

Table 3. Effect of Various Types of Irrigation Water and spraying with seaweeds on growth of *Ziziphus* plants (P1)and *citrus* plants (P2) grown in pots.

Concent-rations of seaweed extract (A)	Types of water (W)	Plant height (cm)			Number of shoots			Number of leaves			Stem diameter (mm)			Fresh weight (gm)			Dry weight (gm)		
		Plants of study (P)																	
		P1	P2	Mean A*W	P1	P2	Mean A*W	P1	P2	Mean A*W	P1	P2	Mean A*W	P1	P2	Mean A*W	P1	P2	Mean A*W
A1	W1	51.67	41.33	46.50	2.33	2.66	2.50	34.67	20.67	27.67	6.04	6.32	6.16	163.3	123.7	143.5	27.08	26.81	26.9
	W2	47.67	43.33	45.50	2.33	2.33	2.33	31.00	19.33	25.17	5.58	6.00	5.78	151.0	100.3	125.7	24.57	19.50	22.03
	W3	41.67	40.33	41.00	2.66	1.66	2.16	29.67	21.67	25.67	5.86	5.56	5.70	142.0	95.00	118.5	21.87	15.88	18.87
	W4	41.67	38.33	40.00	1.66	1.66	1.66	26.67	17.67	22.17	5.26	5.04	5.14	100.3	81.70	91.00	19.71	14.22	16.96
A2	W1	58.67	56.00	57.33	4.66	2.33	3.50	39.67	30.00	34.83	7.08	6.60	6.84	173.0	126.7	149.8	29.16	27.27	28.21
	W2	51.00	48.67	49.83	2.33	2.66	2.50	32.67	22.00	27.33	5.84	6.16	6.00	157.7	105.7	131.7	26.46	19.96	23.21
	W3	47.67	42.67	45.17	3.00	2.66	2.83	30.67	25.00	27.83	6.04	5.86	5.94	153.0	98.30	125.7	23.76	17.41	20.58
	W4	42.33	42.67	42.50	2.66	1.66	2.16	29.33	20.33	24.83	5.54	4.53	5.38	117.7	87.30	102.5	21.33	15.12	18.22
A3	W1	64.33	60.33	62.33	5.00	4.66	4.83	44.00	37.00	40.50	7.44	7.08	7.26	193.0	136.0	164.5	34.56	29.70	32.13
	W2	52.67	55.00	53.83	2.33	3.66	3.00	34.67	29.67	32.17	6.28	6.2	6.42	170.7	96.00	123.3	28.43	19.34	23.88
	W3	49.67	49.00	49.33	4.00	3.66	3.83	32.33	27.67	30.00	6.18	5.98	6.08	164.0	102.7	133.3	26.73	19.50	23.11
	W4	45.33	47.33	46.33	1.33	3.00	2.16	31.00	22.67	26.83	5.68	5.30	5.50	128.3	92.00	110.2	25.38	18.38	21.88
Mean(P)		49.53	47.08	Mean A	2.86	2.72	Mean A	33.03	24.47	Mean A	6.06	5.94	Mean A	151.2	102.1	Mean A	26.70	20.20	Mean A
Mean A*P	A1	45.67	40.83	43.25	2.25	2.08	2.16	30.50	19.83	25.17	5.68	5.72	5.70	139.2	100.2	119.7	23.30	19.10	21.20
	A2	49.92	47.50	48.71	3.16	2.33	2.75	33.08	24.33	28.71	6.12	5.96	6.04	150.3	104.5	127.4	25.17	19.94	22.00
	A3	53.00	52.92	52.96	3.16	3.75	3.45	35.50	29.25	32.38	6.40	6.14	6.26	164.0	101.7	132.8	28.77	21.73	20.20
				Mean W			Mean W			Mean W			Mean W			Mean W			Mean W
Mean W*P	W1	58.22	52.56	55.39	4.00	3.22	3.61	39.44	29.22	34.33	6.84	6.66	6.76	176.4	128.8	152.6	30.26	27.92	29.06
	W2	50.44	49.00	49.72	2.33	2.88	2.61	32.78	23.67	28.22	5.90	6.12	6.00	159.8	94.00	126.9	26.48	19.6	23.04
	W3	46.33	44.00	45.17	3.22	2.66	2.94	30.89	24.78	27.83	6.02	5.80	5.90	153.0	98.70	125.8	24.12	17.59	20.85
	W4	43.11	42.78	42.94	1.88	2.11	2.00	29.00	20.22	24.61	4.94	5.20	5.34	115.4	87.00	101.2	22.14	15.90	19.02
L.S.D		A	W	P	A	W	P	A	W	P	A	W	P	A	W	P	A	W	P
		0.91	1.05	0.74	0.01	0.01	0.01	0.83	0.96	0.68	0.02	0.02	0.02	7.22	8.34	5.90	0.26	0.37	0.12
		A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P
		1.29	1.83	1.49	0.02	0.03	0.02	1.18	1.67	1.36	0.04	0.06	0.04	5.21	7.44	6.79	0.25	0.43	0.47
		A*W*P		2.58	A*W*P		0.04	A*W*P		2.36	A*W*P		0.08	A*W*P		6.42	A*W*P		0.53

