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ACANTHUS ILICIFOLIUS (N.O. Acanthaceae) is a mangrove plant found in the estuaries of the rivers Mandovi and Zuari in Goa. The leaves of the plant are used by villagers in Goa for the treatment of rheumatic pains. The plant is useful in asthma and the leaves and the tender shoots are useful for the treatment of snake bite.¹ The methanolic extract of the plant has been reported to possess analgesic and anti-inflammatory activities.² Based on the medicinal importance of the plant the present study has been undertaken.

Earlier work on chemical constituents of *Acanthus ilicifolius* by Tiwari *et al.*,⁴ reports the isolation of an alkaloid 'Acanthifoline' from the chloroform fraction of the defatted plant material. We wish to report here the isolation of 2-benzoxazolinone (I) from the chloroform extract of the defatted plant material. This is the first report of I from *A. ilicifolius*.

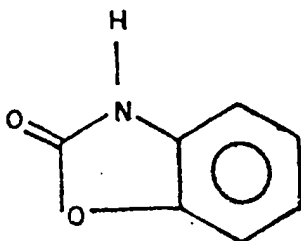
The aqueous methanolic extract of the leaves of *A. ilicifolius* was fractionated with petroleum ether followed by chloroform. The chloroform fraction was dried

over anhydrous sodium sulphate and evaporated under vacuum. The residue was chromatographed on a column of silica-gel made in pet-ether. Elution with pet-ether-chloroform yielded an impure compound which was further purified by column chromatography over Acme's silica-gel (greater than 200 mesh). Elution with pet-ether-benzene gave a crystalline compound I, $C_7H_9NO_2$ (Recrystallised from Pet-ether-chloroform), m.p. 138-40° Rf (tlc) 0.69 in benzene-ethyl acetate (9:1).

Its IR (KBr) spectrum showed bands at 3250 cm^{-1} (-NH), 1760 cm^{-1} (>C=O)

1260 cm^{-1} , $\begin{matrix} & O & \\ & \diagdown & / \\ C & & C \end{matrix}$ stretching) and 1500 cm^{-1} , 1400 cm^{-1} , 1010 cm^{-1} (characteristic of oxazole ring system) and the above data agreed with that reported for 2-benzoxazolinone.⁵ Its ¹H NMR data (CDCl₃) showed at δ 7.1-7.2 four aromatic protons. In the mass spectrum M^+ at 135 is the base peak. Other intense peaks obtained were at m/e 107, m/e 91 and m/e 79. The mass spectral fragmentation agreed with that reported for I.⁶

I



The identity of I was confirmed as 2-benzoxazolinone by comparing it with an authentic sample prepared by the method described by R. T. Williams.⁷

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A Simple TLC Method for the Detection of Glucose in Oral Rehydration Salts and Allied Preparations

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A simple TLC method for detection of glucose in Oral Rehydration Salts (ORS) and other allied preparations has been developed. Further, sucrose and lactose can be detected if present as adulterants.

ORAL Rehydration Salts (ORS) commonly prescribed for the treatment of children-diarrhoea are solid mixtures of glucose and different inorganic salts of sodium, potassium and calcium. Currently, ORS formulations based on the recommendations of World Health Organisation (WHO) are available in the market. This report presents a simple TLC test for the identification of glucose, the major component (about 70% w/w) in such formulations and also to detect the presence of other sugars like sucrose and lactose as adulterants.

Chromatoplates (20 x 10 cm) coated with silica gel G (0.25 mm) and activated

at 105° for 45 minutes were used. The chamber was saturated with the solvent; ethyl acetate:formic acid:water (60:20:20)¹ for 1.5 hr. prior to use.

Appropriate quantity of ORS and other allied preparations were diluted with water to contain 0.5% w/v of glucose. Standard solutions (0.5% w/v) of sucrose, lactose and glucose were prepared in water. One μ l of each solution was spotted on the chromatoplate. After development to a height of 10 cm, the plate was dried in air and sprayed with either sulphuric acid¹ (5% v/v in alcohol) or with anisaldehyde solution¹ (5% v/v in alcohol containing 5% v/v of sulphuric