

## A Note on the Phytochemical Investigation of *Terminalia* Genus

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In consideration of medicinal importance<sup>1</sup> of *Terminalia bellerica* and *T. tomentosa* (Combretaceae), we were interested to examine them. The previous studies<sup>1</sup> on *T. bellerica* showed the presence of many compounds triterpenoids and their glycosides. We now report the isolation of stigmasterol, n-triacontanol and 3-*O*-acetyloleanolic acid from the roots of *T. tomentosa*, and 16-hentriacontanone from *T. bellerica*.

The air-dried roots (2 kg) of *T. tomentosa* were extracted with petroleum ether (b.p. 60–80°). The concentrated extract on chromatography over alumina (neutral) and elution with petroleum ether, furnished a solid, which was crystallised from acetone as a white solid, m.p. 136–37°. The solid gave positive Libermann-Burchardt test and was characterised as  $\beta$ -sitosterol by mixed m.p. and co-chromatography with an authentic specimen.

Further elution of the column with benzene afforded a white solid, which was crystallised from acetone, m.p. 168–69°, gave positive L.B. test;  $m/z$  412 ( $M^+$ );  $\delta$  0.69, 0.75, 0.80, 0.85, 1.1, 1.23, 4.51, 4.56 and 5.30. The results suggest the identity of the compound as stigmasterol.

The ether extract of the root of *T. tomentosa* was concentrated, chromatographed over alumina and eluted with benzene-acetone (1 : 1) to yield a white solid, m.p. 260–61°, responded to L.B. test;  $m/z$  498 ( $M^+$ ), 456 ( $M$ -COCH<sub>3</sub>), 248 and 189. The identity of the compound was confirmed as 3-*O*-acetyloleanolic acid by m.p., m.m.p. and co-chromatography with an authentic sample.

The petroleum ether extract of the bark of *T. tomentosa* on chromatography over silica gel furnished a white solid, which was characterised as n-triacontanol by m.p., m.m.p. and co-chromatography.

The petroleum ether extract of the stem bark of *T. bellerica* on concentration deposited a solid, which was chromatographed over silica gel. Elution with benzene-chloroform (1 : 1) yielded a white solid, m.p. 81.5°, gave positive 2,4-DNPH test;  $\nu_{\max}$  1720, 2900, 2840, 1460, 727 and 714 cm<sup>-1</sup>;  $m/z$  450 ( $M^+$ );  $\delta$  2.21 (methylene group adjacent to C=O), 0.81 and 1.20. The data suggest the compound to be a long-chain aliphatic ketone and it was characterised as 16-hentriacontanone.

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