

ON THE OCCURRENCE OF (ISO-) DOLICHANTOSIDE IN *STRYCHNOS MELLODORA*M.N. QUARRE¹, M. TITS¹, J.N. WAUTERS¹, C. DELAUDE² and L. ANGENOT¹¹Laboratoire de Pharmacognosie, U.Lg, Rue Fusch, 5, B-4000 Liège²Cecodel, Institut de Chimie, Université de Liège

Strychnos mellodora S. MOORE is a rare tree found in African mountain rain forests (1). It was collected by one of us (C.D.) in Chirinda Forest (Zimbabwe). Herbarium specimen (L. PAUWELS 7381) was deposited at the Botanical Garden of Belgium.

Samples of leaves, stem bark and root bark have been screened for alkaloids. Two glucoalkaloids: dolichantoside and its 3- β epimer (isodolichantoside) were now identified by comparison of UV, FT-IR, TLC and diode-array HPLC data with those of references (2,3). The assay of the main constituent (dolichantoside) was carried out according the HPLC method for opium (4), but with the detection at 250 nm instead of 280 nm. The results indicate that dolichantoside accumulates more in the root bark (1.65 %) and in the stem bark (0.95 %) than in the leaves (0.3 %).

Dolichantoside and its epimer could be the biosynthetic precursors of some monoterpene indole alkaloids (e.g. akagerine) (3,5). Moreover, they show cytotoxic activities (3,6).

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(1) A.J.M. LEUWENBERG (1969) *The Loganiaceae of Africa*. University of Wageningen, pp. 180-182

(2) C. COUNE and L. ANGENOT (1978) *Planta Medica* 34, 53-56

(3) H. ACHENBACH *et al.* (1993) *Planta Medica* A 619

(4) European Pharmacopoeia (1992) Monograph entitled «*Opium crudum*»

(5) G. MASSIOT and C. DELAUDE (1988) in *The Alkaloids* vol. 34, A. P., pp. 288-292

(6) J. LECLERCQ *et al.* (1986) *J. Ethnopharmacology* 15, 305-316.