EXTRACTIVES OF *DECUSSOCARPUS WALLICHIANUS*[1]

RICHARD C. CAMBIE,* DAVID SIDWELL,

Department of Chemistry, University of Auckland, Private Bag, Auckland, New Zealand

and CHAN KAI CHEONG

Department of Chemistry, University of Malaya, Kuala Lumpur, Malaysia

In a continuation of a recent survey of the wood extractives of the Podocarpaceae (1,2), we report here those of *Decussocarpus wallichianus* (C. Presl) de Laub. (syn. *Podocarpus wallichianus* C. Presl), an important timber tree in the Southeast Asian region. The occurrence of totaryl derivatives in this and other species (1,2) suggests that they are more common in the family than hitherto supposed.

EXPERIMENTAL

GENERAL EXPERIMENTAL PROCEDURES.—The methods for extraction and work-up and general experimental details were as previously described (1).

PLANT MATERIAL.—The wood was obtained from the grounds of the Forest Research Institute, Kepong, Malaysia, and an herbarium sample was deposited there as FRI 25930.

HEXANE-ETHER EXTRACTS.—The dried wood (1.6 kg) of *D. wallichianus* gave a hexane extract (0.51 g) and an Et_2O extract (2.36 g), which were combined and chromatographed on alumina. Elution with hexane-Et_2O mixtures containing increasing amounts of Et_2O gave successively small amounts (1-5 mg) of totaryl acetate, totarol, 19-hydroxytotarol, 19-oxototarol, β-sitosterol, 4β-carboxy-19-nortotarol, and podocarpic aciod. Each compound had ir spectra identical with those of authentic samples and identical behavior when co-chromatographed with authentic samples on tlc. 4β-Carboxy-19-nortotarol and β-sitosterol were also identified by ms.

ETHYL ACETATE EXTRACT.—The EtOAc-soluble fraction of a MeOH extract of the wood was chromatographed on alumina. Elution with hexane-Et_2O mixtures and Et_2O-EtOAc mixtures, containing increasing amounts of EtOAc, gave successively β-sitosterol (3 mg), needles, mp and mmp 136-137° (correct ir and tlc); nagilactone D (0.13 g, 0.008%), needles, mp and mmp 262-265° (dec.) [correct ir (3), pmr (3), and cmr (4), ms, and tlc]; and hydroquinone (70 mg, 0.004%), needles, mp and mmp 172° subliming at 110° (correct ir, pmr, cmr, and ms).

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