INDOLE ALKALOIDS OF *AILANTHUS ALTISSIMA*

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Ailanthus altissima (Mill.) Swingle, Syn. *A. glandulosa* Desf. (Simaroubaceae), is a large tree indigenous to China. It is known as the "Tree of Heaven" and has been the subject of several chemical studies. The presence of quassinoid-type bitter principles (1-6), flavonols (7,8), and 2,6-dimethoxy-*p*-benzoquinone (9,10) has been reported in earlier papers. Recently, a series of four canthin-6-one substances were isolated and identified from the wood (11) and from the root bark (12) by two groups of authors working independently of each other. In this work, three alkaloids were isolated and identified from the leaves of *A. altissima*.

EXPERIMENTAL

PLANT MATERIAL.—The leaves of *A. altissima* Swingle were collected in Manchester (U.K.) and authenticated at the Manchester University herbarium, where a specimen has been deposited.

METHODS AND RESULTS.—Dried plant material (600 g) was successively extracted with petroleum ether, $CHCl_3$, and MeOH. The solvents were evaporated *in vacuo* leaving 13g, 18g, and 25g of residues, respectively. From the residue of $CHCl_3$ extract, three alkaloids were isolated by column chromatography on alumina: canthin-6-one, 1-methoxycanthin-6- one, and 4-methoxy-1-vinyl-β-carboline. They were identified by standard methods: tlc, color reactions, mp, spectral data (11,13) (uv, nmr, ms) and comparison with authentic samples.

Full details of the isolation and identification of the compounds are available on request to the first author.

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