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AUCUBIN FROM SUTERA DISSECTA

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Scrophulariaceous species are known to contain iridoids (1). Several species used medicinally have been examined for their chemical constituents. In the literature, nothing could be found concerning the constituents of *Sutera dissecta* Roth (Scrophulariaceae). We report the isolation and identification of aucubin.

EXPERIMENTAL

GENERAL EXPERIMENTAL PROCEDURES.—Uv spectra were run in MeOH on a Perkin-Elmer 137 uv recording spectrophotometer and ir spectra in KBr pellets on a Perkin-Elmer 237; mps were determined on a Köfler hot-stage and microscope and were uncorrected; ¹H-nmr spectra were determined in D₂O using TMS as internal standard on a Brüker spectrospin 80; optical rotations were determined on a Zeiss polarimeter; elementary analyses were determined on a Perkin-Elmer 240 CHN; silica gel 60 Merck was used for column chromatography.

PLANT MATERIAL.—The plant was collected in January 1982, by Bhogilal C. Shah in the Indore district, India, and anthenticated by Dr. J. Guedes, Museum National d'Histoire Naturelle, Paris, France (82/207). An herbarium specimen of the plant material is being preserved in the laboratory.

EXTRACTION AND ISOLATION OF AUCUBIN.—The air-dried and powdered aerial parts (1 kg) of *S*. *disseta* were defatted with hexane, extracted with EtOH-H₂O (8:2), and the solvent evaporated. The portion of the crude mixture soluble in absolute EtOH (76 g) was chromatographed on silica gel (60 Merck, 700 g) and eluted with EtOAc/MeOH mixtures of increasing polarity.

Fractions 11-13: eluent EtOAc-MeOH (9:1), gave a solid which crystallized from EtOH, yielded pure aucubin. Mp, ir, ¹H nmr, optical rotation and elemental analysis values are in agreement with those in the literature (2-3).

ENZYMATIC HYDROLYSIS OF AUCUBIN.—Aucubin (100 mg) was incubated with emulsin at 37° for 24 h. The aqueous layer afforded D-glucose which was identified by co-tlc and by analytical gc as its trimethylsilyl derivative.

ACETYLATION OF AUCUBIN.—Aucubin (500 mg) was treated with Ac_2O -pyridine, worked up in the usual manner to afford aucubin hexa-acetate.

Mp, ir, $\{\alpha\}D$, ¹H nmr, of aucubin and aucubin hexa-acetate were found identical with authentic samples kindly supplied by Prof. F. Bailleul, U.E.R. de Pharmacie, Laboratoire de Pharmacognosie, Lille-Cedex 59045, France.

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

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