

I. INTRODUCTION

Grapes are considered the second fruit crop in Egypt. Their plantation are exceeding rapidly with total acreage of 99124 feddans according to the figures of the Ministry of Agriculture in 1989.

In the regions chosen to conduct this research in Samannud, Gharbia Governorate the area of grapes reached 14885 feddans, and in Aga. Dakahlia Governorate reached 16516 feddans, area represents about 31.68% of the total acreage in Egypt.

The past years of viticultural research have brought more progress in production than the prior century. Advances in both basic and applied research have led to a broader and more nearly correct understanding of vine responses to the environment and cultural practices, including fertilization and the influence of these on fruiting.

Accurate diagnosis of the vine nutritional status is essential before one can give advice on fertilizer treatment. The present knowledge of soil-plant nutrient relationship is not sufficiently precise to predict the vine response to a given amount of nutrient applied to the soil.

Once the nutritional status of the vine has been accurately diagnosed, the next problem is that of changing, the vine nutritional status to conform with known optimum nutrient levels for high yield of good quality which are not necessarily the same levels as those of optimum growth.

This investigation was carried out during 1988 and 1989 seasons to evaluate the nutritional status, vegetative growth, phynological phases, bud fertility, yield and fruit quality of Thompson seedless grape vines grown at two locations at Egypt i.e, Samannud at Gharbia Governorate and Age, Dakhlia Governorate.