

Table 2. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on shoot fresh weight (g) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigation as control) during the seasons of 2013-2014 and 2014-2015.

Irrigation	I₁ Daily		I₂ Every 2 days		I₃ Every 3 days		I₄ Every 4 days		
Growing media	Sandy Soil	Rice Straw	Sandy soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season.....								Mean DA
Control	199.67	122.67	251.00	122.67	197.00	190.00	185.00	190.33	182.29
K ₂ -HA (2 g/l)	477.33	208.00	493.00	313.67	422.00	376.00	299.00	347.33	367.04
K ₂ SiO ₃ (5 g/l)	253.67	140.33	349.00	174.33	239.33	225.33	230.00	197.67	226.21
SWE (0.5 g/l)	390.33	144.00	423.00	276.33	344.67	365.33	259.33	320.67	315.46
Mean I	242.00		300.38		294.96		253.67		
	Mean Soil	313.33			Mean Straw	232.17			
MSD DA 1.61	MSD I		2.19	MSD GM	0.87		MSD GM*DA*I 6.74		
Drenching applications	.....2 nd season.....								Mean DA
Control	201.33	139.67	253.33	159.33	198.67	211.67	185.67	194.33	193.00
K ₂ -HA (2 g/l)	478.67	253.33	494.67	356.00	423.33	414.00	300.00	399.00	389.88
K ₂ SiO ₃ (5 g/l)	255.67	172.00	350.67	200.33	240.67	253.67	230.67	230.33	241.75
SWE (0.5 g/l)	392.33	223.33	425.33	298.00	346.00	383.00	260.33	361.67	336.25
Mean I	264.54		317.21		308.88		270.25		
	Mean Soil	314.83			Mean Straw	265.60			
MSD DA 1.27	MSD I		1.68	MSD GM	0.92		MSD GM*DA*I 6.28		

Table 3. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on shoot dry weight (g) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015

Irrigation	I ₁ Daily		I ₂ Every 2 days		I ₃ Every 3 days		I ₄ Every 4 days		
	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season								Mean DA
Control	40.67	14.33	42.00	18.33	40.00	30.00	27.67	28.67	30.21
K ₂ -HA (2 g/l)	46.00	25.00	49.67	29.67	44.67	37.33	34.67	35.00	37.75
K ₂ SiO ₃ (5 g/l)	41.67	18.00	45.00	22.00	40.00	31.00	29.67	29.33	32.08
SWE (0.5 g/l)	44.00	21.33	47.33	25.67	42.67	34.33	32.33	31.00	34.83
Mean I	31.38		34.96		37.50		31.04		
	Mean Soil	40.50			Mean Straw	26.94			
MSD DA 0.58	MSD I		1.01	MSD GM		0.28	MSD GM*DA*I 2.38		
Drenching applications	.....2 nd season.....								Mean DA
Control	42.00	20.33	43.00	25.67	41.00	34.00	28.67	33.00	33.46
K ₂ -HA (2 g/l)	47.33	29.33	50.67	36.33	46.00	45.67	36.67	43.67	41.96
K ₂ SiO ₃ (5 g/l)	43.00	22.33	46.33	30.00	46.00	36.00	31.33	34.67	35.67
SWE (0.5 g/l)	45.00	27.00	48.67	32.00	44.00	40.67	35.00	40.00	39.04
Mean I	34.55		39.08		41.13		35.38		
	Mean Soil	41.90			Mean Straw	33.17			
MSD DA 0.52	MSD I		0.5	MSD GM		0.26	MSD GM*DA*I 2.03		

Table 4. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on leaf area (cm²) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015.

Irrigation	I ₁ Daily		I ₂ Every 2 days		I ₃ Every 3days		I ₄ Every 4days		
	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season.....								Mean DA
Control	90.76	38.17	93.63	39.91	90.68	52.35	75.75	50.99	66.53
K ₂ -HA (2 g/l)	110.75	51.15	121.94	62.35	109.90	75.91	97.43	74.09	87.94
K ₂ SiO ₃ (5 g/l)	97.57	38.74	105.12	42.96	95.39	55.04	79.76	53.91	71.06
SWE (0.5 g/l)	102.33	46.66	113.60	54.72	100.32	68.29	83.90	67.32	79.64
Mean I	72.02		79.28		80.98		72.9		
	Mean Soil	98.05			Mean Straw	54.53			
MSD DA 4.4	MSD I		6.39	MSD GM	1.77		MSD GM*DA*I 16.24		
Drenching applications	.....2 nd season.....								Mean DA
Control	91.98	41.42	94.85	46.98	91.95	66.40	76.96	63.81	71.79
K ₂ -HA (2 g/l)	111.99	64.89	123.15	73.42	111.13	97.97	98.67	96.99	97.28
K ₂ SiO ₃ (5 g/l)	98.78	43.71	106.34	52.32	96.62	74.49	80.97	73.20	78.30
SWE (0.5 g/l)	103.54	52.75	114.81	66.57	101.55	91.27	85.11	89.80	88.18
Mean I	76.13		84.80		91.42		83.19		
	Mean Soil	99.27			Mean Straw	68.50			
MSD DA4.4	MSD I		5.81	MSD GM	2.18		MSD GM*DA*I 17.5		

