Table 1: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on yield components per tree of Manfalouty pomegranate cultivar during 2006 season.

Characteristic / Treatment	Fruit No. I	Fruit No. II	Fruit No. III	Yield (kg) I	Yield (kg) II	Yield (kg) III	Total no. Fruits	Total yield Weight (kg/tree)
1) Flower thinning	73.9	55.7	34.8	39.4	20.6	8.1	164.4	68.1
2) 50 ppm GA_3	62.7	61.5	70.8	37.8	23.4	18.2	195.0	79.4
3) 100 ppm GA_3	60.3	51.7	65.0	32.8	20.0	18.6	177.0	71.4
4) 150 ppm GA_3	57.2	66.2	66.8	33.6	24.1	19.7	190.2	77.4
5) Flower thinning + 100 ppm GA_3	65.5	41.3	41.6	42.1	14.5	10.6	148.5	67.2
6) 1000 ppm Ethrel	59.8	61.6	59.4	34.4	23.0	15.8	180.8	73.2
7) 50 ppm GA_3 + 1000 ppm Ethrel	59.6	61.0	64.0	36.6	21.2	17.5	184.6	75.3
8) 100 ppm GA_3 + 1000 ppm Ethrel	62.6	63.5	65.7	35.9	24.2	15.5	191.8	75.6
9) 150 ppm GA_3 + 1000 ppm Ethrel	60.4	62.2	66.2	36.4	24.4	16.2	188.8	77.0
10) Control	52.6	46.5	72.5	25.4	16.4	18.8	171.6	60.6
$LSD_{0.05}$	10.3	11.2	21.1	8.7	N.S	5.4	18.2	N.S

I First grade

II Second grade

III Third grade

Table 2: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on yield components per tree of Manfalouty pomegranate cultivar during 2007 season.

Characteristic / Treatment	Fruit No. I	Fruit No. II	Fruit No. III	Yield (kg) I	Yield (kg) II	Yield (kg) III	Total No. fruits	Total yield weight (kg/tree)
1) Flower thinning	111.6	60.8	45.0	60.6	27.8	12.1	217.4	100.5
2) 50 ppm GA_3	103.2	110.2	117.4	59.2	41.8	30.8	330.8	131.8
3) 100 ppm GA_3	98.0	102.6	82.4	53.6	39.8	24.6	283.0	118.0
4) 150 ppm GA_3	105.6	111.6	97.0	60.2	43.2	30.0	314.0	133.4
5) Flower thinning + 100 ppm GA_3	102.0	78.4	63.6	58.4	30.8	16.6	244.0	105.8
6) 1000 ppm Ethrel	93.4	96.0	88.0	51.4	34.4	25.6	277.4	111.4
7) 50 ppm GA_3 + 1000 ppm Ethrel	98.2	120.0	114.4	52.0	44.0	26.2	332.6	123.0
8) 100 ppm GA_3 + 1000 ppm Ethrel	95.2	92.8	80.4	53.2	32.2	24.9	268.4	110.3
9) 150 ppm GA_3 + 1000 ppm Ethrel	96.0	102.2	91.2	52.8	39.8	27.4	289.4	120.0
10) Control	80.6	101.6	95.2	42.6	40.4	23.4	277.4	106.4
$LSD_{0.05}$	20.1	22.3	25.6	9.1	N.S.	9.3	30.8	25.3

I First grade

II Second grade

III Third grade

Table 3: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on yield components (per tree) and fruit splitting percentages of Manfalouty pomegranate cultivar during 2006 season.

Characteristic / Treatment	Fruit No. % I	Fruit No. % II	Fruit No. % III	Yield % I	Yield % II	Yield % III	Fruit splitting No. %	Fruit splitting weight %
1) Flower thinning	44.9	33.9	21.4	57.6	30.8	11.5	8.0	7.2
2) 50 ppm GA_3	32.3	31.4	36.2	47.0	30.0	22.9	3.8	3.8
3) 100 ppm GA_3	34.8	29.4	36.0	45.5	28.4	26.0	2.4	2.3
4) 150 ppm GA_3	30.1	34.7	35.1	43.1	31.1	25.6	3.6	3.9
5) Flower thinning + 100 ppm GA_3	44.4	27.9	27.7	62.7	21.2	16.0	5.2	5.2
6) 1000 ppm Ethrel	33.9	33.9	32.4	46.7	31.5	21.7	1.2	1.7
7) 50 ppm GA_3 + 1000 ppm Ethrel	33.0	33.2	34.1	48.7	28.4	23.0	3.1	2.8
8) 100 ppm GA_3 + 1000 ppm Ethrel	32.2	33.6	34.1	47.3	32.4	20.2	2.9	3.1
9) 150 ppm GA_3 + 1000 ppm Ethrel	32.0	32.5	35.8	47.2	31.2	21.4	2.9	3.2
10) Control	30.3	27.7	41.9	41.6	27.3	31.0	13.6	11.9
$LSD_{0.05}$	8.0	N.S	N.S	11.6	N.S	7.5	8.5	2.8

I First grade

II Second grade

III Third grade

Table 4: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on yield components (per tree) and fruit splitting percentages of Manfalouty pomegranate cultivar during 2007 season.

