## ISOLATION OF DICTAMNINE FROM CHORILAENA QUERCIFOLIA (RUTACEAE)

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[Manuscript received April 26, 1971]

The genus *Chorilaena* belongs to the plant family Rutaceae and contains three species which are endemic to the south-western province of Western Australia. *Chorilaena quercifolia* Endl. is a tall shrub which is an understorey species in the karri forest and is known locally as "hazel". Dictamnine has now been isolated from an extract of the roots of this species.

This work provides an example of the occurrence of a furoquinoline alkaloid in yet another genus belonging to the Rutaceae.<sup>2</sup>

## Experimental

General remarks concerning experimental procedures which have been made previously<sup>3</sup> also apply to the present work.

Fresh roots (26 kg), collected from shrubs growing near Pemberton, W.A., in August 1962, were milled and extracted with methanol at room temperature. The methanol was evaporated under reduced pressure and the aqueous residue was shaken with ether. Extraction of the ethereal layer with 1% aq. HCl, basification of the acid solution, and re-extraction with ether afforded the crude base as a viscous oil  $(7 \cdot 6 \text{ g})$ . Sublimation of the crude base at  $145^{\circ}/0 \cdot 1 \text{ mm}$  yielded a crystalline product  $(3 \cdot 35 \text{ g})$  which was recrystallized from ethanol whereupon dictamnine was obtained as needles, m.p.  $131-132^{\circ}$ . The melting point was not depressed on admixture with an authentic specimen of dictamnine isolated from *Flindersia maculosa* (Lindl.) F. Muell., 4 and the infrared spectra (KBr) of the two samples were identical (Found: C,  $72 \cdot 0$ ; H,  $4 \cdot 6$ ; N,  $7 \cdot 0$ . Calc. for  $C_{12}H_{9}NO_{2}$ : C,  $72 \cdot 4$ ; H,  $4 \cdot 6$ ; N,  $7 \cdot 0^{\circ}_{0}$ ).

## Acknowledgments

We thank Mr T. E. H. Aplin and Mr R. D. Royce for identifying the plant material and Professor E. Ritchie for an authentic specimen of dictamnine.

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<sup>&</sup>lt;sup>4</sup> Binns, S. V., Halpern, B., Hughes, G. K., and Ritchie, E., Aust. J. Chem., 1957, 10, 480.