

## GESNERIACEAE

CONSTITUENTS OF THE LEAVES AND STEMS OF *SARMIENTA*  
*REPENS*\*

M. SILVA† and G. POBLETE

Departamento de Botanica, Universidad de Concepcion, Chile

and

P. G. SAMMES

Chemistry Department, Imperial College, London SW7

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*Plant. Sarmienta repens* R. et P.*Previous work.* None.

*Compounds isolated.* The stems and leaves were collected in March 1966, near Concepcion, Chile. Extraction of the dry material (2.49 kg) with light petroleum (b.p. 60–80°) yielded a fraction (100 g) which was separated into neutral (94 g) and acidic (3 g) fractions.

The neutral material afforded, by column chromatography through alumina, the following compounds.

A hydrocarbon, hentriacontane (800 mg), m.p. 63–64° (from petroleum ether),  $[\alpha]_D^{20}$  0.00° (c 0.6, CHCl<sub>3</sub>),  $\nu_{\max}^{\text{film}}$  2933, 2877, 1471, 737, and 720 cm<sup>-1</sup>. Its mass spectrum showed a parent ion at *m/e* 436 corresponding to C<sub>31</sub>H<sub>64</sub>.

Lupenone (950 mg), m.p. 164–165° (from EtOH) (identical m.p., mixed m.p. and *R<sub>f</sub>* on TLC to authentic material),  $[\alpha]_D^{20}$  +57.4° (c 1.0, CHCl<sub>3</sub>),  $\nu_{\max}^{\text{KBr}}$  1718 cm<sup>-1</sup>, 2,4-dinitrophenylhydrazone, m.p. 214–216°.

A methylenic alcohol fraction, (90 mg), m.p. 53–56°,  $[\alpha]_D^{20}$  0.00° (c 0.3, CHCl<sub>3</sub>),  $\nu_{\max}^{\text{film}}$  3448, 2961, 2857, 1471, 1389, 737, and 720 cm<sup>-1</sup>. Its mass spectrum showed a parent ion at *m/e* 452, corresponding to C<sub>31</sub>H<sub>64</sub>O, as well as peaks corresponding to lower homologues at *m/e* 438 and 424.

Daucosterin<sup>1</sup> (12 mg), m.p. 287–290° (from EtOH) (m.p., mixed m.p. and TLC),  $\nu_{\max}^{\text{KBr}}$  3350, 2930, 1445, 1360, 1050 cm<sup>-1</sup>; tetra-acetate, m.p. 165–170°,  $\nu_{\max}^{\text{KBr}}$  2925, 1738, 1626, 1460, 1380, 1240 cm<sup>-1</sup>. Hydrolysis with 2.5 N HCl in EtOH afforded  $\beta$ -sitosterol, m.p. 135–136° (from EtOH) (m.p., mixed m.p. and co-chromatography). The glucose liberated was identified by paper chromatography.<sup>2</sup>

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† To whom enquiries should be sent

<sup>1</sup> L. J. SWIFT, *J. Amer. Chem. Soc.* **74**, 1099 (1952).

<sup>2</sup> C. M. WILSON, *Anal. Chem.* **31**, 1199 (1959)