

CHAPTER V

CONCLUSION AND RECOMMENDATION

The present work led to the isolation of two heteroyohimbines and two oxindoles, all of which possess pentacyclic structure. Full identification of the four alkaloids has been undertaken. The two heteroyohimbines are unsubstituted alkaloids with *pseudo* configuration, viz. 3-isoajmalicine, having C(19)-CH₃ α , and its C(19)-CH₃ β analogue, 19-epi-3-isoajmalicine. The two oxindoles are also unsubstituted isomers but with *normal* configuration, viz. mitraphylline and uncarine B. They are analogous to each other differing only at the orientation of C(19)-CH₃. That of the first analogue being α while in the latter it is β .

There are also two other oxindole alkaloids isolated as mixture and the evidence of base-line alkaloid(s). Further work is recommended on the isolation and characterisation of these alkaloids which would certainly reveal more interesting features concerning the alkaloid content of this particular species.

Furthermore, the investigation of alkaloidal pattern, both qualitatively and quantitatively, and site of biogenesis of the alkaloids by studying the leaves, stem bark and root collected at monthly intervals over a whole year period is strongly recommended.

The pharmacology of alkaloids is one of the most interesting points recommended to be studied. Mitraphylline has been reported to

have hypotensive activity and to exert general depressant effect on smooth muscle (Saxton, 1965 a). No other alkaloid isolated from this species has been subjected to pharmacological investigation.