1. INTRODUCTION

Producing food in sufficient amounts to meet the demands of the excessive population in Egypt has become not only a social problem but also political and economical ones. Many trials were and are still done to solve the food problem either through expansion in the arable land or increasing productivity of the cultivated area. In this respect, extensive efforts are paid nowadays to add new areas of the calcareous soils to the cultivated land. However, it is well known that calcareous soils are, in most cases, poor in their fertility and suffer from problems in soil-water-plant relationship. Application of organic wastes to such soils may fulfil more than one objective such as the low-cost disposal of large quantities of municipal organic wastes as well as improving physical, chemical and biological properties of these soils and hence increasing their productivity.

The current work represents a trial to shed light on the effect of some organic wastes (sewage sludge, town refuse and biogas manure) on the available contents of some micronutrients (Fe, Mn, Zn and Cu) in calcareous soils differing mainly in their contents of $CaCO_3$ as well as the uptake of these nutrients by barley plants grown thereon.