

Table (1) :Effect of different substrate media and irrigation water with macro and micro elements on flowering of strawberry during 2018 and 2019 seasons

Items	No. of days to open 1 st flower		No.of flowers/plant		Fruit set (%)	
	1	2	1	2	1	2
Sand	114.41	115.44	14.51	14.93	42.39	43.06
Peat moss	114.36	115.39	15.19	15.61	42.46	43.13
Vermiculite	114.15	115.18	15.25	15.67	45.50	46.17
Perlite	114.28	115.31	15.30	15.72	45.47	46.14
Peat: Vermin	113.17	114.20	15.51	15.63	45.49	46.16
Peat : Perlite	111.83	112.86	16.69	17.11	47.14	47.81
Vermi: Perlite	109.58	110.61	16.78	17.20	47.29	47.96
Peat: Vermin: Perlite	108.12	109.15	20.74	12.16	53.16	53.83
LSD (0.05)	0.17	0.19	1.10	1.07	2.17	2.11
Control (without fertilizer)	113.78	114.81	15.85	16.27	45.36	46.03
Fertilizer	111.19	112.22	16.64	17.06	46.86	47.53
LSD (0.05)	1.13	1.11	0.17	0.14	1.26	1.22

1= First season 2018 and 2 = Second season 2019.

Table (2): Effect of different substrate media and irrigation water with macro and micro elements on number of fruits , fruit weight and fruit length of strawberry at early yield during 2018 and 2019 seasons

Items	No. of Fruits		Fruits weight(g)		Length of fruit (cm)	
	1	2	1	2	1	2
Sand	4.05	4.06	3.64	3.77	2.55	2.57
Peat moss	4.19	4.20	3.67	3.80	2.61	2.63
Vermiculite	4.26	4.47	3.70	3.83	2.66	2.68
Perlite	4.30	4.31	3.71	3.89	2.66	2.68
Peat: vermin	4.34	4.35	3.71	3.84	2.69	2.71
Peat : Perlite	4.42	4.43	3.74	3.87	2.73	2.75
Vermi: Perlite	5.25	5.26	4.26	4.36	3.09	3.11
Peat: vermin: Perlite	5.54	5.55	4.34	3.47	3.25	3.27
LSD (0.05)	0.15	0.12	0.03	0.04	0.01	0.01
Control (without fertilizer)	4.41	4.42	3.64	3.90	2.61	2.63
Fertilizer	4.67	4.68	3.92	4.05	2.95	2.97
LSD (0.05)	0.13	0.11	0.11	0.10	0.20	0.21

1= First season 2018 and 2 = Second season 2019.

Table (3): Effect of different substrate media and irrigation water with macro and micro elements on fruit yield of strawberry during 2018 and 2019 seasons

Items	Fruit diameter (cm)		No. of Fruits / plant		Fruit weight (g)		Early yield (g/plant)		Yield (g/ plant)	
	1	2	1	2	1	2	1	2	1	2
Sand	2.39	2.46	2.80	3.33	4.64	4.69	251.66	266.33	851.16	860.31
Peat moss	2.44	2.51	3.95	3.98	4.70	4.75	254.26	264.43	861.31	870.46
Vermiculite	2.48	2.55	5.15	5.18	4.76	4.81	257.09	267.26	863.26	872.41
Perlite	2.69	2.76	5.26	5.29	4.81	4.86	260.67	270.84	867.66	876.81
Peat: vermin	2.71	2.78	5.49	5.52	4.98	5.03	268.12	278.29	885.86	895.01
Peat : Perlite	2.71	2.78	5.86	5.89	5.08	5.13	268.63	278.80	885.71	894.86
Vermi: Perlite	2.81	2.88	6.21	6.24	7.20	7.25	270.16	280.33	891.88	901.03
Peat: vermin: Perlite	2.85	2.92	12.14	12.17	10.43	10.48	284.38	294.55	948.32	957.47
LSD (0.05)	0.01	0.03	0.04	0.02	0.13	0.11	4.71	3.96	6.21	6.19
Control (without fertilizer)	2.54	2.61	4.92	4.95	5.34	5.42	529.39	269.56	877.24	886.39
Fertilizer	2.77	2.79	6.91	6.94	6.27	6.32	269.34	279.51	886.54	895.69
LSD (0.05)	0.17	0.20	1.15	1.17	0.08	0.07	5.22	5.17	7.20	8.21

1= First season 2018 and 2 = Second season 2019.

