

CHAPTER IV

CONCLUSION

In this research, the chemical constituent of the stem bark of *Croton oblongifolius* Roxb. was investigated. The concentrated methanolic extract of *Croton oblongifolius* stem bark was re-extracted with hexane. The hexane crude extracted was separated on silica gel column chromatography using hexane-ethyl acetate gradient system to result four new natural labdane diterpenoids, labda-7,12(*E*),14-triene (1), labda-7,12(*E*),14-triene-al (2), labda-7,12(*E*),14-triene-ol (3) and labda-7,12(*E*),14-triene-oic acid (4). In this report we present a full account of the structure elucidation of 1, 2, 3 and 4 by one and two-dimensional NMR spectroscopy and by chemical transformation. The structure of these compounds were shown in the figure 21.

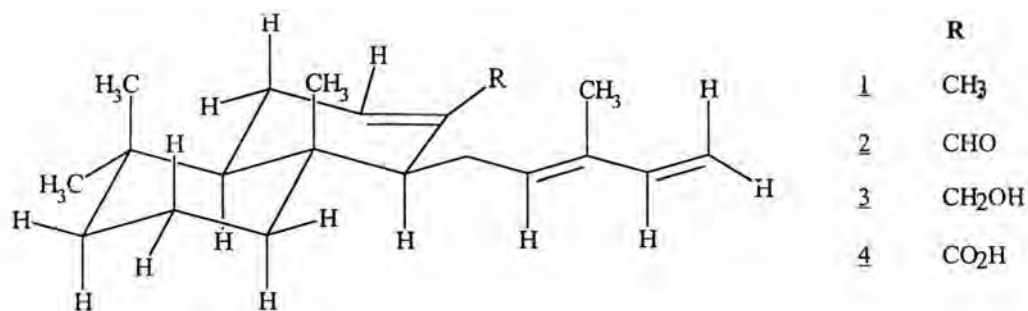


Figure 21 Stereochemistry of compound 1-4

All isolated substances and amounts were summarized in Table 17

Table 17 Isolated substances from hexane crude extract (40g) of the stem barks of *Croton oblongifolius* Roxb.

Compound	Name of compound	Weight (g)	% wt.by wt.
<u>1</u>	Labda-7,12(<i>E</i>),14-triene	4.25	0.38
<u>2</u>	Labda-7,12(<i>E</i>),14-triene-17-al	1.60	0.14
<u>3</u>	Labda-7,12(<i>E</i>),14-triene-17-ol	4.29	0.39
<u>4</u>	Labda-7,12(<i>E</i>),14-triene-17-oic acid	23.64	2.13