1-INTRODUCTION

Owing to the limited natural resources, and the alarming rate of over expanding population in A.R.E., horizantal expansion of agricultural land is one of the major aims in agricultural policy. Among the promising areas for this purpose, the Region North of Sinai is given due consideration.

Generally, soils of Sinai have a wide variation in their origin , properties and suitability for agriculture, therefore sustainable agriculture development lacks information, capability and suitability for crops.

The studied area (north eastern part of Sinai) is consedered one of the promising parts of North Sinai, this , the presence of wide areas of arable land and high potential of groundwater, moreover, relatively high content of rainfull.

The current study aims at evaluating of soil physical, chemical, mineralogical and pedological properties of the north eastern region of Sinai for agriculture use, so that we might be able to increase the arable land and hence, overcome the crucial situation of the increasing population.

2-REVIEW OF LITERATUR

2.1. Location:

Sinai Peninsula covers about 6 % of the total area of Egypt. It has a triangular shape and situated between the two major continents, Africa and Asia. It is bounded on the north by the Mediterranean Sea, on the south by the Red Sea, on the west by the Suez Canal and the Gulf of Suez and on the east by the Gulf of Aqaba.

The studied area is located in the north eastern part of Sinai Peninsula, between longitudes 33^0 44` and $34^0$ 13` East , and latitudes 30^0 50` and $31^0$ 18` North (Fig. 1) It covers about 1700 km^2 (about 400000 feddans). It is suitated between the Egyptian – Palestinian border on the east, Wadi El Arish on the west, the Mediterranean Sea on the north and Abu Aweigila region on the south.

2.2. Climate :

Sinai falls under the great arid belt crossing the North of Africa and the southwest Asia. Most of Sinai is characterized by low rainfall, high evaporation and a wide daily range in temperature . Low humidity allows up to more than 80 percent of solar insolation to pentrate the atmosphere and heat the ground during the day, but at night the lack of clouds allows the accumulated heat to radiate back to the atmosphere. The aridity is manifested by degraded soil surface, expansive areas of sand dunes, salinization of soils and groundwater, numerous large dry water courses or channels (wadi beds), and rugged bare mountainous regions.