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PHENOLICS OF *ACACIA FARNESIANA*

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Plant and source. *Acacia farnesiana* pods were picked in June from a 4-yr-old tree grown in Rafah, Sinai Peninsula, Egypt. *Previous work.* Flowers.¹

Present work. The pods were exhaustively extracted with Et₂O followed by EtOAc. From the Et₂O extract (4.16%), seven polyphenols were isolated and identified (C,H analysis, m.m.p., UV and co-chromatography with authentic materials) as gallic acid, ellagic acid, *m*-digallic acid, methyl gallate, kaempferol, aromadendrin, and naringenin.

The EtOAc extract (28.31%), was subjected to polyamide column chromatography and separated into four fractions. From the first three fractions, kaempferol-7-diglucoside, naringenin-7-glucoside and naringenin-7-rhamnoglucoside (naringin) were isolated and identified (chromatography, UV). The fourth fraction gave a flavanone glycoside, *X*, (C₃₄H₃₆O₁₉·H₂O, m.p. 203–206°, decomp.; λ_{max} 282 nm), whose characteristics, including *R_f*s in several solvents, were found to be different from those of similar compounds already reported. Mild acid hydrolysis of *X* gave naringenin, glucose and gallic acid. Permethyl-ation² of the glycoside (MeI and Ag₂O) followed by hydrolysis (2 N HCl) gave a resinous material, which yielded, after crystallization from MeOH, 4'-hydroxy-4,2',6'-trimethoxy chalcone (C₁₈H₁₈O₅, m.p. 208–210°), and a white solid (colorless needles from H₂O, m.p. 168°), identical with 3,4,5-trimethoxybenzoic acid (C,H-analysis, m.m.p. and UV). Furthermore, two as yet unidentified methylated sugars were also obtained. The new glycoside *X* is most probably naringenin-7-diglucoside acylated with gallic acid and the nature of the disaccharide is now being investigated. A voucher specimen of the plant is deposited in the laboratory.

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¹ ILYAS, M., HAMEED, N. and RAHMAN, W. (1970) *J. Indian Chem. Soc.* **47**(2), 183.

² HOROWITZ, R. M. and GENTILI, B. (1963) *Tetrahedron* **19**, 773.