LEGUMINOSAE

5-O-METHYLGENISTEIN FROM ORMOSIA EXCELSA*

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Trunk wood. The ethanol extract was dissolved in AcOEt and washed with dil. aq. H$_2$SO$_4$. Upon standing, a precipitate appeared. This was separated, dissolved in dioxan and reprecipitated by addition of H$_2$O. The white powder was acetylated and separated by silica chromatography into the acetate of lupeol, and the diacetate of 5-O-methylgenistein, m.p. 168–170° [lit.3 m.p. 168–170°]. Hydrolysis produced the plant constituents lupeol, and 5-O-methylgenistein (4’,7-dihydroxy-5-methoxyisoflavone), m.p. 305° dec. [lit.3 m.p. 316° dec.]. Mass, NMR, UV and IR spectral measurements corroborated the identifications.

* Part XXXV in the series “The Chemistry of Brazilian Leguminosae”. For part XXXIV see ref. 1.


Key Word Index—Ormosia excelsa; Leguminosae; isoflavone; 5-O-methylgenistein.

LINACEAE

STEROLS OF LINUM USITATISSIMUM SEED

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Plant. Linum usitatissimum (linseed). Previous work. GLC separation of derived acetates of sterols from seed.1 Present work. The following sterols from seed have been characterized by GLC (OV-17) and GC–MS2,3 as their derived TMS ethers: cholesterol (2% of sterol fraction), campesterol (26%), stigmasterol (7%), sitosterol (41%), Δ5-avenasterol (13%), cycloartenol (9%) and 24-methylene cycloartanol (2%).

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2 B. A. KNIGHTS, J. Gas Chromatog. 5, 273 (1967).

Key Word Index—Linum usitatissimum; Linaceae; sterols; sitosterol; campesterol.