1. INTRODUCTION

The cultivation of newly reclaimed sandy and calcareous soils has become an unavoidable necessary for increasing our agricultural production . These soils are poor in organic matter and clay contents. They may contain extremely level of available nutrients, and hence the efficiency of chemical nitrogen fertilizers as NO^-_3, NH^+_4 and urea in these soils is low different appreciable amounts of nitrogen may be lost from these soils by leaching and or volatilization under the condition prevailing in them.

Several attempts were conducted to increase the efficiency of nitrogen fertilizers through controlling or delaying their solubility by slow-release materials such as ureaformaldehyde (UF).

The present work was conducted to study the effect of slow release or controlled nitrogen fertilizers either in presence or absence of polyacrylamide as a soil conditioner on the plant growth and uptake of nutrients.