

Br 26.1 per cent. The picrate forms yellow needles, m.pt. 231.5° C. The aurichloride forms golden scales, m.pt. 146.5° C.

## SUMMARY

1. Two new alkaloids, butropine (*iso*-butyryltropeine) and valtropine (*d*- $\alpha$ -methylbutyryltropeine) have been found in the leaves of *Duboisia leichhardtii*. They may occur in quantity comparable with that of the hyoscyne.

2. The two bases have been separated by vacuum fractionation, and by fractional extraction of an ether solution with aqueous acid. They form well defined crystalline salts.

3. *n*-Butyryl, *isobutyryl* and *isovaleryltropeines* have been synthesised, and the m.pt. of a number of their salts are recorded.

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## REFERENCES

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2. Barger, Martin and Mitchell, *ibid.*, 1938, 1685.
3. Trautner, *Austral. chem. inst. J. and Proc.*, 1947, 411.
4. Neufeld and Garvey, *ibid.*, 1946, 371.
5. Barger, Martin and Mitchell, *J. chem. Soc.*, 1937, 1820.
6. Drake and Veitch, *J. Amer. chem. Soc.*, 1935, 57, 2624.

## Supplementary Note by the Authors

After this paper had been submitted for publication, the "Chemische Berichte" for November 1953 became available in Melbourne. This contained a paper<sup>1</sup> giving an account of the identification of *isobutyryltropeine* and *d*- $\alpha$ -methylbutyryltropeine in *D. leichhardtii*. This paper was received by the Editor on September 11, 1953. The results given by the authors are mainly similar to our own, and we attribute some differences in melting points to the greater purity of our derivatives. We had the advantage of working with much greater quantities of material, and our bases were vacuum-distilled, eliminating all traces of hyoscyne and hyoscyamine.

The isolation and identification of butropine and valtropine was mentioned briefly, and a method for their estimation in *D. leichhardtii* leaf described, in a paper by one of us in the *Australian Journal of Applied Science*<sup>2</sup>. This paper was received by the Editor on February 18, 1953, but was delayed in publication.

## REFERENCES

1. Deckers and Maier, *Chem. Ber.*, 1953, 86, 1424.
2. Rosenblum, *Aust. J. Appl. Sci.*, 1954, 5, 51.