

CHEMICAL CONSTITUENTS OF *GLOCHIDION VENULATUM*,
MAESA INDICA AND *RHAMNUS TRIQUETRA*

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Key Word Index—*Glochidion venulatum*; Euphorbiaceae; glochidone; *Maesa indica*; Myrsinaceae; quercetin-3-rhamnoside; *Rhamnus triquetra*; Rhamnaceae; frangulin.

Plant. Glochidion venulatum (Euphorbiaceae). *Source*. Dehradun. *Uses*. Medicinal.^{1c} *Previous work*. None.

Present work. Leaves. Light petrol. extract yielded sitosterol m.p. 136–137° (m.p. and m.m.p.). EtOH extract yielded a solid crystallized from EtOH in needles m.p. 164–165°. Identified as glochidone C₃₀H₄₆O (m.p. and m.m.p.).⁴

Plant. Maesa indica, Wall (Myrsinaceae). *Source*. Dehradun. *Uses*. Medicinal.^{1a} *Previous work*. None.

Present work. Leave. Light petrol. extract yielded sitosterol C₂₉H₅₀O m.p. 135–137° (m.p. and m.m.p.); acetate m.p. and m.m.p. 127°. EtOAc soluble fraction yielded quercetin-3-rhamnoside C₂₁H₂₀O₁₁·2H₂O m.p. 182–185°. Acid hydrolysis gave rhamnose (PC) and quercetin C¹⁵H¹⁰O⁷ (m.p. and m. m.p. 314–315°); penta-acetate m.p. 190°; methyl ether m.p. 152–153°. Methylation followed by acid hydrolysis gave 5,7,3',4'-tetramethyl quercetin m.p. 196–197° confirming the above characterization.

Plant. Rhamnus triquetra, Wall (Rhamnaceae). *Source*. Dehradun. *Uses*. Medicinal.^{1b} *Previous work*. None.

Present work. Heart wood. Et₂O soluble fraction yielded emodin C¹⁵H¹⁰O⁵ m.p. 255–256° (m.p., m.m.p. and NMR comparison²); M⁺, *m/e* 270; acetate m.p. 190–191° (lit. m.p. 191–192°).³ EtOAc soluble fraction afforded a glycoside m.p. 228–229° which on hydrolysis gave rhamnose (PC) and emodin. Identified as frangulin (lit. m.p. 230°).³ EtOH extract of leaves afforded kaemferol m.p. and m.m.p. 250–254°; acetate m.p. and m. m.p. 182°.

Voucher specimens of all above plants are kept in B.S.I., Dehra Dun.

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¹ CHOPRA, R. N. and CHOPRA, I. C. (1956) *Glossary of Indian Medicinal Plants*, (a) p. 159, (b) p. 211, (c) p. 125, CSIR, New Delhi.

² FOX, C. H., MAASS, W. S. G. and FORREST, T. P. (1969) *Tetrahedron Letters* 919.

³ HEILBRON and BUNBURY, H. M. (1953) *Dictionary of Organic Compounds*, Vol. II, p. 564, Eyre & Spottiswoode, London.

⁴ GOVINDACHARI, T. R. and MOHAMMAD, P. A. (1966) *Tetrahedron Letters* 1513.