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CONSTITUENTS OF *EUPHORBIA LATHYRIS*

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Plant. Euphorbia lathyris L.

Uses. Medicinal.¹

Previous work. On seeds²⁻⁵ and leaves.⁶

Seeds. Extracted with light petroleum, chloroform and ethanol.

Petroleum ext. The oil extracted with petrol on keeping for a few weeks deposited the crystals of the product, m.p. 198–199°. ²⁻⁴ The structure has very recently been determined as phenylacetate-diacetate of a new diterpene 6,20-epoxy-lathyrol by X-ray crystallographic studies.⁷

Ethanol extract. The ethanolic extract on concentration deposited a yellow solid which on purification by charcoal and crystallization from MeOH yielded light yellow prisms, m.p. 269–270°. It has R_f 0.73 on filter paper with *n*-BuOH–HOAc–H₂O (4: 1: 1). It forms an acetate, m.p. 140–141° and a methyl ether, m.p. 152–154°. Work on this product is in progress.

Leaves. Petroleum ext. on chromatography over alumina yielded β -sitosterol, C₂₉H₅₀O (m.p., mixed m.p. and $[\alpha]_D$; m.p., mixed m.p. and $[\alpha]_D$ of acetate).

Stem. Petroleum ext. chromatographed on alumina. Petrol fraction afforded hentriacontane (m.p. and mixed m.p.). Petrol-benzene (8: 1) yielded taraxerone, C₃₀H₄₈O (m.p., mixed m.p., $[\alpha]_D$, IR, TLC). Benzene–Et₂O (4: 1) fraction yielded β -sitosterol (m.p., mixed m.p., $[\alpha]_D$; m.p., mixed m.p. and $[\alpha]_D$ of acetate). Benzene–E&O (1 : 1) eulate afforded taraxerol, C₃₀H₅₀O (m.p., mixed m.p., $[\alpha]_D$, IR and TLC; m.p., mixed m.p., $[\alpha]_D$, of acetate and benzoate) and betulin (m.p., mixed m.p., $[\alpha]_D$, IR, TLC; m.p., mixed m.p. and $[\alpha]_D$ of acetate).

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