# ALKALOIDS OF ALSTONIA MACROPHYLLA

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The genus Alstonia belongs to family Apocyanaceae. Two species of this genus, namely *A. macrophylla* and *A. scholaris* are found in Sri Lanka. The former (*S.* 'Havari Nuga') is very common in Sri Lanka.

The chemical studies of *A. macrophylla* growing in other countries have been reported(1)(3). This plant is used by Phillippines to prepare important drugs.(2)

In the present study the powdered dried bark (2 kg) of *A. macrophylla* was extracted with 70% ethanol, concentrated, acidified with dilute hydrochloric acid and defatted using light petroleum (80°–100°). The aqueous solution was basified (with ammonium hydroxide) and extracted repeatedly with chloroform to obtain the tertiary bases (63.5 g).

The quaternary alkaloids present in the aqueous phase were precipitated as a picrate. This precipitate was dissolved and the alkaloid was converted into its chloride form by passing it through a Amberlite IRA 400 (cl) (wt – 40 g).

The fractionation of the chloroform fraction yielded three indole alkaloids. The major alkaloid was a dimeric indole alkaloid. The ir data of the least polar compound indicates the presence of an oxo-enol ether function and the nmr data suggests a polycyclic structure resembling an indolehomotropane alkaloid.

The structures of these three compounds have been assigned using uv, ir, $^1$H NMR and ms data.

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*References*

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3. Saxton, J. E., *The Alkaloids*, (12), 207-224. (1970).