

SAKURANETIN AND PULCHERRYL ACETATE FROM
EUPATORIUM HAVANENSE

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Key Word Index—*Eupatorium havanense*, Compositae sakuranetin pulcherryl acetate

Plant *Eupatorium havanense*, H B K, voucher No 7261 ITESM *Source* Hills south of Monterrey in November 1971 *Uses* Unknown *Previous work* Only on sister species, citotoxic sesquiterpenolactones and flavonoids have been isolated^{1,2} and other flavonoids alkaloids, triterpenes has been found³⁻⁵

Present work The whole plant (1500 g) was dried, powderized and extracted successively with petrol (30–60°) and the marc with EtOH *Petrol fraction* On evaporation 62 g of residue was left This residue was stirred with EtOH A white powder was formed, which after separation and purification, afforded 4.329 g of white crystals m p 228–229°, $[\alpha]_{589}^{19} +63.9^\circ$ CHl, $C_{32}H_{50}O_2$ (M^+ , m/e 468) identical with pulcherryl acetate⁶ a stereoisomer of β -amyrin,⁷ m m p, IR, NMR, co-TLC On saponification of the white crystals, a solid, m p 115–116°, $C_{30}H_{48}O$ was obtained It was identical with pulcherrol, m m p MS, IR, RMN, $[\alpha]$ and co-TLC The residue soluble in alcohol was chromatographed on a column of silica gel, monitoring the eluates by TLC Triacotane $C_{30}H_{62}$ m p 65° was obtained and identified by comparison with an authentic sample The $C_6H_6-CHCl_3$ afforded β -sitosterol identified by m m p with an authentic specimen and its IR, NMR, $[\alpha]$, constants

From EtOH On evaporation the EtOH extract gave 96 g of residue This material was shaken with $CHCl_3$ and the $CHCl_3$ layer was chromatographed on a silica gel column On elution with C_6H_6 -acetone, yellowish crystals were obtained After purification they melted at 155°, UV, IR, NMR and MS were identical with the corresponding to sakuranetin (5,4'-dihydroxy-7-methoxyflavone) There was no depression on m m p with an authentic sample, and only one spot was observed on co-TLC and co-PC

Comment This is the first record of the isolation from a Compositae of a pulcherrol derivative, previously only found in Euphorbiaceae⁷

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