Table (4): Effect of different substrate media and irrigation water with macro and micro elements on fruit quality (N , P , K , and Ca %) of strawberry during 2018 and 2019 seasons

Items	N %		P %		K %		Ca %	
	1	2	1	2	1	2	1	2
Sand	2.60	2.61	0.36	0.37	3.04	3.06	1.58	1.59
Peat moss	2.62	2.63	0.36	0.37	3.14	3.16	1.59	1.60
Vermiculite	2.64	2.65	0.37	0.38	3.15	3.17	1.60	1.61
Perlite	2.69	2.70	0.45	0.45	3.17	3.19	1.62	1.63
Peat: vermin	2.73	2.74	0.46	0.47	3.21	3.23	1.64	1.65
Peat : Perlite	2.78	2.79	0.64	0.65	3.24	3.26	1.64	1.65
Vermi: Perlite	2.81	2.82	0.63	0.64	3.24	3.26	1.65	1.66
Peat: vermin: Perlite	2.86	2.87	0.66	0.67	3.25	3.27	1.65	1.66
LSD (0.05)	0.05	0.04	0.01	0.01	0.02	0.01	0.02	0.01
Control (without fertilizer)	2.67	2.68	0.47	0.48	3.13	3.15	1.60	1.61
Fertilizer	2.75	2.76	0.51	0.51	3.22	3.24	1.64	1.65
LSD (0.05)	0.07	0.06	0.03	0.01	0.07	0.06	0.01	0.02

1= First season 2018 and 2 = Second season 2019.

Table (5): Effect of different substrate media and irrigation water with macro and micro elements on TSS, acidity , V.C , sugars and anthocyanin contents of strawberry during 2018 and 2019 seasons

Items	TSS %		Acidity %		Vitamin c %		Sugars %		Anthocynins (mg/100g F.W)	
	1	2	1	2	1	2	1	2	1	2
Sand	7.50	7.57	0.90	0.91	53.65	53.68	6.62	6.67	26.19	26.23
Peat moss	7.55	7.62	0.87	0.88	54.30	54.33	6.65	6.70	27.70	27.74
Vermiculite	7.66	7.73	0.82	0.83	54.65	54.68	6.69	6.74	28.22	28.26
Perlite	7.67	7.74	0.76	0.77	55.05	55.08	6.69	6.74	28.29	28.33
Peat: vermin	7.70	7.77	0.66	0.67	56.19	56.22	6.77	6.82	28.33	28.37
Peat : Perlite	7.73	7.80	0.63	0.64	57.32	57.35	6.84	6.89	31.13	31.17
Vermi: Perlite	7.75	7.82	0.40	0.54	57.36	57.39	6.86	6.91	31.31	31.35
Peat: vermin: Perlite	7.79	7.86	0.26	0.27	58.95	58.97	6.90	6.95	41.27	41.31
LSD (0.05)	0.02	0.02	0.07	0.05	0.70	0.68	0.07	0.08	2.15	2.17
Control (without fertilizer)	7.62	7.69	0.74	0.78	55.33	55.36	6.69	6.74	29.20	29.24
Fertilizer	7.72	7.75	0.59	0.60	56.53	56.56	6.80	6.85	31.40	31.44
LSD (0.05)	0.07	0.03	0.02	0.02	0.65	0.67	0.05	0.04	1.11	1.17

1= First season 2018 and 2 = Second season 2019.