

## CHAPTER IV



### CONCLUSION AND SUGGESTION

From the study about anion adsorption on three red soils it could be concluded that the Thai red soils selected which have high iron oxides and kaolinite adsorb many kinds of anions such as chloride, sulphate and phosphate. The adsorption varies widely with soil properties, being largest where there are substantial amounts of iron oxides. The amount of adsorption of these three soils is in the following order : the Tha Mai > the Pak Chong > the Chok Chai series. With a given soil, anion adsorption increases with decreasing pH as well as increasing the amount of anion in equilibrium solutions. The amount of anions adsorbed appears to depend on the kinds of anions and the order of adsorption of three anions used in the study is as followed : phosphate > sulphate > chloride, which is true for every soil used.

Since this is the first attempt to study anion adsorption, it is found that there are more information that should be studied further in order to get a broader view point. They are as follows.

- 1) The amount of anion adsorption at higher pH should be studied because in soil management the soil pH is always raised to about 6.5..
- 2) From agricultural point of view, nitrate adsorption should be also studied.
- 3) Since  $\text{NO}_3^-$ ,  $\text{Cl}^-$ ,  $\text{SO}_4^{2-}$  and  $\text{H}_2\text{PO}_4^-$  are usually applied as fertilizer, it is important to study further on competitive effects of these ions.
- 4) The desorption of these anions should be studied.