CYTOTOXIC GERMACRANOLIODES OF ELEPHANTOPUS SCABER

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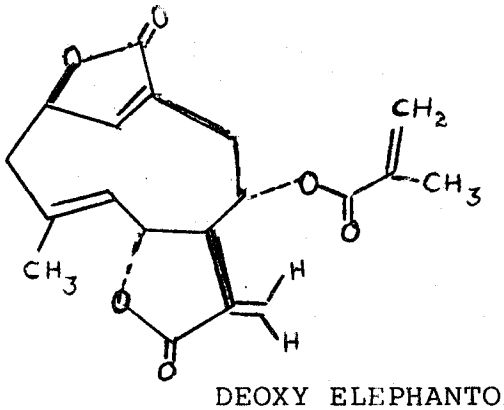
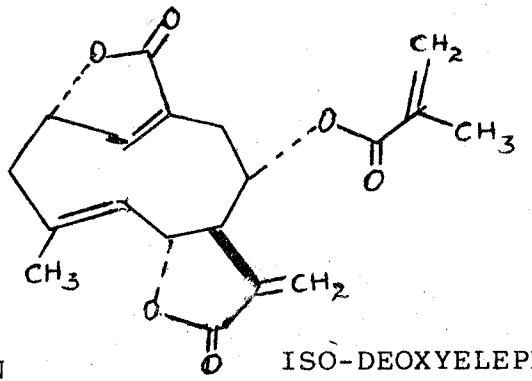
We reported the isolation of 11-13 dihydrodoxy elephantopin (1) from Elephantopus scaber (s.Athadi) and Govindachari (2) had reported the presence of deoxy elephantopin (2) in the same plant from Madras.

We have now re-examined E.scaber using a new extractive procedure and isolated deoxy elephantopin and iso-deoxyelephantopin. The structures were established by spectroscopic methods. Both deoxyelephantopin and iso-deoxy elephantopin isolated form West Virginian Elephantopus carolianus showed significant cytotoxicity with ED_{50} = 2.5 µg/ml against the in vitro growth of K B tissue culture cells (3).



DEOXY ELEPHANTOPIN



ISO-DEOXYELEPHAN-TOPIN

References :
1. L.B. de Silva, W.H.M.W. Herath, R.C. Jennings, M. Mahendran and G.P. Wannigama (184).
2. T.R. Govindachari, N. Visvanathan &. H. Fuhrer (197) Indian J. Chemistry 10, 272.
3. D. Zhang, M. HARINA, A.J. McPhil and KUD-HSIUNG Lee 1986) Phytochemistry 25, 899.