

Table 1. Effect of soil water contents on number of tillers/plant and grain yield/plant (g), biological yield/plant, spike weight/plant, weigh of 100 grain/plant of wheat Sakha 93 and Giza 168 cultivars in two growing seasons (2006/2007 and 2007/2008)

2006-2007 season															
characters															
Cult.	Number of tillers/plant			Grain yield / plant (g)			Biological yield/ plant			Spike weight/ plant (g)			Weight of 100 grains (g)		
	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean
Treat.															
80% ETo (1280m ³ /fed.)	5.12a	4.76ab	3.70B	0.64b	0.61b	0.62B	3.95ab	3.11b	3.53A	1.38cb	1.08c	1.23B	3.20ab	2.50b	2.85B
100% ETo (1600m ³ /fed.)	3.43ab	3.24b	3.34B	1.03ab	1.14ab	1.08A	3.73ab	3.64ab	3.69A	1.82ab	1.80abc	1.81A	3.40a	3.22ab	3.31AB
120% ETo (1920m ³ /fed.)	3.92ab	3.49ab	4.49A	1.30a	1.30a	1.30A	3.90ab	4.74a	4.32A	1.46abc	2.15a	1.81A	3.24ab	3.77a	3.57A
mean	4.16A	3.83A		0.99A	1.02A		3.86A	3.83A		1.55A	1.68A		3.28A	3.16A	
2007-2008 season															
80% ETo (1280m ³ /fed.)	2.80a	2.68a	2.74A	0.59b	0.58b	0.59B	5.32c	5.65bc	5.49C	1.39bc	1.16c	1.28B	3.10a	2.91a	3.01A
100% ETo (1600m ³ /fed.)	2.73a	3.15a	2.94A	1.23ab	1.60ab	1.42A	6.59abc	7.19ab	6.89B	1.93abc	2.26abc	2.10A	3.44a	3.29a	3.37A
120% ETo (1920m ³ /fed.)	2.64a	3.00a	2.82A	1.98a	1.54ab	1.76A	7.57a	8.03a	7.80A	2.93a	2.51ab	2.72A	3.24a	3.77a	3.51A
mean	2.72A	2.94A		1.27A	1.24A		6.49A	6.96A		2.08A	1.98A		3.26A	3.32A	

Data presented as means of 3 replicates. Different letters refer to significant differences ($P \leq 0.05$)

Table 2. Effect of soil water contents on crop, tillering and harvest indexes of wheat Sakha 93 and Giza 168 cultivars in two growing seasons (2006/2007 and 2007/2008)

2006-2007 season									
Characters									
Cult.	Crop index %			Tillering index %			Harvest index %		
	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean	Sakha 93	Giza 168	mean
80% ETo (1280m³/fed.)	17.80c	22.49bc	20.14B	81.73b	91.66ab	86.69B	14.88b	18.21ab	16.55B
100% Eto (1600m³/fed.)	37.80ab	41.15a	39.47A	95.51a	93.60a	94.55A	27.23a	29.10a	28.17A
120% Eto (1920m³/fed.)	24.20abc	26.14abc	25.17B	93.19a	91.12ab	92.16AB	19.41ab	18.73ab	19.07B
mean	26.60A	29.92A		90.14A	92.12A		20.51A	22.01A	
2007-2008 season									
80% Eto (1280m³/fed.)	12.96b	12.86b	12.77B	88.80a	88.53a	88.67A	11.13b	11.20b	11.16B
100% Eto (1600m³/fed.)	23.64ab	30.02ab	26.83AB	80.35a	79.47a	80.16A	18.67ab	21.78ab	20.23A
120% Eto (1920m³/fed.)	41.21a	25.50ab	33.36A	88.13a	72.18a	79.92A	28.87a	19.93ab	24.40A
mean	25.85A	22.79A		85.77A	80.06A		19.56A	17.64A	

Data presented as means of 3 replicates. Different letters refer to significant differences ($P \leq 0.05$)

Table 3. Effect of soil water content on anti-oxidative enzymes of 28 days old wheat plant cultivars

Soil moisture content	Cultivars	Superoxide dismutase (SOD) (IU.mg ⁻¹ protein)	Ascorbate peroxidase (APX) (IU. mg ⁻¹ protein)	Peroxidase activity (POD) (IU. mg ⁻¹ protein)	Catalase (CAT) (IU. mg ⁻¹ protein)	Phenylalanine ammonia-lyase (PAL) (μmol. h ⁻¹ mg ⁻¹ protein)
80% ETo (1280m ³ /fed.)	Giza 168	53 ± 1.2c	1755 ± 60.1b	1456 ± 58d	9774 ± 600.34c	8.13 ± 0.005b
	Sakha 93	73 ± 1.3a	1073 ± 60.3a	5692 ± 60a	14834 ± 600.58a	9.32 ± 0.008a
100%ETo (1600m ³ /fed)	Giza 168	29± 1.2d	1030 ± 59.9c	1191 ± 41e	8555 ± 600.25d	6.09 ± 0.005c
	Sakha 93	19 ± 1.3e	818 ± 60.3d	1785 ± 60c	6478 ± 600.36e	3.47 ± 0.008e
120%ETo (1920m ³ /fed.)	Giza 168	18 ± 0.96e	683 ± 60.7e	1452 ± 60d	7226 ± 600e	4.47 ± 0.006d
	Sakha 93	61 ± 1.53b	1764 ± 60.5b	4165 ± 40b	11165 ± 600.54b	5.68 ± 0.003c

Data presented as means of 3 samples. Different letters refer to significant differences (P ≤ 0.05)