ANTHRACENE DERIVATIVES FROM RUMEX ABYSSINICUS

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Examination of Rumex abyssinicus Jacq. (Polygonaceae), a plant used in traditional medicine as purgative and hypoglycemic agent, is reported.

EXPERIMENTAL.

PLANT MATERIAL.—The tubers of R. abyssinicus were collected 160 km north of Addis Ababa near Debre Behran, in January 1983, and identified by Ato Zerihun Woldu of the National Herbarium, Addis Ababa University, Ethiopia, where a voucher specimen is deposited.

EXTRACTION AND IDENTIFICATION. --- The combined CHCl₃ and Me₂CO extracts (20.5 g) of powdered tubers (200 g) of the plant afforded by extended cc chrysophanol (1%), physcion (1%), emodin (10%), palmidin C (emodin-chrysophanol bianthrone, 2%), chrysophanol-8-β-D-glucoside (3%), and emodin-8- β -D-glucoside (3%), which were identified on the basis of their physical and spectral data.

The anthraquinones were confirmed by authentic sample comparison. Palmidin C, $C_{30}H_{22}O_7$, mp 258-259°, on FeCl₃ oxidation (1) gave emodin and chrysophanol. It has been previously isolated only as the glucoside (1,2). Chrysophanol-8-β-D-glucoside, mp 240-242° [lit. (2) mp 245-246°], and emodin-8-β-D-glucoside, mp 190-191° [lit. (2) mp 190-191°] on acid hydrolysis gave, in addition to β -D-glucose, chrysophanol and emodin, respectively.

Full details of the isolation and identification are available on request to the senior author.

LITERATURE CITED

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ISOLATION OF THE CONSTITUENTS OF THE ROOT-BARK OF GUETTARDA PLATYPODA

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The root bark of Guettarda platypoda DC. (Rubiaceae), a shrub that grows near the coastal plain of northeastern Brazil and is used in popular medicine as a febrifuge and during the puerpural period (1), showed considerable anti-inflammatory activity in our laboratory (2). The CHCl3-soluble part of the nonbasic fraction of the ethanolic extract of the root bark, which retained the anti-inflammatory activity, yielded quinovic acid, rotundic acid, and β -sitosterol, whereas the CHCl₃-insoluble part afforded a saponin, mp 220-222°, which upon acid hydrolysis gave quinovic acid. The physical properties of the saponin appear to be different from those of quinovin A, B, and C (3).

EXPERIMENTAL

PLANT MATERIAL.-The plant material used in this study was collected from the interior of the State of Paraíba in February 1980, and the voucher is deposited at the LPX Herbarium of the Universidade Federal da Paraíba, João Pessoa, Paraíba, Brazil.

EXTRACTION AND ISOLATION OF THE COMPOUNDS.—The dried ethanolic extract of the defatted root bark (1 kg) of G. platypoda was treated with dilute H_2SO_4 and filtered. The acid aqueous filtrate was treated in the usual way to give a basic fraction, which was put aside for further treatment. The residue (150