m.p. 127°, $[\alpha]_D$ −40° confirmed by IR and co-TLC with authentic sitosteryl acetate) and melianone ($C_{30}H_{46}O_4$ m.p. 225–226° $[\alpha]_D$ −48° ($CHCl_3$), positive L.B. test for triterpene and positive Ziemmermann colour reactions for 3-ketotriterpene) confirmed by UV, IR, NMR, MS and co-TLC with authentic specimen and also confirmed by Sarret oxidation and chromic acid oxidation under conditions specified by Spaeth.[1] The alcohol extract gave scopoletin, $C_{18}H_8O_4$, m.p. 202–203°, positive colour reaction with alcoholic alkali. Confirmed by UV, IR, MS and co-TLC with authentic sample. 6,7-Dimethoxycoumarin, $C_{11}H_{10}O_4$, m.p. 145°, M^+ 206 confirmed by UV, IR, MS and NMR. Methylation of scopoletin gave an identical compound. The plant was identified at the Institute where a voucher specimen No. CT-1 is kept.

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TRITERPENOID AND OTHER CONSTITUENTS OF *EUGENIA JAMBOLANA* LEAVES

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Key Word Index—*Eugenia jambolana*; Myrtaceae; *n*-Alkanes; aliphatic alcohols; phytosterols; triterpenoids.

Plant. Eugenia jambolana Lam. (Syn. *Syzygium cumini*, Linn; *E. fruticosa*) leaves (local species) investigated for chemical constituents. *Occurrence.* Throughout India. *Uses.* Medicinal[1] and others. *Previous work.* Only the essential oil of leaves[2] studied. Seeds,[3] flowers,[4] bark,[4a] stem bark[5] and fruits[6] also examined. *Extraction of the plant leaves.* Air-dried, powdered leaves exhaustively extracted with petrol.–Et_2O(60–80°), and EtOH; the extracts repeatedly chromatographed (silica gel or alumina), the various products thereafter crystallized, and thoroughly investigated.

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n-*Paraffins.* Product from the earlier fractions (chromatography-alumina) of the neutral part of the petrol. extract, and crystallization (EtOH)—m.p., IR, elemental and GLC analyses: a mixture of *n*-alkanes (C_{26}–C_{34}); *n*-heptacosane (4·97%); *n*-nonacosane (47·08%); *n*-triacontane (2%); *n*-hentriacontane (44·58%); and the minor quantities of the C_{26}, C_{28}, C_{32}, C_{33}, and C_{34}-alkanes. Odd numbered *n*-alkanes predominated.[7]

Aliphatic alcohols. C_6H_6–elution of the neutral part of the petrol.-extract, and crystallization (m.p., IR and elemental analysis); Acetate of the product (m.p., IR, elemental and GLC analyses): a mixture of *n*-alcohols (C_{26}–C_{34}): mainly *n*-octacosanol (2·30%); *n*-triacontanol (20·75%); *n*-dotriacontanol (73·10%) accompanied by minor quantities of C_{26}-, C_{27}-, C_{29}-, C_{31}-, C_{33}- and C_{34} compounds. The *n*-alkanes and the aliphatic alcohols belong to the same series of carbon atoms i.e. C_{26}–C_{34}.

Sitosterol. Elution of the neutral part of the petrol.-extract with C_6H_6–$CHCl_3$ (1:1) and crystallization (MeOH); m.p., m.m.p., IR, NMR, elemental analysis, positive L.B. Test; Co-TLC and Co-IR with authentic specimen. Acetate (MeOH + acetone): m.p., mixed m.p., IR, NMR, Co-TLC with an authentic specimen; benzoate and 3:5-dinitrobenzoate (m.p., m.m.p., Co-TLC).

Betulinic acid. (m.p., IR, Co-IR, Co-TLC, positive L.B., Noller's, and tetranitromethane tests). Acetate ($CHCl_3$:MeOH) m.p., elemental analysis, IR, NMR and Co-NMR; methyl ester (m.p., IR, and NMR) and methyl ester–acetate (m.p., IR, NMR). From alkali-soluble part of the petrol.-extract on elution with C_6H_6–$CHCl_3$ and repeated crystallization (MeOH).

Crategolic (*Maslinic*) *acid.*[8] (m.p., positive L.B., Noller's and tetranitromethane tests, elemental analysis and IR). From $CHCl_3$ fractions of the acidic part of the petrol.-extract and crystallization (MeOH). Monoacetate (MeOH + $CHCl_3$): m.p., IR, NMR; methyl ester (MeOH): m.p., methyl ester-di-acetate ($CHCl_3$: MeOH): m.p., IR, NMR, and Co-IR with an authentic specimen. EtOH extract also afforded a large proportion of this acid through ether.

Others. Glucose and fructose (EtOH extract[9]–Et_2O insoluble portion); oxalic, citric and glycollic acids (EtOH and 50% aq. EtOH extracts[9]); Glycine, alanine, tyrosine and leucine (H_2O, 0·2% aq. NaOH and 80% EtOH extracts) by co-PC.

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