

CHAPTER VI

CONCLUSION

In this research, the chemical constituents of the stem bark from *Croton oglongifolius* Roxb. from Amphoe Phurua, Loei Province was investigated. The chromatographic separation of hexane and ethyl acetate crude extract gave Neocrotocembraneic acid (Compound **1**, white solid crystal 1.5 g, 1.3% wt. by wt. of the dried stem bark), Crotoncembraneic acid (Compound **2**, yellowish oil 0.8 g, 0.7% wt. by wt. of the dried stem bark), a compound similar to Kolavenol (Compound **3**, yellowish oil 28 mg, 0.023% wt. by wt. of the dried stem bark), (-)-Hardwickiic acid (Compound **4**, white solid crystal 12.6 mg, 0.012% wt. by wt. of the dried stem bark) and Nasimalun A (Compound **5**, white solid crystal 0.6 g, 0.4% wt. by wt. of the dried stem bark), are presented in Table 22. The structures were determined from spectral data, including UV, IR, MS, NMR and x-ray and also by comparison with the spectral data of previously reported.

Neocrotocembraneic acid and Nasimalun A was found as a major constituent. Even though Nasimalun A was first isolated from *B. racemosa* Blume but the presence of Nasimalun A had never been reported in *Croton* species. Therefore, this research work represented the first report and X-ray data of Nasimalun A in *Croton oglongifolius* Roxb.

Table 28. Isolated substances from *Croton oblongifolius* Roxb. in this research.

Compound	Name of Compound	Weight(g)	% wt. by wt. of the dried stem bark
1	Neocrotonembraneic acid	1.5 g	1.3%
2	Crotonembraneic acid	0.8 g	0.7%
3	Compound similar to Kolavenol	28 mg	0.023%
4	(-)-Hardwickiic acid	12.6 mg	0.012%
5	Nasimalun A	0.6 g	0.4%

Suggestion for the future work

1. The investigation of chemical constituents of *Croton oblongifolius* Roxb. should be continued in order to find new sources of diterpenoids and better understanding of the biodiversity of this species.
2. The chemistry of Nasimalun A for example should be explored further in order to find the possible application of this compound and its derivatives.