Sixth Article:

Article title	**A Study On The Evaluation Of Some Grape Cultivars Grown In Reclaimed Land**
Participants	Mohammed El-Sayed Morsi Essa[1], Mohamed Abdel Aziz Abdel Wahab[2] , Hatem Hamdy Saied Aly[2] and **Hussein, H.A.Z** [1] [1]Horticulture Department, Faculty of Agriculture, Fayoum University, Egypt. [2]Horticulture Research Institute, Agricultural Research Center, Giza, Egypt
Article status	Sharing with another inside the specialization- Published in national Journal
The Journal	**Fayoum Journal of Agricultural Research and Development.,Vol.33 No. 1(B) March,2019**

Abstract

This investigation was conducted, for two successive seasons 2016 and 2017 in a private vineyard located at 58km Cairo-Alexandra desert road to evaluate vegetative growth, fruit quality and yield of three seeded grape varieties of the *V. vinifera* grapes namely: "Black Rose"; "Matrouh Eswed" and "Ribier". The chosen grapes vines were eight-year-old, spaced at 2 X 2.75 meter apart, vines grape grown in a sandy loam soils and irrigated by drip irrigation systems. Vines were cane pruned and trellised by the Spanish Paron system . The grape vines were pruned during the 2nd week of January for the two seasons of the study so as to maintain a loads of 84 buds/vine (7canes X 12 buds/vine).

The results revealed that "Matrouh Eswed" grape cultivar had significantly the highest values of vegetative growth aspects (expressed as shoot diameter, shoot length, weight of pruning, number of leaves per shoot and leaf area) and leaf content of plant pigments including chlorophyll a & b and carotenoids compared to the other grape cultivars. Concerning to leaf and cane content of total carbohydrates and mineral elements, it is noticed that "Black Rose" grape cultivar induced significantly the highest magnitude of total carbohydrates and macro-elements i.e. nitrogen, phosphorus and potassium, while "Matrouh Eswed" grape cultivar resulted in the highest magnitude of micro-elements i.e. iron, zinc and manganese. With respect to yield and its attributes, it is mentioned that "Black Rose" grape cultivar had significantly the highest values of yield per vine, (weight, length, width of cluster), number of berries per cluster whereas "Matrouh Eswed" grape cultivar induced significantly the highest values of number of clusters/vine. As for physical and chemical characteristics, of grape berries, it is noticed that "Black Rose" grape cultivar had significantly the highest values of all physical characteristics including weight, size, length and diameter of berry, while "Matrouh Eswed" grape cultivar resulted in the highest values of chemical characteristics except total anthocyanin in berry skin including TSS, total sugars, reducing sugars and non-reducing sugars and the least values of acidity. On the other hand, "Black Rose" grape cultivar induced significantly the highest magnitude of total anthocyanin in berry skin.

***Keywords*:** grape, Black Rose; Matrouh Eswed and Ribier.