SHORT COMMUNICATION

TRITERPENES OF EUPHORBIA POLYGONIFOLIA*

A. N. STARRATT

Research Institute, Canada Department of Agriculture, London, Ontario, Canada

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Plant. Euphorbia polygonifolia L.—Euphorbiaceae.

Source. Picton, Ontario.

Previous work. Many studies on sister species. 1-3

Constituents of aerial parts.† A petroleum ether extract was saponified. Chromatography (alumina) of the neutral part yielded an inseparable mixture of alcohols (major fraction), β -sitosterol (m.p. 138–140°; acetate, m.p. 126–127°, $[\alpha]_D - 42^\circ$ (c, 0·4)), and cycloart-23-en-3 β , 25-diol (m.p. 194–199°; monoacetate, m.p. 146–148°). After acetylation of the alcohol mixture lupeol acetate (m.p. 212–214°, $[\alpha]_D + 43^\circ$ (c, 0·3)), cycloartenol acetate (m.p. 118–122°, $[\alpha]_D + 60^\circ$ (c, 1·0)), β -amyrin acetate (m.p. 232–234°) and ceryl acetate (m.p. 64–65°; hydrolysed to ceryl alcohol, m.p. 79–81°) were isolated by chromatography over alumina and on silver nitrate impregnated Kieselgel plates. The triterpenes of E. polygonifolia are similar to those reported 3 as latex constituents of E. hirta which belongs to the same section (Anisophyllum) but a different subsection of Euphorbia as classified by Pax and Hoffmann.4

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- * Contribution No. 398.
- † Compounds were identified by direct comparison (mxd. m.p., i.r., TLC) with authentic specimens.
- ¹ A. N. STARRATT, Phytochem. 5, 1341 (1966).
- ² G. Ponsinet and G. Ourisson, Phytochem. 4, 799 (1965).
- ³ G. Ponsinet and G. Ourisson, Phytochem. 7, 89 (1968).
- ⁴ F. PAX and K. HOFFMANN, in *Natürlichen Pflanzenfamilien* (edited by A. ENGLER), 2nd edition, Vol. 19c, p. 208, W. Engelmann, Leipzig (1931).