Table 5. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on leaf relative water content (%) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015

Irrigation	I₁ Daily		I₂ Every 2 days		I₃ Every 3 days		I₄ Every 4 days		
Growing media	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season								Mean DA
Control	56.77	64.41	58.62	67.51	55.16	73.41	52.12	73.02	62.63
K ₂ -HA (2 g/l)	62.71	73.29	64.38	77.68	61.75	89.80	58.28	89.13	72.13
K ₂ SiO ₃ (5 g/l)	58.90	68.32	59.78	68.69	57.95	77.59	54.70	74.33	65.03
SWE (0.5 g/l)	60.47	69.47	64.27	70.51	60.11	82.54	56.18	75.74	67.41
Mean I	64.29		66.43		69.79		66.69		
	Mean Soil	58.88			Mean Straw	74.72			
MSD DA 0.14	MSD I		0.12	MSD GM		0.08	MSD GM*DA*I		0.58
Drenching applications	.....2 nd season								Mean DA
Control	58.37	65.88	60.13	69.19	56.83	75.14	53.49	74.63	63.91
K ₂ -HA (2 g/l)	64.37	74.65	65.74	79.25	63.82	91.36	59.60	90.84	73.40
K ₂ SiO ₃ (5 g/l)	60.42	69.71	61.18	70.13	60.15	79.33	56.01	75.96	66.31
SWE (0.5 g/l)	61.95	70.92	65.62	71.98	61.78	84.26	57.52	77.53	68.65
Mean I	65.48		67.60		71.28		67.90		
	Mean Soil	60.14			Mean Straw	76.00			
MSD DA 0.16	MSD I		0.16	MSD GM		0.08	MSD GM*DA*I		0.65

Table 6. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on total N (mg/g dw) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015.

Irrigation	I₁ Daily		I₂ Every 2 days		I₃ Every 3 days		I₄ Every 4 days		
Growing media	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season.....								Mean DA
Control	28.14	26.51	29.80	26.84	27.87	27.41	27.01	27.10	27.59
K ₂ -HA (2 g/l)	29.95	27.63	30.47	28.09	29.32	28.87	28.51	28.63	28.93
K ₂ SiO ₃ (5 g/l)	28.94	26.89	29.89	27.12	28.21	27.94	27.40	27.50	27.99
SWE (0.5 g/l)	29.21	27.23	30.07	27.84	28.73	28.80	28.10	28.25	28.53
Mean I	28.06		28.76		28.39		27.81		
	Mean Soil	28.85			Mean Straw	27.67			
MSD DA 0.02	MSD I		0.03	MSD GM	0.01		MSD GM*DA*I 0.08		
Drenching applications	.....2 nd season.....								Mean DA
Control	29.47	27.82	31.13	28.16	29.19	29.53	28.35	29.41	29.13
K ₂ -HA (2 g/l)	31.27	28.95	31.86	29.41	30.66	31.31	29.83	31.13	30.55
K ₂ SiO ₃ (5 g/l)	30.26	28.22	31.26	28.44	29.54	30.10	28.72	29.82	29.55
SWE (0.5 g/l)	30.52	28.54	31.41	29.17	30.05	29.5	29.41	30.71	30.08
Mean I	29.38		30.10		30.15		29.67		
	Mean Soil	30.18			Mean Straw	29.47			
MSD DA 0.06	MSD I		0.05	MSD GM	0.03		MSD GM*DA*I 0.23		

Table 7. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on total P (mg/g dw) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015

