

Table (2): Effect of spraying applications of silicon alone or combined with some macro and micro nutrients on average bunch weight, yield and some physical characteristics of Zaghloul fruit date palms during 2015 and 2016 seasons

Treatments	Av. bunch weight (kg.)		Yield/palm (kg.)		Average fruit (g.)		Average fruit length (cm)		Average fruit diameter (cm)	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Control	9.9	10.3	99.0	103.0	26.1	27.2	5.41	5.55	1.95	2.02
Potassium silicate at 0.1 %	10.6	10.7	106.0	107.0	27.6	27.9	5.55	5.64	2.07	2.07
Zn + Fe + Mn + Cu + B	11.2	11.3	112.0	113.0	28.1	28.5	5.57	5.75	2.10	2.15
N + P + K + Mg	11.9	11.8	119.0	118.0	29.0	29.1	5.69	5.90	2.18	2.23
Si + Zn + Fe + Mn + Cu + B	12.4	12.8	124.0	128.0	29.7	30.0	5.74	6.00	2.26	2.23
Si + N + P + K + Mg	13.0	13.5	130.0	135.0	30.1	30.9	6.25	6.19	2.35	2.37
Zn + Fe + Mn + Cu + B + N + P + K + Mg	13.3	14.1	133.0	141.0	30.8	31.8	6.09	6.29	2.42	2.60
Si + Zn + Fe + Mn + Cu + B + N + P + K + Mg	14.0	14.7	140.0	147.0	31.7	32.3	6.41	6.47	2.48	2.71
New L.S.D at 5%	1.0	1.0	9.6	9.8	0.5	0.6	0.06	0.05	0.09	0.08

Table (3): Effect of spraying applications of silicon alone or combined with some macro and micro nutrients on some physical and chemical characteristics of Zaghoul fruit date palms during 2015 and 2016 seasons

Treatments	Fruit flesh %		Fruit seed %		T.S.S. %		Total sugars %		Reducing sugars %	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Control	78.9	80.0	21.1	20.0	25.2	26.0	19.0	19.7	13.0	13.2
Potassium silicate at 0.1 %	80.0	81.2	20.0	18.8	25.8	26.5	19.7	20.5	14.0	14.0
Zn + Fe + Mn + Cu + B	81.0	83.0	19.0	17.0	26.6	27.1	20.1	21.3	14.5	14.7
N + P + K + Mg	82.0	84.5	18.0	15.5	27.3	27.8	20.6	22.0	15.0	15.5
Si + Zn + Fe + Mn + Cu + B	84.0	85.5	16.0	14.5	28.3	28.5	21.1	22.4	15.5	16.5
Si + N + P + K + Mg	85.0	86.9	15.0	13.1	29.0	29.0	22.0	22.8	16.0	17.0
Zn + Fe + Mn + Cu + B + N + P + K + Mg	86.0	87.5	14.0	12.5	29.4	29.7	22.4	23.3	17.0	17.4
Si + Zn + Fe + Mn + Cu + B + N + P + K + Mg	87.0	88.4	13.0	11.6	29.8	30.4	22.7	23.6	18.0	18.0
New L.S.D at 5%	1.77	0.83	0.86	0.80	1.1	0.9	0.4	0.5	1.0	0.8

Table (4): Effect of spraying applications of silicon alone or combined with some macro and micro nutrients on some chemical characteristics of Zaghloul fruit date palms during 2015 and 2016 seasons

Treatments	Non-reducing sugars %		Titratable acidity %		Total crude fibre %		Total soluble tannins %	
	2015	2016	2015	2016	2015	2016	2015	2016
Control	6.0	6.5	0.397	0.360	0.76	0.69	0.71	0.67
Potassium silicate at 0.1 %	5.7	6.5	0.360	0.329	0.71	0.65	0.65	0.64
Zn + Fe + Mn + Cu + B	5.6	6.6	0.353	0.301	0.67	0.59	0.60	0.59
N + P + K + Mg	5.6	5.5	0.305	0.274	0.61	0.54	0.54	0.54
Si + Zn + Fe + Mn + Cu + B	5.6	5.9	0.240	0.254	0.55	0.49	0.49	0.47
Si + N + P + K + Mg	6.0	5.8	0.257	0.231	0.50	0.44	0.40	0.40
Zn + Fe + Mn + Cu + B + N + P + K + Mg	5.4	5.9	0.221	0.210	0.45	0.37	0.33	0.37
Si + Zn + Fe + Mn + Cu + B + N + P + K + Mg	4.7	5.6	0.201	0.194	0.39	0.31	0.30	0.30
New L.S.D at 5%	NS	NS	0.034	0.012	0.06	0.07	0.08	0.05