

CHAPTER V

CONCLUSION

In the present investigation of *Garcinia atroviridis* Griff., a steroid and a xanthone were isolated from the stem bark of this plant (collected from Chumphorn, Thailand). The steroid was identified as the known β -sitosterol. The xanthone was identified as 5,8,12-trihydroxy-2,2-dimethyl-2H,6H-pyrano[3,2-b]xanthene-6-one which has never been found previously either naturally or synthetically. Various spectroscopic techniques were employed to elucidate the structure of the novel xanthone. The structure was deduced through extensive 1D and 2D NMR experiments and the complete ^1H -NMR and ^{13}C -NMR spectroscopic assignments were made unambiguously.

This work offers some knowledge in supporting chemotaxonomic information and phytochemical notification. Since xanthenes play an important role in broad array biological activities (Bennett and Lee, 1989), further work on the bio-assay of this new xanthone should be recommended.