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ALKALOIDAL CONSTITUENTS OF SOME

SRI LANKAN INSECTICIDAL PLANTS

A THESIS PRESENTED BY

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ABSTRACT

This work describes the isolation and characterisation of the chemical constituents of some Sri Lankan plants which showed activity in insecticidal screening tests. The first part describes the isolation of lycorine, tazettine and ambelline from the hot methanol extract of the bulbs of Crinum latifolium (Amaryllidaceae). Tazettine has not been previously isolated from Crinum species.

In the second part, the alkaloidal constituents of Glycosmis mauritiana (Rutaceae) were described. Two acridone alkaloids noracronycine and des-N-methylacronycine and a new carbazole alkaloid glycomaurine were isolated from the bark extract. Spectroscopic and chemical methods were used to establish the structure of glycomaurine as that of 6-methylcarbazole with a 2,2-dimethylchromene ring at 3,4- position.

Isolation of three aporphine alkaloids xylopine, nornantanine and litseferine from the cold methanol extract of the twigs and leaves of Xylopia nigricans (Annonaceae) as their acetyl derivatives is described in the third part.

The thesis also includes a chapter on the isolation of some known triterpenoid acids, oleanonic acid, oleanolic acid, lantanolic acid, lantadene A and lantadene B from the hot petroleum ether extract of the roots of Lantana camara (Verbenaceae).