Table 4. Effect of Various Types of Irrigation Water and spraying with seaweeds on biochemical attributes of *Ziziphus* plants (P1) and *citrus* plants (P2) grown in pots.

Concentrations of seaweed extract (A)	Types of water (W)	Total chlorophyll (mg/g)			Total carbohydrate (mg/g)			CAT(U/g fw)			SOD(U/g fw)			POD(U/g fw)		
		Plants of study (P)														
		P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W
A1	W1	3.39	3.02	3.20	73.11	63.20	68.15	2.44	1.27	1.85	11.88	11.28	11.58	8.80	8.26	8.53
	W2	2.73	2.05	2.39	69.87	54.91	62.39	3.51	1.56	2.54	13.43	11.81	12.62	14.40	11.29	12.84
	W3	2.21	1.45	1.83	60.01	44.43	52.22	3.49	1.75	2.62	13.29	11.94	12.61	18.59	13.66	16.12
	W4	1.62	1.14	1.38	50.03	35.81	42.92	3.88	2.32	3.10	13.55	12.33	12.94	22.10	13.94	18.02
A2	W1	3.46	3.14	3.30	75.14	67.20	71.17	2.79	1.92	2.35	13.51	11.52	12.51	13.28	11.47	12.37
	W2	2.97	2.44	2.70	71.12	57.64	64.38	3.96	2.15	3.05	15.21	12.67	13.94	15.29	11.69	13.49
	W3	2.41	1.65	2.03	64.56	47.41	55.98	3.88	2.81	3.35	16.39	14.11	15.25	20.29	17.49	18.89
	W4	1.82	1.24	1.53	53.13	39.75	46.44	4.69	3.40	4.04	16.89	14.64	15.76	24.97	19.46	22.21
A3	W1	3.54	3.42	3.48	78.07	69.57	73.82	5.54	3.30	4.42	16.37	14.44	15.40	14.91	13.88	14.39
	W2	3.07	2.90	2.98	74.25	61.08	67.67	7.44	3.91	5.67	17.29	15.84	16.56	17.44	14.78	16.11
	W3	2.51	1.85	2.18	67.24	50.06	58.65	7.38	4.21	5.79	19.09	17.30	18.19	24.22	18.34	21.28
	W4	1.97	1.37	1.67	55.26	40.16	47.71	9.50	6.36	7.93	23.78	19.87	21.83	28.43	19.76	24.10
Mean(P)		2.64	2.14	Mean A	65.98	52.60	Mean A	4.877	2.916	Mean A	15.89	13.98	Mean A	14.50	18.56	Mean A
Mean A*P	A1	2.49	1.91	2.20	63.25	49.58	56.42	3.33	1.72	2.53	13.04	11.84	12.44	15.97	11.79	13.88
	A2	2.66	2.12	2.39	65.99	53.00	59.49	3.83	2.57	3.20	15.50	13.23	14.37	18.46	15.02	16.74
	A3	2.77	2.38	2.58	68.70	55.22	61.96	7.46	4.44	5.95	19.13	16.86	18.00	21.25	16.69	18.97
				Mean W			Mean W			Mean W			Mean W			Mean W
Mean W*P	W1	3.46	3.19	3.33	75.44	66.66	71.05	3.59	2.16	2.87	13.92	12.41	13.17	12.33	11.20	11.76
	W2	2.92	2.46	2.69	71.75	57.88	64.81	4.97	2.54	3.75	15.31	13.44	14.37	15.71	12.59	14.15
	W3	2.38	1.65	2.01	63.94	47.30	55.62	4.91	2.92	3.92	16.25	14.45	15.35	21.03	16.49	18.76
	W4	1.80	1.25	1.53	52.81	38.57	45.69	6.02	4.03	5.02	18.07	15.61	16.84	25.17	17.72	21.44
L.S.D		A	W	P	A	W	P	A	W	P	A	W	P	A	W	P
		0.06	0.04	0.03	0.33	0.47	0.67	0.06	0.07	0.05	0.28	0.32	0.23	0.27	0.32	0.22
		A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P
		0.05	0.07	0.03	0.58	0.41	0.82	0.09	0.13	0.11	0.39	0.56	0.46	0.39	0.55	0.45
		A*W*P		0.10	A*W*P		1.17	A*W*P		0.19	A*W*P		0.79	A*W*P		0.78

Table 5. Effect of Various Types of Irrigation Water and spraying with seaweeds on mineral contents of *Ziziphus* plants (P1) and *citrus* plants (P2) grown in pots.

