 spectrophotometer in matched quartz cells of 1.0 cm optical path.

A stock solution was prepared by dissolving 2.995 g stannic chloride pentahydrate (B.D.H.) in 1 litre 1 : 1 hydrochloric acid. The amount of tin was estimated gravimetrically by the N-benzoylphenylhydroxylamine method[5]. The solutions of lower concentrations were prepared by dilution of the stock solution and were made 1*N* with respect