CHAPTER 8

CONCLUSIONS

Simultaneous fast separation of NH_4^+, K^+, Ca^{2+}, Na^+, Mg^{2+}, Mn^{2+}, Co^{2+} and Cd^{2+} using a background electrolyte consisted of 12 mM imidazole, 3 mM 18-crown-6 ether in 15 mM alanine at pH 6 was successfully achieved in less than 1.6 minutes by capillary zone electrophoresis. The developed CZE method can be applied to the analysis of cations in macronutrients, micronutrients and trace nutrient (Mn^{2+}) in fertilizer samples. The results obtained from the CE method agreed well with that from the AAS. Sensitivity of the CE method was satisfactory to determine NH_4^+, K^+, Ca^{2+}, $Mg^{2+}$and Mn^{2+} in fertilizer samples without peak interference.