

CHAPTER V



CONCLUSION AND RECOMMENDATION

The investigation of alkaloids from the leaves of *Mitragyna branonis* (Wall. ex G. Don) Craib reveals the occurrence of, apart from traces of two heteroyohimbines, six oxindole alkaloids with only *normal* open E ring configuration. Ciliaphylline, the B series methoxy substituted oxindole alkaloid with ethyl group at C(19), is the dominant constituent and being one of the two which have been isolated and identified. The other is the C(19) vinyl isomer of ciliaphylline, viz. specionoxeine. Both have never been reported in the leaves of this species before. Two other oxindole alkaloids partially identified are in A series with ethyl group at C(19), one of which is the unsubstituted analogue and the other the methoxy substituted, viz. isorhynchophylline and rhynchociline, respectively. In addition, other two open E ring oxindole alkaloids have been observed but are present in too small the quantities to be isolated out and identified which also is the case for the two heteroyohimbines.

Further larger scale extraction of the leaves of this species is firstly recommended in the hope that the six alkaloids mentioned, and possibly more others, might be isolated and fully identified which in turn would reveal more interesting feature(s) concerning the alkaloidal content of this species.

The stem bark, root bark and also the root are further recommended to be investigated and compared with those previously been reported to present broader picture of alkaloidal content of plants grown in different geographical localities.

The investigations of young leaves and also the leaves collected from the same tree at regular monthly intervals throughout a year are also recommended, to reveal the overall pattern of alkaloids in this species.