

Trunk-wood (1.4 kg) collected at km-14 of the Manaus Itacoatiara road was extracted with benzene at room temp. The extract (40 g) was chromatographed on silica. Elution with light petrol. gave safrol (12 ml). Elution with light petrol.-benzene, 1:1 gave first sitosterol (350 mg) and next eugenol (8 ml). Elution with benzene gave 3,4-methylenedioxy-cinnamaldehyde (200 mg, m.p. 84–85°, lit.⁶ m.p. 84–85°). Elution with benzene–AcOEt 4:1 gave first 3,4-methylenedioxy-cinnamyl alcohol (80 mg, m.p. 75–77°, lit.⁷ m.p., which we were not able to confirm, 123°) and next syringic aldehyde (120 mg, m.p. 108–110°, lit.⁸ m.p. 109–110°). The identifications were obtained by spectral means and confirmed by direct comparison with authentic samples.

Comments. Surprisingly 3,4-methylenedioxy-cinnamyl alcohol and 3,4-methylenedioxy-cinnamaldehyde seem to be rare natural products. While the proven occurrence of the aldehyde was so far restricted to two Lauraceae (camphor tree,⁹ sassafras⁶), the alcohol does not seem to have been isolated previously.

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CONSTITUENTS OF *LINDERA ERYTHROCARPA*

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Key Word Index.—*Lindera erythrocampa*, Lauraceae; bark and leaves; linderone; methyl-linderone; lucidone; methyl-lucidone.

Plant. *Lindera erythrocampa* Makino. *Source.* Gifu Prefecture, Japan. *Uses.* Leaves as a folk medicine of Gifu Prefecture for stomach ache and thirst. *Previous work.* Tannin of bark¹ and essential oil of leaves.²

Bark. The Et₂O extract of dry bark was chromatographed on silica and eluted with light petrol. (b.p. 45–60°), followed by benzene and EtOAc. Benzene eluted linderone (I), orange yellow needles, C₁₆H₁₄O₅, m.p. 92–93.5° (TLC, IR, UV, NMR and m.m.p.). Ethyl acetate afforded methyl-linderone (II), yellow needles, C₁₇H₁₆O₅, m.p. 84–85° (TLC, IR, UV, NMR and m.m.p.). The presence of lucidone (III) and methyl-lucidone (IV) were only detected by TLC.

Leaves. The presence of I, II, III and IV were detected by TLC from Et₂O extract of dry leaves. TLC on Kiesel-gel H; solvent systems: benzene–EtOAc (9:1), EtOAc, and CHCl₃–MeOH (9:1), color reagent: I₂ and Ehrlich reagent.

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