

Table (1): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on the growth parameters of strawberry plants during 2014/2015 and 2015/2016 seasons

Treatments	Plant height (cm)		Leaves number / plant		Shoot dry weight (g)		Relative increases in shoot DW (%)	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	11.66	10.00	12.16	12.66	20.16	20.83	00.00	00.00
Cs	14.33	14.66	13.50	13.83	28.32	28.80	40.48	38.26
CaCl ₂	12.66	13.16	12.66	13.83	29.30	30.29	45.34	45.42
K ₂ O ₃ Si	16.16	15.16	15.00	15.66	29.52	30.14	46.43	44.70
CaCl ₂ +K ₂ O ₃ Si	17.00	17.33	15.66	16.16	27.51	27.83	36.45	33.60
Cs+K ₂ O ₃ Si	16.83	15.66	17.00	17.83	36.94	38.11	83.23	82.96
Cs+CaCl ₂	15.00	14.16	17.66	18.00	33.41	34.60	65.72	66.11
Cs+CaCl ₂ +K ₂ O ₃ Si	17.66	18.00	16.50	16.66	35.85	36.60	77.83	75.71
LSD (0.05)	1.79	2.03	1.62	1.95	1.01	0.78	---	---

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (2): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on the early and total yield of strawberry plants during 2014/2015 and 2015/2016 seasons

Treatments	Early yield (g/plant)		Early yield (ton/fed.)		Total yield (g/ plant)		Total yield (ton/fed.)		Relative increases in total yield (%)	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	63.44	63.95	3.553	3.581	208.13	252.19	11.655	14.123	00.00	00.00
Cs	70.41	82.83	3.943	4.638	253.03	278.12	14.296	15.575	22.66	10.28
CaCl₂	67.19	72.29	3.762	4.048	233.74	270.62	13.089	15.155	12.30	07.31
K₂O₃Si	70.83	86.29	3.966	4.832	267.81	328.43	14.997	18.392	28.67	30.23
CaCl₂+K₂O₃Si	76.45	88.54	4.281	4.958	280.78	340.61	15.723	19.074	34.90	35.06
Cs+K₂O₃Si	85.63	102.58	4.795	5.744	317.49	374.12	17.779	20.950	52.54	48.34
Cs+CaCl₂	71.98	93.26	4.030	5.037	279.38	332.81	15.645	18.637	34.23	31.96
Cs+CaCl₂+K₂O₃Si	83.33	99.33	4.666	5.562	288.28	349.37	16.143	19.565	38.51	38.53
LSD (0.05)	5.13	6.19	0.287	0.347	7.33	13.48	0.410	0.755	--	--

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (3): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on fruit quality at harvest of strawberry fruits during 2014/2015 and 2015/2016 seasons

Treatments	Firmness (g/cm ²)		TSS (%)		Total acidity (mg/100 ml juice)		Vitamin C (mg/ml juice)	
	1 st season	2 nd season	1 st season	2 nd season	2 nd season	2 nd season	2 nd season	1 st season
Control	306.6	310.0	8.00	8.50	0.58	0.58	33.7	34.3
Cs	400.0	400.0	8.83	8.83	0.50	0.48	36.3	37.7
CaCl₂	433.3	443.3	9.00	9.0	0.43	0.45	34.7	34.3
K₂O₃Si	460.0	480.0	9.00	9.0	0.60	0.58	34.5	36.3
CaCl₂+K₂O₃Si	486.6	516.6	9.16	9.05	0.52	0.52	42.0	41.3
Cs+K₂O₃Si	416.6	416.6	10.16	10.0	0.43	0.47	43.3	43.7
Cs+CaCl₂	406.6	443.3	10.33	10.0	0.48	0.48	42.0	43.0
Cs+CaCl₂+K₂O₃Si	453.3	466.6	9.16	9.50	0.50	0.52	39.3	40.7
LSD (0.05)	14.60	16.63	0.18	0.15	0.03	0.04	1.12	1.19

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (4): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on weight loss (%) of strawberry fruits during storage period 2014/2015 and 2015/2016 seasons

Treatments	Weigh loss (%)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	1.35	1.56	2.60	2.52	3.56	3.73
Cs	1.20	1.20	1.80	1.70	2.85	2.98
CaCl ₂	1.08	1.01	1.39	1.43	2.27	2.28
K ₂ O ₃ Si	0.96	0.87	1.32	1.07	2.66	2.69
CaCl ₂ +K ₂ O ₃ Si	1.18	1.10	1.79	1.56	2.53	2.90
Cs+K ₂ O ₃ Si	1.03	0.91	1.31	1.06	2.28	2.18
Cs+CaCl ₂	0.48	0.61	0.53	0.77	1.56	1.04
Cs+CaCl ₂ +K ₂ O ₃ Si	0.93	0.85	1.19	0.86	1.63	2.20
LSD (0.05)	NS	NS	0.26	0.22	0.40	0.48

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (5): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on decay (%) of strawberry fruits, during storage period 2014/2015 and 2015/2016 seasons

