

## CHAPTER V

### CONCLUSION

*Derris reticulata* Craib is one of medicinal plants used in Thai traditional medicine which neither phytochemical nor pharmacognostical studies have been reported. In the present investigation on phytochemical study, two compounds were isolated from the stem bark of this plant (collected from the area of Erawan waterfall in Kanchanaburi Province, Thailand). The compounds DR-1 was found to be lupinifolin and DR-2 was an isoflavone namely lupiwighteone.

The identification of these isolated compounds was based on the data from various spectroscopic techniques.

All of the isolated compounds have never been reported from this species before. The present investigation has therefore led to the finding of the new constituents occurring in this particular species.

In addition to the isolation of the compounds, the determination of free sugars in the aqueous portion had been made. This result indicated that sucrose may be the major principle which provided a sweet taste to the plant.

For the pharmacognostic specification, the present comparative investigation on *Derris reticulata* Craib and *Derris scandens* Benth. deals with the quantitative values of leaf, the microscopic characters of leaf and stem powder and the chromatographic patterns of chemical constituents of stem. The methods seem to lend themselves excellently for the identification and differentiation of the plants.

Identification for the corrected botanical origin of Cha-aem Thai by Thin-layer chromatographic patterns can be concluded that Cha-aem Thai which were secured from various local traditional drug distributors are *Derris reticulata* Craib, *Cha-aem nua*.