

Saponins and Sapogenins. XXVI.* On the Second Sapogenins of Maharashtra *Albizzia Odoratissima*, Benth. Seeds

By I. P. VARSHNEY and Mohd. S. Y. KHAN

(Received October 30, 1964)

In an earlier communication¹⁾ *Albizzia odoratissima* Benth. seeds from Maharashtra have been reported to contain a mixture of saponins which, on sulphuric acid hydrolysis, yields two acid sapogenins acetates which melt at 228–234°C and 260–265°C respectively. The acetate with the m. p. of 260–265°C has earlier been identified as that of Machaerinic acid (3,21-dihydroxy-olean-12-ene-18 β -28-oic acid).¹⁾

The unidentified second acid sapogenin, the acetate with the m. p. of 228–234°C, after repeated crystallizations melted at 232–234°C. It was deacetylated with a methanolic sodium hydroxide solution on a water bath; the free genin was obtained by the decomposition of the sodium salt with hydrochloric acid and had a m. p. of 267–270°C. The acetate, on reaction with diazomethane, was recovered unchanged. The melting points of the genin and of the acetate and the non-formation of acetyl

methyl ester indicated that the genin might be identical with acacic acid. A direct comparison by mixed melting point and infrared spectra showed that the genin is identical with acacic acid, which has recently been assigned the formula 3,16,21-trihydroxy-olean-12-ene-28-oic acid²⁾ and in which the 3- and 16-hydroxyl groups are in the β -position.³⁾ Acacic acid is widely distributed in the seeds and the bark of the members of the *Leguminosae* family.⁴⁾

Thanks are due to Professor A. R. Kidwai for the facilities and to the Council of Scientific and Industrial Research, New Delhi, for the ward of a junior research fellowship to one of the authors (M. S. Y. K.).

Department of Chemistry
Aligarh Muslim University
Aligarh, India

* Part XXI: See Ref. 2.

1) I. P. Varshney and M. S. Y. Khan, *J. Pharm. Sci.*, **51**, 923 (1961).

2) I. P. Varshney and K. M. Shamsuddin, unpublished results.

3) I. P. Varshney and K. M. Shamsuddin, *Tetrahedron Letters*, No. 30, 2055 (1964).

4) I. P. Varshney, "Leguminosae Saponins," Symposium on "Glycosides and Saponins," Calcutta, 1964, C. S. I. R. (in press) and the references cited therein.