

EtOAc-EtOH) (43 mg),  $[\alpha]_D^{20} -161^\circ$  (c 1.0, EtOH), acid hydrolysis gave quercetin and arabinose; *quercitrin*<sup>7</sup> (25 mg) (7:3, EtOAc-EtOH), m.p. 183–185°, acid hydrolysis gave quercetin and rhamnose; *meratin*<sup>8</sup> (28 mg) (1:4, EtOAc-EtOH), m.p. 182–183°, acid hydrolysis afforded quercetin and glucose; *rutin*<sup>9</sup> (33 mg) (EtOH), m.p. 178°, acid hydrolysis afforded quercetin, rhamnose and glucose. All the flavonoids were identified by direct comparison with authentic samples and by UV spectral analysis.

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*Key Word Index*—*Adenopeltis colliguaya*; Euphorbiaceae; kaempferol and quercetin glycosides; sitosterol; hydrocarbons.

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## TRITERPENOIDS AND STEROIDS OF *EUPHORBIA PILULIFERA*

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*Plant. Euphorbia pilulifera. Previous work.* Alkaloids from the latex.<sup>1</sup>

*Present work.* Leaves and stems. The neutral fraction of hot hexane extract was chromatographed on an Al<sub>2</sub>O<sub>3</sub> column. The following pentacyclic triterpenes and sterols were identified: taraxerol only in free form (m.p., acetate and ketone,<sup>2</sup> TLC, GLC and IR); taraxerone (m.p.,<sup>2</sup> TLC, GLC and IR).  $\alpha$ - and  $\beta$ -Amyrin (10:1) were identified by GLC in the esterified form only. Campesterol (20%), stigmasterol (10%) and sitosterol (70%) occurred in both free and esterified forms (TLC and GLC) in mixtures. No euphol, euphorbol, tirucallol or other tetracyclic triterpenes could be detected in this plant.<sup>3</sup>

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*Key Word Index*—*Euphorbia pilulifera*; Euphorbiaceae; taraxerone; taraxerol;  $\alpha$ - and  $\beta$ -amyrin; steroids.