Phytochemistry, 1970, Vol. 9, p. 673. Pergamon Press. Printed in England.

SHORT COMMUNICATION

XANTHONES OF *RHEEDIA GARDNERIANA*[1]

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(*Received* 5 *July* 1969)

Abstract—1,5-Dihydroxyxanthone, 1,7-dihydroxyxanthone, 1,6-dihydroxy-5-methoxyxanthone, lupeol, betulin and β-sitosterol were isolated from *Rheedia gardneriana* Pl. & Tr.

Plant. Rheedia gardneriana Pl. & Tr., trivial name "bacuparí", family Guttiferae.

Source. Dois Irmãos forest, Recife, Pernambuco State, Brazil.

Bark. The benzene extract (155 g, 5%) was chromatographed on a silica column. From fractions eluted with benzene–$CHCl_3$ crystallized lupeol (10 g), and from fractions eluted with $CHCl_3$ crystallized betulin (30 mg).

Wood. The benzene extract (57 g, 0·7%) was chromatographed on a silica column. The fraction eluted with $CHCl_3$ was crystallized from EtOH. First crop: Aliphatic ester, m.p. 80–83° (184 mg); second crop: β-sitosterol (1 g). The residue of the mother-liquor was chromatographed on a silica column. Elution with benzene–$CHCl_3$ (1:1) produced a fraction which was crystallized from $CHCl_3$–light petroleum, affording 1,6-dihydroxy-5-methoxyxanthone (30 mg) (buchanaxanthone), isolated previously from *Garcinia buchananii* Baker[2] and *Calophyllum fragrans* Ridley.[3] The residue of the mother-liquor was crystallized from EtOH yielding 1,5-dihydroxyxanthone (10 mg) isolated previously from *G. buchananii* Baker,[2] *Mammea americana* L.,[4] *M. africana* G. Don[5] and *Mesua ferrea* L.[6] Elution with chloroform produced 1,7-dihydroxyxanthone (9 mg) (euxanthone), widespread in Guttiferae species.[7]

All substances were identified by direct comparison (co-chromatography, mixed m.p., u.v. and i.r. spectra) with authentic samples.[2,8]

Acknowledgements—The authors wish to thank the Fundação de Amparo à Pesquisa do Estado de São Paulo for financial support, Dr. Geraldo Mariz, Universidade Federal de Pernambuco, for the collection and the classification of the plant, Dr. F. Scheinmann, University of Salford, for a sample of buchanaxanthone, and Professor W. D. Ollis, The University, Sheffield, for the mass spectra.

[1] Part XX in the series "The Chemistry of Brazilian Guttiferae"; for Part XIX, see O. R. GOTTLIEB and G. M. STEFANI, *Phytochem.* **9**, 453 (1969).

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