Phytochemistry, 1969, Vol. 8, pp. 673 to 674. Pergamon Press. Printed in England.

SHORT COMMUNICATION

POLYPHENOLS OF *ANACARDIUM OCCIDENTALE*

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(*Received* 8 *October* 1968, *in revised form* 1 *November* 1968)

Plant. Anacardium occidentale L.—Anacardiaceae.

Uses. Edible cashew nuts; shell oil industrial;[1] medicinal.[2]

Previous work. Phenolic constituents: anacardic acid, anacardol and cardol from shell oil[3].

Present Work

Flowers. (EtOH extract of fresh material, fractionated with petrol. ether, ether and ethyl acetate). *Ethyl gallate.* (From ether fraction, 3·0% yield) $C_9H_{10}O_5$, Found: m.p. 157–158° (C_6H_6-MeOH), optically inactive; triacetate, m.p. 137–138°; tribenzoate, m.p. 127–128°; trimethyl ether, m.p. 53–54°; gallic acid (hydrolysis[4] with H_3PO_4), m.p. 250–252°; Mixed m.p. with synthetic ethyl gallate and all the derivatives undepressed. Required:[5] m.p. 158°, triacetate, m.p. 138°, tribenzoate, m.p. 126–128°, trimethyl ether, m.p. 53–55°, gallic acid, m.p. 253° (decomp.). *Quercetin.* (m.p. and mxd. m.p., penta acetate, m.p. and mxd. m.p.; R_f and co-chromatography). *Hyperoside* (quercetin 3-galactoside). (From ethyl acetate fraction, m.p. and mxd. m.p. 232–234°, R_f values and co-chromatography. Acid hydrolysis gave quercetin and one mole of galactose). M-*digallic acid.* Two dimensional paper chromatography.[6]

Tender leaves. (Fresh material extracted EtOH and fractionated as for flowers). *β-sitosterol.* (Petrol. ether fraction) Found: m.p. and mxd. m.p. 137–138°, acetate, m.p. and mxd. m.p. 133–134° (MeOH). *Ethyl gallate.* (0·3 per cent). *Hyperoside.* (0·06 per cent). *Methyl gallate.* Two dimensional paper chromatography;[6] co-chromatography with synthetic sample. *Leucocyanidin* and *leucodelphinidin.* Identified after conversion to cyanidin and delphinidin chloride—spectral properties and PC comparison.

Bark. Condensed tannins. No crystalline components isolated.

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