CHAPTER 4

CONCLUSIONS

The extractant that demonstrated the highest efficiency in extracting fluoride from the soil was found to be deionized distilled water. It can exert a better extracting power for fluoride than ammonium acetate, calcium chloride and hydrochloric acid respectively

The optimum conditions for extracting fluoride was concluded to be by using 15 ml of the deionized distilled water at 80°C for 90 minutes. The highest extraction efficiency was obtained and fluoride in the sample could be extracted completely.

The fluoride distribution in soil from high fluoride accumulation areas in five villages was found to cover the range of 15.5-133.1 mg/kg. Due to the different soil type in each area, the distribution of fluoride discharged from the RO process into the soil was thus found to be dependent on soil types and its surrounding environment. The characteristics of fluoride accumulation in the area where the soil type is a mixture of silt and clay showing more fluoride content in the top soil than that in the lower soil. Whereas the areas that are loamy and sandy soil, and alluvial soil, the accumulation of fluoride in the lower soil was more than that in the top soil.