

3rd Annual Congress on**Pollution and Global Warming**

&

4th International Conference on**Past and Present Research Systems of Green Chemistry**

October 16-18, 2017 Atlanta, USA

Influences of irrigation, fertilizers on growth and yield of two sugar beet varieties in Egypt**Safi-naz S Zaki, Mehanna H M and Hussien M M**
National Research Centre, Egypt

Two field experiments were conducted in the Experimental farm of the National Research centre, El-Nobaria, El-Boheira Governorate, Egypt, during two seasons (2014-2015) to evaluate the growth of root and yield of sugar beet (*Beta vulgaris* L.). The experimental treatments were as following: (a) two sugar beet varieties (Samba and Farida), (b) three irrigation water regimes (2483, 1862 and 1241 m³/fed./season) under drip irrigation system, and (c) four NPK fertilization rates (0, 0, 0) as control, (50, 75, 25), (75, 110, 35) and (100, 150, 50) as quantity of compound NPK fertilizers, respectively. The results were: Samba variety was the superior in root characters i.e. length, and diameter, and yields of roots and sugar/fed., water stress induced by irrigated sugar beet plants with the lowest water regime which depressed the root parameters as well as yield of roots and sugar/fed. Root diameter and yields of roots and sugar showed its higher values under the moderate water regime (1862 m³/fed.). For water productivity of root yield, it was observed that the highest values were gained using the lowest quantity of water. Generally, it was obviously that Samba variety which irrigated by the moderate water regime (1862 m³/fed./season), and fertilized by the highest amount of NPK (100, 150, 50) produced the economic root and sugar yields of sugar beet and saved 621 m³/fed./season, which is the main concern nowadays for the arid regions

Biography

Safi-naz Sabet Zaki is a Researcher at National Research Centre, Egypt. She is currently working as a Researcher in Agriculture & Biological division

safinsab@gmail.com

Notes: