CHAPTER IV

CONCLUSION

The leaf of *Croton oblongifolius* Roxb., which is a plant in the genus *Croton* belongs to the family Euphorbiaceae, were extracted with hexane, dichloromethane, ethyl acetate and methanol. The crude extracts were separated by using column chromatography lead to three mixtures and three compounds as follow ;

1. Mixture 1 was a mixture of long chain hydrocarbons. (C_{27-33})
2. Compound 2 was 6,10,14-trimethyl-2-pentadecanone.($C_{18}H_{36}O$)
3. Mixture 3 was a mixture of long chain alcohols. (C_{28-29},C_{31-32}, C_{34})
4. Mixture 4 was a mixture of steroids (stigmasterol and β-sitosterol).
5. Compound 5 was a neo - crotocembraneic acid. ($C_{20}H_{30}O_2$)
6. Compound 6 was a potassium chloride. (KCl)

The chemical constituents of the leaf of *Croton oblongifolius* Roxb. can be summarized in Figure 28.

$CH_3\text{-}CH_2\text{-}(CH_2)_n\text{-}CH_2\text{-}CH_3$

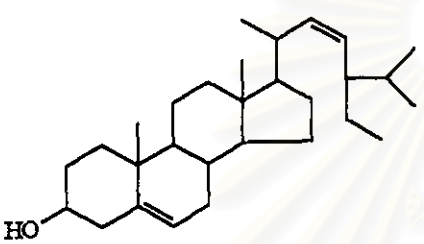
n = 23 - 29

a mixture of long chain hydrocarbons

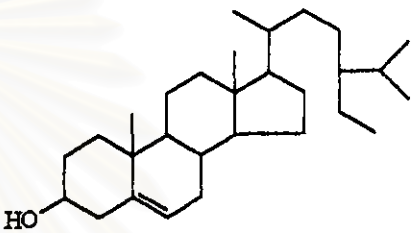
$CH_3\text{-}CH_2\text{-}(CH_2)_n\text{-}CH_2\text{-}OH$

n = 25, 26, 28, 29, 31

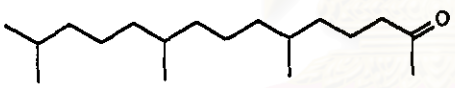
a mixture of long chain alcohols



Stigmasterol



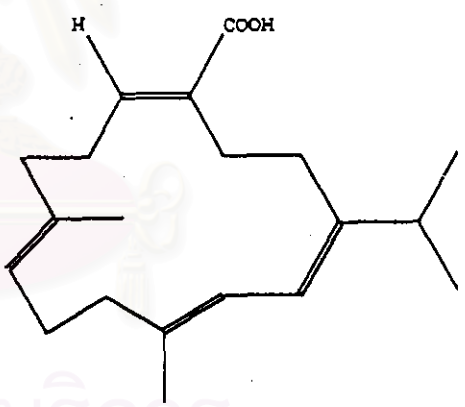
β-sitosterol



6,10,14-trimethyl-2-pentadecanone

KCl

Potassium chloride



neo-Crotocembraneic acid

Figure 28 The Chemical Constituents of the leaf of *Croton oblongifolius* Roxb.

Future work

The neo-crotocembraneic acid is a new compound which relate to crotocembraneic acid. The future studies should investigate its biological activity.The neo-crotocembraneic acid probably can inhibit tumor cells as crotocembraneic acid [21].