
ABSTRACT

The bark of two Malaysian *Alstonia*, the *Alstonia spatulata* Bl. and *Alstonia macrophylla* Wall. were investigated for their alkaloidal content. Extraction followed by repeated chromatography resulted in the isolation of thirteen alkaloids. The elucidation of structures were carried out by spectroscopic methods.

Two alkaloids were isolated from the bark of the *A. spatulata* Bl. and were identified as Leuconoxine and a methoxy epi-echitamidine type alkaloid respectively. From the bark of *A. macrophylla* Wall. eleven alkaloids were isolated and were identified as : Talcarpine, N_b -Methyl- N_b , 21-secotalpinine, Alstophylline, 19,20-Dehydro-10-methoxytalcarpine, N_b -Demethyl-alstophylline oxindole, N_b -Demethylalstophyllal oxindole, Alstonisine, Alstonal, Pleiocarpamine, Villalstonine and Macralstonine hydroxyketone.

N_b -Demethylalstophyllal oxindole and alstonal are new oxindole alkaloids and their structural elucidations are discussed in detail.

ABSTRAK

Kulit pokok dari dua tumbuhan Malaysia iaitu *Alstonia spatulata* Bl. dan *Alstonia macrophylla* Wall. telah dikumpul dan dikaji kandungan sebatian alkaloidnya. Sebanyak tiga belas sebatian alkaloid telah berjaya diasing dan ditentukan melalui kaedah pengekstrakan dan penulenan kimia. Struktur kimia tiga belas sebatian alkaloid ditentukan melalui kaedah spektroskopi.

Dua sebatian alkaloid berjaya diasingkan daripada kulit pokok *A. spatulata* Bl. dan dikenalpastikan sebagai leuconoxine dan alkaloid berangka jenis methoxy epi-echitamide.

Sebelas sebatian alkaloid telah diasingkan daripada *A. macrophylla* Wall. dan dikenalpasti sebagai : Talcarpine, N_b -Methyl- N_b , 21-secotalpinine, Alstophylline, 19,20-Dehydro-10-methoxytalcarpine, N_b -Demethyl-alstophylline oxindole, N_b -Demethylalstophyllal oxindole, Alstonisine, Alstonal, Pleiocarpamine, Villalstonine dan bentuk hidroksiketon Macralstonine.

N_b -Demethylalstophyllal oxindole dan alstonal merupakan sebatian alkaloid oxindol yang baru. Perbincangan teliti mengenai penentuan struktur sebatian N_b -Demethylalstophyllal oxindole dan alstonal telah dibentangkan.