Present work Etiolated hypocotyls were inoculated with either tobacco necrosis virus (TNV) or *Colletotrichum lindemuthianum*, the latter isolated from infected cowpea at IITA as described previously [3,4] Hypocotyls showing cellular browning were extracted as described previously [4] Antifungals were detected by bioautography of TLC plates[5,6] and purified by preparative TLC [silica gel 60_{F254}, C_6H_6–Et_2O (1 1) or $CHCl_3$–EtOH (97 3)]

Demethylhomopterocarpin was detected as in Table 1 by comparison with authentic spectra and had m p 130–130 5 lit 130–131 [7] $[\alpha]_D^{21}$ −192 (*c* 0 1095 EtOH *l* 1 cm)

TABLE 1 OCCURRENCE OF DEMETHYLHOMOPTEROCARPIN FOLLOWING INFECTION

Plant	Infective agent: TNV	Infective agent: *Colletotrichum lindemuthianum*
Jack bean	1200 1500 μg g R_f m p OR UV IR NMR	R_f UV IR
Cowpea cv IVu57	Trace R_f, UV	50 μg g R_f UV IR
Cowpea cv IVu76	Not detected[3]	Absent in single experiment

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MINOR PHENOLIC CONSTITUENTS OF *DALBERGIA RETUSA*

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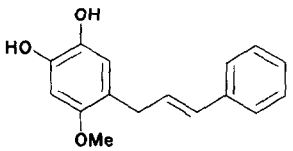
Key Word Index– *Dalbergia retusa* Leguminosae heartwood extractives chalcone flavanone cinnamyl phenol

Plant *Dalbergia retusa* Hemsley *Source* Panama *Previous work* The isolation of obtusaquinone, (±)-4-methoxydalbergione, (±)-obtusaquinol and the isoflavones, retusin

(7,8-dihydroxy-4'-methoxyisoflavone) and 8-*O*-methylretusin from *D retusa* heartwood has been resported,[1,2] (±)-Obtusafuran isolated from petrol extracts[3] may be an artefact[4] formed from obtusaquinol by a thermal rearrangement during the isolation procedure Heartwood extractives of other *Dalbergia* species have recently been reviewed [5]

Present work Heartwood sawdust was extracted successively with petrol, Et_2O, acetone and MeOH Preparative column chromatography on LH20($CHCl_3$–EtOH, 10 1) of the concentrated ether extract gave (±)-obtusaquinol and a second, highly unstable, dihydric phenol (oil) This phenol was rapidly oxidized in air to obtusaquinone The phenol formed a *diacetate* which, after chromatographic purification on silica gel, was obtained as a light yellow oil MS-m^+ (*m/e*) obs 340 13166 [Calc for $C_{20}H_{20}O_5$, m^+ (*m/e*)] 340 13106 IR ν_{max}^{Nujol} 1775, 1620, 1505, 1375, 1210, 1025 cm^{-1} The 100 MHz NMR spectrum of the diacetate in $CDCl_3$ showed the presence of two acetyl groups (s at δ2 22 and δ2 26) two benzylic protons (*d* at δ3 47, *J* 6 Hz), two vinylic protons (H_α, *d* δ6 47, *J* 16 Hz), H_β, δ6 24, sextet, *J* 16, 6 and 6 Hz), the paracoupled protons at C-2 and C-5 of the phenol (δ6 84 and δ6 65 respectively) and five aromatic protons at δ7 0–7 4 From these data this phenol is considered to be 4-cinnamyl-3-methoxycatechol (**1**)



(1)

This was confirmed by the synthesis of the diacetate from, (a) obtusaquinone by $NaBH_4$ reduction and acetylation of the product, and (b) from 3-methoxycatechol by cinnamylation in aqueous citric acid[1] and chromatographic separation of the acetylated products

Chromatography of the acetone extract on LH20 and silica gel, gave crystalline 4,2',4'-trihydroxychalcone (isoliquiritigenin) and 7,4'-dihydroxyflavanone (liquiritigenin) The chalcone separates from methanol as yellow needles, m p 199° and the flavanone as cream colored rosettes, m p 206–207° The identity of these compounds was confirmed by direct comparison with authentic specimens

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