

Introduction

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Cultivation of sandy soils is necessary to increase the agricultural production and solve the problem of food shortage under the increasing population. Poor fertility characterizes the sandy soils and hence plants grown on these soils suffer from deficiency the nutritive elements. Therefore, it is importance to try different fertilization treatments with they aid of improving fertility of these soils which would be reflected on plant uptake of the different macro and micronutrients and consequently plant growth. The addition of organic materials in the form of plant compost or poultry manure has been proved to be of beneficial effects on soil fertility.

It is well known that organic matter is not only a source of the nutrients necessary for good plant growth but also it has desired effect on improving chemical, physical and hydro-physical properties especially those related to the soil-water relationships. Organic matter increases soil aggregates and micro pores at the expense of the macro ones and hence would save water and reduce leaching of water out of the soil.

It is thought that macronutrients application whether solely or in combination with the organic matter to soils is considered to be of significant importance if high yields are to be aimed.

The present work was carried out aiming at throwing some light on the potential effect of different fertilization treatments on plant uptake of the different macro and micronutritive elements. The investigated fertilization treatments involved application of two types of manuring a sandy soil. The applied organic material were added at two rates either solely or in combination with the recommended rates of N, P and K mineral fertilizers.