Treatments	Decay percentage (%)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	33.62	32.15	38.47	37.04	50.0	47.37
Cs	17.41	17.22	23.08	25.10	33.17	32.02
CaCl₂	29.17	30.77	39.29	45.12	41.18	44.45
K₂O₃Si	21.43	23.34	34.79	34.79	43.12	41.18
CaCl₂+K₂O₃Si	20.25	21.72	30.37	32.15	44.45	44.45
Cs+K₂O₃Si	10.72	10.02	21.43	22.89	28.17	29.17
Cs+CaCl₂	9.85	11.72	19.24	19.24	23.08	25.07
Cs+CaCl₂+K₂O₃Si	11.29	12.64	21.09	21.01	29.17	28.06
LSD (0.05)	3.18	2.92	2.44	3.72	6.28	4.18

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (6): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on TSS (brix^o) of strawberry fruits, during storage period 2014/2015 and 2015/2016 seasons

Treatments	TSS (brix ^o)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	9.83	9.16	7.50	8.00	6.93	6.70
Cs	10.73	9.83	8.50	8.00	6.96	7.00
CaCl ₂	10.00	10.0	8.33	8.16	7.00	7.53
K ₂ O ₃ Si	10.50	10.0	8.66	8.83	7.56	7.63
CaCl ₂ +K ₂ O ₃ Si	10.16	10.00	9.16	8.00	7.63	7.00
Cs+K ₂ O ₃ Si	11.33	11.33	9.66	9.50	8.70	8.70
Cs+CaCl ₂	11.16	10.33	9.50	9.16	8.43	8.43
Cs+CaCl ₂ +K ₂ O ₃ Si	10.73	10.33	9.50	8.83	7.76	7.93
LSD (0.05)	0.17	0.15	0.16	0.19	0.26	0.23

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (7): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on total acidity (mg/100 ml juice) of strawberry fruits during storage period 2014/2015 and 2015/2016 seasons

Treatments	Total acidity (mg/100ml)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	0.50	0.50	0.50	0.52	0.60	0.55
Cs	0.20	0.15	0.35	0.42	0.28	0.25
CaCl ₂	0.70	0.70	0.80	0.90	0.60	0.83
K ₂ O ₃ Si	1.00	0.48	0.52	0.52	0.52	0.55
CaCl ₂ +K ₂ O ₃ Si	0.15	0.13	0.57	0.50	0.92	0.93
Cs+K ₂ O ₃ Si	0.22	0.30	0.45	0.63	0.65	0.95
Cs+CaCl ₂	0.53	1.05	0.62	0.88	0.77	0.82
Cs+CaCl ₂ +K ₂ O ₃ Si	0.48	0.55	0.83	1.05	0.67	0.63
LSD (0.05)	0.07	0.06	0.09	0.05	0.03	0.04

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (8): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on vitamin C (mg/100ml juice) of strawberry fruits during storage period 2014/2015 and 2015/2016 seasons

Treatments	Ascorbic acid (mg/100 ml)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	11.0	11.6	10.0	10.0	8.3	9.0
Cs	12.3	15.0	12.6	11.6	12.0	11.6
CaCl ₂	12.3	15.0	11.0	10.0	10.3	9.3
K ₂ O ₃ Si	15.0	18.3	13.3	10.0	11.0	11.6
CaCl ₂ +K ₂ O ₃ Si	15.0	15.6	16.0	19.0	14.0	12.6
Cs+K ₂ O ₃ Si	26.6	23.3	20.0	21.6	16.3	16.6
Cs+CaCl ₂	16.6	20.0	14.0	13.3	11.7	12.6
Cs+CaCl ₂ +K ₂ O ₃ Si	16.6	17.3	15.0	14.0	14.0	13.0
LSD (0.05)	2.20	2.15	2.03	2.17	2.51	1.27

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

Table (9): Effect of foliar spray with chitosan , calcium chloride and potassium silicate on firmness (g/cm²) of strawberry fruits during storage period 2014/2015 and 2015/2016 seasons

Treatments	Fruit firmness (g/cm ²)					
	Days from storage					
	5 days		10 days		15 days	
	1 st season	2 nd season	1 st season	2 nd season	1 st season	2 nd season
Control	356.6	363.3	243.3	246.6	196.6	200.0
Cs	463.3	463.3	333.3	366.6	250.0	250.0
CaCl₂	456.6	453.3	343.3	373.3	266.6	300.0
K₂O₃Si	480.0	496.6	363.3	396.6	283.3	306.6
CaCl₂+K₂O₃Si	530.0	553.3	400.0	460.0	333.3	366.6
Cs+K₂O₃Si	506.6	510.0	366.6	406.6	300.0	316.6
Cs+CaCl₂	510.0	516.6	376.6	416.6	333.3	333.3
Cs+CaCl₂+K₂O₃Si	496.6	526.6	380.0	433.3	303.3	310.0
LSD (0.05)	10.45	14.70	12.73	14.11	18.00	14.42

Control =(tap water) , Cs= Chitosan (1.5 %) , CaCl₂= calcium chloride (2%), K₂O₃Si= potassium silicate (5ml/l)