Concent-rations of seaweed extract (A)	Types of water (W)	N %			P%			K%			Zn(µg/g)			Fe(µg/g)			
		Plants of study (P)															
		P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W	P1	P2	MeanA*W	
A1	W1	3.13	2.93	3.03	1.22	1.23	1.22	1.70	1.62	1.66	83.22	71.20	77.21	61.34	59.44	60.39	
	W2	2.51	2.13	2.32	1.14	1.00	1.07	1.36	1.20	1.28	71.22	60.70	65.96	53.43	50.53	51.98	
	W3	1.92	1.41	1.66	0.95	0.75	0.85	1.14	0.79	0.96	60.00	58.90	59.45	45.84	37.05	41.44	
	W4	1.53	1.02	1.27	0.80	0.60	0.70	0.86	0.64	0.75	53.26	52.00	52.63	37.05	30.00	33.53	
A2	W1	3.21	3.02	3.11	1.34	1.31	1.32	1.74	1.82	1.78	90.20	73.22	81.71	63.50	60.40	61.95	
	W2	2.83	2.50	2.66	1.24	1.02	1.13	1.42	1.41	1.41	75.60	63.60	69.60	56.63	54.51	55.57	
	W3	2.03	1.76	1.89	1.00	0.82	0.91	1.20	0.90	1.05	60.20	60.20	60.20	48.99	40.53	44.76	
	W4	1.65	1.15	1.40	0.88	0.66	0.77	0.92	0.70	0.81	55.90	54.77	55.33	39.41	31.82	35.61	
A3	W1	3.45	3.12	3.28	1.44	1.38	1.41	2.00	1.92	1.96	95.10	74.10	84.60	64.54	62.03	63.28	
	W2	3.01	2.73	2.87	1.35	1.15	1.25	1.51	1.60	1.56	73.50	64.48	68.99	59.89	57.04	58.46	
	W3	2.18	1.94	2.06	1.03	0.92	0.97	1.27	1.00	1.13	65.10	65.10	65.10	50.76	45.58	48.17	
	W4	1.75	1.22	1.48	0.95	0.70	0.83	1.02	0.72	0.87	58.20	55.30	56.75	41.11	33.35	37.23	
Mean(P)		2.43	2.08	Mean A	1.11	0.96	Mean A	1.34	1.19	Mean A	70.13	62.90	Mean A	51.87	46.86	Mean A	
Mean A*P	A1	2.27	1.87	2.07	1.02	0.89	0.96	1.26	1.06	1.16	66.92	60.70	63.81	49.41	44.25	46.83	
	A2	2.43	2.11	2.27	1.11	0.95	1.03	1.32	1.21	1.26	70.47	62.94	66.71	52.13	46.81	49.47	
	A3	2.60	2.25	2.42	1.19	1.04	1.11	1.45	1.31	1.38	72.95	64.74	68.86	54.07	49.50	51.79	
				Mean W			Mean W			Mean W			Mean W			Mean W	
Mean W*P	W1	3.26	3.02	3.14	1.33	1.30	1.32	1.81	1.78	1.80	89.50	72.84	81.17	63.12	60.62	61.87	
	W2	2.78	2.45	2.62	1.24	1.05	1.15	1.43	1.40	1.42	73.44	62.92	68.18	56.65	54.03	55.34	
	W3	2.04	1.70	1.87	0.99	0.83	0.91	1.20	0.90	1.05	61.76	61.4	61.58	48.53	41.05	44.79	
	W4	1.64	1.13	1.39	0.88	0.66	0.77	0.93	0.69	0.81	55.78	54.02	54.90	39.19	31.72	35.46	
L.S.D		A	W	P	A	W	P	A	W	P	A	W	P	A	W	P	
		0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.54	0.65	0.48	0.55	0.39	0.27
		A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	A*P	A*W	W*P	
		0.02	0.04	0.03	0.02	0.01	0.02	0.02	0.01	0.03	0.71	0.54	0.56	0.47	0.67	0.67	
		A*W*P		0.05	A*W*P		0.04	A*W*P		0.04	A*W*P		0.84	A*W*P		0.95	