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ALKALOIDS OF *HUNTERIA ELLIOTII*

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Plant. Hunteria elliotii (Stapf) Pichon. Source. J. Brookman-Amissah, Silviculturist, Department of Forestry, Kumasi, Ghana. *Uses.* Medicinal [1] *Previous work. Hunteria elliotii* has never been investigated but the alkaloidal contents of *H. eburnea*, [2–9] *H. umbellata* [10–14] and *H. corymbosa* [15,16] are well known.

Present work. The different tissues were exhaustively extracted in a Soxhlet with CH_2Cl_2 and then with MeOH. The different alkaloids were isolated by a combination of column chromatography, preparative TLC and fractional crystallization. Column chromatography was carried out mainly on alumina which was found superior to cellulose and Si gel when dealing with small amounts of alkaloids. The alkaloids were identified by co-chromatography employing different solvent systems with cerium(IV) ammonium sulphate in 85% phosphoric acid as visualizing agent [17] The results are as follows:

The alkaloidal content of the different tissues were estimated according to Hultin and Torssell [18] and a modified Douglas and Kiang [19] procedure. The original Douglas and Kiang procedure does not separate the tertiary and quaternary bases but extraction of the dried material first with $CHCl_3$ and then with MeOH allowed an estimation of these two groups of alkaloids. As can be seen from Table 1 the Douglas and Kiang procedure allows a more efficient extraction of the material.

The alkaloids found have all previously been found in *Hunteria* species. It is noteworthy that of the N_b-diastereomeric alkaloids hunterburnine-α-methochloride and hunterburnine-β-methochloride only the former was detected and only in the stem bark. These alkaloids have previously been found occurring together in *H. eburnea* [2].

Table 1. Amount of alkaloids in tissues of *H. elliotii*

Plant part examined	Alkaloids* tertiary	quaternary
rootbark	0.9 (0.9)	0.8 (2.8)
stembark	1.8 (0.8)	1.2 (2.8)
leaves	0.4 (0.4)	0.1 (1.4)
seeds	1.6	0.3
fruit pods	0.2	0.2

* Hultin and Torssell method [18]: the results from the Douglas and Kiang method [19] in parentheses.

The root bark contained burnamine and pleiocarpamine; the stem bark had burnamine, eburnamine, hunterburnine-α-methochloride, huntrabrine-methochloride, pleiocarpamine and yohimbole-methochloride; the leaves contained eburnamine, pleiocarpamine, and yohimbole-methochloride; and the seeds akuammidin, burnamine, and pleiocarpine.

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