
CHAPTER 4

CONCLUSION

The barks of both *Phoebe grandis* (Nees) Merr. and *Goniothalamus tortilipetalus* Hend., were fully studied for their chemical constituents. Four alkaloids were isolated from *Phoebe grandis* namely boldine (70), norboldine (75), laurotetanine(2) and lindcarpine (77). Two alkaloids were isolated from *Goniothalamus tortilipetalus*, namely, liriodenine (22) and discretamine (78). In addition two non-alkaloidal compounds namely, 6-styryl-2-pyrone (81) and Goniothalamine (33) were also isolated from *G. tortilipetalus*. Three alkaloids were isolated from the leaves of *G. tortilipetalus* namely liriodenine (22), lanuginosine (87) and asimilobine (86).

The alkaloids obtained belong to three different classes as stated below:

1) Aporphine alkaloids:

Boldine (70), norboldine (75), laurotetanine (2), asimilobine (86) and Lindcarpine (77)

2) Oxoaporphine alkaloids :

Liriodenine (22) and lanuginosine (87)

3) Tetrahydroprotoberberine : Discretamine (78)

All alkaloids from *Phoebe grandis* (Nees) Merr., belong to the aporphine type. They are substituted either by OH or OCH₃ on ring A and ring D. While the alkaloids of *Goniothalamus tortilipetalus* Hend., belong to the oxygenated aporphine; the oxoaporphine. The pharmacological study also found that 6-Styryl-2-pyrone possesses a vasorelaxant effect on rat oarta and it is cytotoxic to KB cells (ED₅₀ 48.5 ug/ml). In addition liriodenine also exhibits cytotoxicity towards KB cells (ED₅₀ 13 ug/ml).