Irrigation	I₁ Daily		I₂ Every 2 days		I₃ Every 3 days		I₄ Every 4 days		
Growing media	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season.....								Mean DA
Control	8.97	7.57	9.30	8.03	8.80	9.07	8.20	8.30	8.53
K ₂ -HA (2 g/l)	9.93	8.50	10.47	8.97	9.70	10.07	9.17	9.57	9.55
K ₂ SiO ₃ (5 g/l)	9.10	7.73	9.70	8.20	8.97	9.33	8.53	8.70	8.78
SWE (0.5 g/l)	9.67	8.13	10.13	8.60	9.40	9.73	8.80	9.10	9.20
Mean I	8.70		9.18 b		9.38		8.80		
	Mean Soil	9.30			Mean Straw	8.73			
MSD DA 0.048	MSD I		0.047	MSD GM	0.026		MSD GM*DA*I 0.2		
Drenching applications	.....2 nd season.....								Mean DA
Control	9.53	8.17	9.90	8.60	9.17	9.83	8.53	9.60	9.17
K ₂ -HA (2 g/l)	10.57	9.07	11.03	9.93	10.23	10.70	9.97	10.30	10.23
K ₂ SiO ₃ (5 g/l)	9.67	8.33	10.23	8.90	9.57	10.03	9.00	9.57	9.41
SWE (0.5 g/l)	10.17	8.80	10.67	9.40	9.97	10.50	9.50	10.00	9.88
Mean I	9.29		9.83		10.00		9.56		
	Mean Soil	9.86			Mean Straw	9.48			
MSD DA 0.04	MSD I		0.04	MSD GM	0.02		MSD GM*DA*I 0.16		

Table 8. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on total K (mg/g dw) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015

Irrigation	I₁ Daily		I₂ Every 2 days		I₃ Every 3 days		I₄ Every 4 days		
Growing media	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	.....1 st season								Mean DA
Control	33.76	32.70	33.71	33.16	33.85	33.47	35.34	33.40	33.81
K ₂ -HA (2 g/l)	33.96	33.16	33.85	33.47	35.43	33.67	35.99	33.59	34.14
K ₂ SiO ₃ (5 g/l)	34.80	33.71	34.34	34.45	36.60	34.95	37.36	34.86	35.13
SWE (0.5 g/l)	34.50	33.45	34.13	33.63	35.87	33.96	36.73	33.91	34.52
Mean I	33.75		33.85		34.86		35.15		
	Mean Soil	35.08			Mean Straw	33.72			
MSD DA 0.096	MSD I		0.24	MSD GM	0.062		MSD GM*DA*I 0.49		
Drenching applications	.....2 nd Season								Mean DA
Control	34.57	33.60	34.53	34.00	35.75	34.54	36.16	34.45	34.70
K ₂ -HA (2 g/l)	34.77	34.05	34.70	34.36	36.25	34.75	36.81	34.62	35.04
K ₂ SiO ₃ (5 g/l)	35.61	34.75	35.16	35.41	37.42	36.05	38.18	35.97	36.07
SWE (0.5 g/l)	35.32	34.43	34.95	34.58	36.69	35.02	37.56	34.90	35.43
Mean I	34.64		34.71		35.81		36.08		
	Mean Soil	35.90			Mean Straw	34.72			
MSD DA 0.1	MSD I		0.28	MSD GM	0.06		MSD GM*DA*I 0.5		

Table 9. Effect of growing media (sandy soil and rice straw) and drenching applications of potassium humate (K₂-HA), potassium silicate (K₂SiO₃) and seaweed extract (SWE) on total Ca (mg/g dw) of sweet pepper plants under deficit irrigation (every 2, 3 and 4 days in addition to daily irrigations as control) during the seasons at 2013-2014 and 2014-2015

Irrigation	I ₁ Daily		I ₂ Every 2 days		I ₃ Every 3 days		I ₄ Every 4 days		
	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	Sandy Soil	Rice Straw	
Drenching applications	..... 1 st Season								Mean DA
Control	7.23	6.51	7.59	6.86	6.86	7.55	6.54	7.32	7.06
K ₂ -HA (2 g/l)	7.79	7.25	8.13	7.54	7.52	8.00	7.26	7.79	7.66
K ₂ SiO ₃ (5 g/l)	7.36	6.75	7.77	7.10	7.10	7.69	6.80	7.49	7.26
SWE (0.5 g/l)	7.58	6.99	8.00	7.26	7.26	7.85	6.99	7.63	7.45
Mean I	7.18		7.53		7.48		7.23		
	Mean Soil	7.36			Mean Straw	7.35			
MSD DA 0.1	MSD I		0.15	MSD GM	ns		MSD GM*DA*I 0.47		
Drenching applications	..... 2 nd Season								Mean DA
Control	8.04	7.33	8.45	7.73	7.66	8.37	7.35	8.14	7.88
K ₂ -HA (2 g/l)	8.59	8.07	8.99	8.36	8.32	8.81	8.07	8.63	8.48
K ₂ SiO ₃ (5 g/l)	8.17	7.57	8.58	7.92	7.90	8.50	7.59	8.32	8.07
SWE (0.5 g/l)	8.40	7.81	8.81	8.08	8.06	8.66	7.79	8.45	8.26
Mean I	8.00		8.36		8.29		8.04		
	Mean Soil	8.17			Mean Straw	8.17			
MSD DA 0.11	MSD I		0.13	MSD GM	ns		MSD GM*DA*I 0.46		