CHAPTER V

CONCLUSION AND RECOMMENDATION

P. indica Less. has been widely used in herbal medicine of many eastern countries. A number of compounds in the cuauhtemone series have been isolated from *Pluchea* species but there have been no reports of any phytochemical studies in *P. indica* Less. In this present investigation 3-(2',3'-diacetoxy-2'-methyl butyryl)-cuauhtemone, a novel eudesmane derivative from the leaves of this plant has been isolated. Full characterisation of this novel compound has been performed and discussed. Another compound (PI-2) was also isolated, but in too small amount to be fully characterised. Further large scale extraction of leaves in order to get more PI-2 is recommended.

Concerning chemotaxonomic study, the presence of a new eudesmane derivative adds more information about chemical constituents in *Pluchea* species. As a number of compounds belonging to this series have been isolated from many species of this genus such as *Pluchea chingoyo*, *P. foetida*, *P. odorata*, *P. rosea* and *P. suaveolens*, it seems likely that cuauhtemone derivatives might be chemotaxonomically valuable in the genus *Pluchea*. It is recommended to perform phytochemical studies of every plant belonging to this genus.

The pharmacological study is one of the points strongly recommended. Among the isolated compounds in eudesmane series, cryptomeridiol from *Cymbopogon proximus* Stapf. (Locksley *et al.*, 1982) has been reported to have antispasmodic activity. The particular eudesmane derivative isolated from this species has not been subjected to investigation for such action. Further work for trying out of its action especially for antispasmodic should be undertaken.