Phytochemistry, 1971, Vol. 10, p. 2827. Pergamon Press. Printed in England.

## VOLATILE CONSTITUENTS OF MATRICARIA MATRICARIOIDES

BRIAN M. LAWRENCE, STUART J. TERHUNE and JAMES W. HOGG Stange Canada Ltd., 3340 Orlando Drive, Malton, Ontario, Canada (Received 19 January 1971)

Plant. Matricaria matricarioides (Less.) Porter = Matricaria discoidea D.C. Source. Waterloo County, Ontario, Canada.

Uses. None known.

*Previous work*. The presence of acetylenic<sup>1</sup> and 7-glycoside compounds<sup>2</sup> have been reported in the non-volatile portion of the plant.

THE PARTIALLY dried, whole above ground portion of the plant was steam distilled for 4 hr, yielding 0.04% of a pale yellow oil which had a sweet musty odour. The oil, which was analysed using procedures previously described, <sup>3.4</sup> was found to contain the following compounds: myrcene (15.5), limonene (1.3), 1,8-cineol (0.1), cis-allo-ocimene (0.1), cis-3-hexenyl isovalerate (0.1), trans- $\beta$ -farnesene (46.6), germacrene D (21.6), carvone (1.4), geranyl isobutyrate (7.8), trans-nerolidol (0.6), phenyl ethyl isovalerate (0.5),  $\alpha$ -cadinol (0.1) and  $\beta$ -humulen-7-ol. Trace amounts of  $\alpha$ -pinene,  $\beta$ -pinene and  $\beta$ -cymene were also found present. All percentages were calculated from disc integration measurements using a flame ionization detection of a pressure and temperature programmed capillary gas chromatographic analysis using a column of Carbowax 6000.

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<sup>&</sup>lt;sup>1</sup> N. A. Sorensen, *Chemical Plant Taxonomy* (edited by T. Swain), Chap. 9, p. 228, Academic Press, New York (1963).

<sup>&</sup>lt;sup>2</sup> R. HEGNAUER, Chemotaxonomie der Pflanzen, Band 3, p. 527, Birkhauser Verlag, Basel (1964).

<sup>&</sup>lt;sup>3</sup> B. M. LAWRENCE, J. W. HOGG and S. J. TERHUNE, Perfum. Essent. Oil Rec. 60, 88 (1969).

<sup>&</sup>lt;sup>4</sup> B. M. LAWRENCE, J. W. HOGG and S. J. TERHUNE, J. Chromatog. 50, 59 (1970)