

CHEMICAL CONSTITUENTS OF *RHUS WALLICHI*

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In our continuing chemical analysis (1,2) of *Rhus* species, we report here the isolation of three glycosides of quercetin in addition to six other known compounds from the leaves of *Rhus wallichi* Hook, f. (3,4).

EXPERIMENTAL

PLANT MATERIAL.—The leaves of *R. wallichi*, a deciduous tree (3,4), were collected from Ranikhet, Uttar Pradesh, India, in September 1982, and authenticated by Dr. P.P. Joshi of Indian Medicines Pharmaceutical Corporation Ltd. A voucher specimen is preserved in the Department of Medicinal Chemistry, Banaras Hindu University.

EXTRACTION AND ISOLATION.—Dried leaves of *R. wallichi* (1.2 kg) were extracted successively with petroleum ether (60-80°) and EtOAc. Chromatographic resolution of the EtOAc extract over silica gel yielded kaempferol (0.25 g), quercetin (1.2 g), myricetin (0.05 g), gallic acid (0.05 g), quercetin-3-O-arabinopyranoside (0.25 g), quercetin-3-O-xyloside (0.2 g), quercetin-3-O-galactoside (6 g), and β -sitosterol glucoside (0.2 g). The petroleum ether extract yielded only β -sitosterol (0.25 g) by chromatography over silica gel.

All the compounds, other than the flavone glycosides, were identified by standard spectral analysis (5) as well as by direct comparison with authentic samples. The structures of the flavone glycosides were clarified by hydrolytic data, ^{13}C -nmr spectral analysis (6-8), and by the isolation of ω -ethoxy-4,6-dimethoxy-2-hydroxyacetophenone by subjecting the flavone glycosides to methylation, acid hydrolysis, ethylation, and alkali degradation in a sequence of reactions.

Full details of the isolation and identification of the compounds are available on request to the senior author.

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