



CHAPTER V

CONCLUSION AND RECOMMENDATION

The isolated alkaloids from *Stephania glabra* (Roxb.) Miers have been shown to be tetrahydroprotoberberines of isoquinoline alkaloids. Capaurine and tetrahydropalmatine have already been found in this species, *S. glabra* (Roxb.) Miers, together with other species. Capaurine was found in *S. kwangsiensis* H.S.Lo and *S. micrantha* and tetrahydropalmatine in *S. brachyandra* Diels, *S. dielsiana* Wu, *S. elegans* Hook.f. et Thoms., *S. intermedia*, *S. kwangsiensis* H.S.Lo, *S. mashanica*, *S. micrantha*, *S. rotunda* Lour., *S. sasakii* Hayata ex Yamamoto, *S. suberosa* Forman and *S. viridiflavens*. Xylopinine has never been reported in *Stephania glabra* (Roxb.) Miers before and this is the first report of its occurrence in this species but it is also found in the other species, for example, *S. dielsiana* Wu, *S. micrantha*, *S. suberosa* and *S. viridiflavens*.

The investigations of alkaloidal pattern, both qualitatively and quantitatively, and the role of biogenesis can be determined from various plant parts collected at monthly intervals a year period are recommended.

Several reports on the pharmacological properties of alkaloids from *S. glabra* have been studied. Tetrahydropalmatine hydrochloride caused hyperthermia in rats. Palmatine had been found to possess ACTH-like bactericidal and anticholinesterase effects,

and it had been concluded that palmatine, dl-tetrahydropalmatine and ergot alkaloids have an analogous pharmacological mechanism. Stepharine had been reported to have antihypertensive properties. Cycleanine has been shown to exhibit an antitumor effect. Structure activity relationship has been studied in capaurine for emetine type activity. Pronuciferine hydrochloride showed good spasmolytic activity (Bhakuni and Gupta, 1982). Tetrahydropalmatine and xylopinine showed weak antagonists of the dopamine response (Yvonne *et al.*, 1979). Another recommendation from this investigation is that more pharmacological studies should be conducted to reveal the over all activities of these types of alkaloids.



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