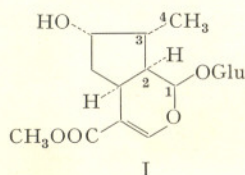


Loganin from *Mytragyna parvifolia* Korth.

The importance of cyclopentane monoterpene skeleton in the biosynthesis of indole alkaloids has recently been emphasized¹, and loganin² (I) has been shown to be the precursor of these alkaloids by feeding (*o*-methyl (³H))³, (2-¹⁴C)⁴ and (4-¹⁴C) loganins⁵.



In the present communication we wish to report the isolation of loganin from the leaves of *Mytragyna parvifolia* Korth. (family Rubiaceae) which actively synthesizes corynanthe⁶ type of indole alkaloids and thus provide support, albeit circumstantial, for the intermediacy of loganin in the biosynthesis of indole alkaloids.

The polar non-alkaloidal fraction from 11 kg fresh leaves of *M. parvifolia* Korth. was separated by a combination of countercurrent distribution (100 transfers; solvent system; *n*-butanol-water) and column chromatography on silica gel (elution with ethyl acetate-ethanol mixtures) to give 300 mg loganin which was crystallized successively from absolute ethanol and methanol, m.p. and mixed m.p. with authentic sample, 221–222°. The identity was further confirmed by TLC, rotation, UV, IR, NMR and mass spectra⁷ as well as by preparation of the penta-acetate, m.p. 140–141°.

This appears to be the first report of the isolation of loganin from a plant belonging to the Rubiaceae family,

and thus indicates its close relationship with the plants of the Loganiaceae⁸ family⁹.

Zusammenfassung. Loganin, ein potentielles Schlüsselzwischenprodukt in der Biosynthese von Indolalkaloiden, wurde aus den Blättern von *Mytragyna parvifolia* Korth. isoliert.

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