

SHORT COMMUNICATION

Chemical Examination of *Ficus bengalensis*¹

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In connection with a systematic examination of the plants of the family Moraceae, we were interested to examine the leaves of *Ficus bengalensis*, the latex of which was previously reported to contain a steroidal substance², m.p. 135°, [α]_D 63.59° (CHCl₃) which was not fully characterised. We now report the isolation of a triterpene, friedelin and β -sitosterol from the leaves of the plant.

Dried powdered leaves (500 g.) of *Ficus bengalensis* was extracted successively with petroleum ether (b.p. 60-80°), benzene and ethanol. The neutral fraction obtained from the petroleum-ether extract was chromatographed over Brockmann's alumina. On concentration of the pet. ether: benzene fraction a compound, m.p. 235-38° was obtained which on crystallisation from petroleum ether melted at 255-56°, (α)_D -22°, (CHCl₃) (lit. report 263°). The compound was homogeneous by TLC (R_f 0.76 in benzene: chloroform mixture 4 : 1). It gave a pink colour with Liebermann-Burchardt reagent and analysed for C₃₀H₅₀O*. The mass-spectral fragmentation of the compound showed fragmentations identical with those of friedelin³. The identity of the compound with friedelin has been confirmed by direct comparison with a pure specimen (m.m.p. and T.L.C.).

From the benzene eluant of the above chromatogram, a compound, m.p. 135-37° (α)_D -35° (CHCl₃) was obtained. It gave positive test for sterol by Liebermann-Burchardt reagent. It analysed for C₂₉H₅₀O* and was identified as β -sitosterol by direct comparison with a pure specimen (m.m.p. 134-36°). An acetate of the compound C₃₁H₅₂O₂, m.p. 130-33°, (α)_D -39° melted at 130-33° when mixed with β -sitosterol acetate.

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1. Part VIII in the series-chemical taxonomy: Part VII:

D. P. Chakraborty, B. K. Chowdhury and B. C. Das, *Tetrahedron Letters*, 1967, **36**, 3471.

2. M. C. Nath and G. R. Debnath, *Science & Culture*, 1947, **12**, 599-60.

3. The authors are indebted to Dr. B. C. Das, Institut de chimie des Substances Naturelles, C. N. R.S, Gif-Sur-Yvette, France for the mass spectral measurements.

*Satisfactory analyses of the compound were obtained.