Characteristic / Treatment	Fruit No. % I	Fruit No. % II	Fruit No. % III	Yield % I	Yield % II	Yield % III	Fruit splitting No. %	Fruit splitting weight %
1) Flower thinning	51.1	27.5	21.3	60.2	28.4	11.3	5.3	3.4
2) 50 ppm GA_3	31.4	34.0	34.5	44.9	31.8	23.2	2.0	1.9
3) 100 ppm GA_3	35.0	36.6	28.3	45.5	33.8	20.6	1.7	1.2
4) 150 ppm GA_3	34.2	36.1	29.6	45.4	32.5	22.1	1.9	1.1
5) Flower thinning + 100 ppm GA_3	41.2	32.5	26.2	55.9	28.9	15.1	3.8	4.0
6) 1000 ppm Ethrel	33.8	34.7	31.4	46.2	30.9	22.9	2.3	2.5
7) 50 ppm GA_3 + 1000 ppm Ethrel	30.1	36.6	33.2	42.7	36.3	20.7	6.3	5.2
8) 100 ppm GA_3 + 1000 ppm Ethrel	35.1	34.4	30.5	48.9	28.1	22.9	5.4	5.0
9) 150 ppm GA_3 + 1000 ppm Ethrel	33.9	34.4	31.6	44.0	33.0	23.2	4.5	3.9
10) Control	29.6	36.1	34.6	40.0	38.1	21.7	10.0	10.0
$LSD_{0.05}$	9.4	N.S.	N.S.	8.0	N.S.	5.5	4.6	3.6

I First grade
II Second grade
III Third grade

Table 5: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on the fruit, peel and granule weight of Manfalouty pomegranate cultivar at the first sampling date during 2006 and 2007 seasons.

Characteristic / Treatment	Average fruit weight (g)		Average peel weight (g)		Average granule weight (g)		Average granule weight (%)	
	2006	2007	2006	2007	2006	2007	2006	2007
1) Flower thinning	483.0	375.0	202.6	138.5	280.3	237.0	58.0	63.2
2) 50 ppm GA_3	497.0	371.3	221.0	147.5	276.0	223.7	55.4	60.1
3) 100 ppm GA_3	463.6	391.4	203.6	149.3	260.0	242.1	56.1	61.9
4) 150 ppm GA_3	474.6	334.1	206.3	132.4	268.3	201.7	56.7	59.0
5) Flower thinning + 100 ppm GA_3	473.3	336.0	215.3	132.4	258.0	203.5	54.5	60.7
6) 1000 ppm Ethrel	469.3	327.2	198.9	118.8	270.7	208.4	57.2	63.6
7) 50 ppm GA_3 + 1000 ppm Ethrel	484.5	373.9	220.0	137.5	264.6	236.4	54.4	63.3
8) 100 ppm GA_3 + 1000 ppm Ethrel	492.3	349.2	217.3	129.1	275.0	220.1	55.9	62.8
9) 150 ppm GA_3 + 1000 ppm Ethrel	495.3	361.8	209.7	124.0	285.6	237.9	57.5	65.7
10) Control	442.0	325.0	200.3	120.0	241.9	205.0	54.0	63.1
$LSD_{0.05}$	N.S.	N.S.	N.S.	25.4	N.S.	N.S.	N.S.	N.S.

Table 6: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on the fruit, peel and granule weight of Manfalouty pomegranate cultivar at the second sampling date during 2006 and 2007 seasons.

Characteristic / Treatment	Average fruit weight (g)		Average peel weight (g)		Average granule weight (g)		Average granule weight (%)	
	2006	2007	2006	2007	2006	2007	2006	2007
1) Flower thinning	520.6	418.8	225.6	192.6	295.0	226.2	56.3	54.2
2) 50 ppm GA_3	533.3	411.3	236.0	182.2	297.3	229.0	55.7	55.8
3) 100 ppm GA_3	473.6	423.8	212.6	187.6	261.0	236.2	55.5	55.7
4) 150 ppm GA_3	524.0	388.8	240.3	180.0	283.6	208.8	54.2	53.6
5) Flower thinning + 100 ppm GA_3	523.7	400.0	237.0	181.4	286.7	218.6	54.7	54.8
6) 1000 ppm Ethrel	488.0	361.6	211.6	139.8	276.3	221.8	56.6	61.3
7) 50 ppm GA_3 + 1000 ppm Ethrel	494.5	388.6	230.0	145.1	264.6	238.4	53.5	61.3
8) 100 ppm GA_3 + 1000 ppm Ethrel	536.5	390.5	242.5	149.7	294.0	240.8	54.8	61.8
9) 150 ppm GA_3 + 1000 ppm Ethrel	530.5	386.2	238.0	146.0	292.5	240.2	55.3	62.1
10) Control	462.3	373.9	216.0	162.7	246.3	211.2	53.3	56.5
$LSD_{0.05}$	67.7	37.0	N.S.	24.2	42.4	N.S.	N.S.	3.6

Table 7: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on TSS%, acidity % and TSS/acid ratio of Manfalouty pomegranate cultivar at the first sampling date during 2006 and 2007 seasons.

Characteristic / Treatment	TSS %		Acidity %		TSS/acid ratio	
	2006	2007	2006	2007	2006	2007
1) Flower thinning	16.7	15.2	1.087	0.885	15.5	17.1
2) 50 ppm GA_3	15.5	14.3	1.186	1.083	13.1	13.3
3) 100 ppm GA_3	15.3	14.1	1.239	1.092	12.3	13.0
4) 150 ppm GA_3	15.3	14.6	1.187	1.090	12.8	13.4
5) Flower thinning + 100 ppm GA_3	15.0	14.4	0.979	0.885	15.4	16.2
6) 1000 ppm Ethrel	15.2	15.4	1.064	0.894	14.2	17.2
7) 50 ppm GA_3 + 1000 ppm Ethrel	15.6	15.0	1.094	0.925	14.4	16.1
8) 100 ppm GA_3 + 1000 ppm Ethrel	15.0	14.5	1.045	0.964	14.4	15.0
9) 150 ppm GA_3 + 1000 ppm Ethrel	15.2	15.2	1.087	0.977	14.0	15.5
10) Control	14.9	14.3	1.186	1.038	12.7	13.9
$LSD_{0.05}$	1.0	N.S.	N.S.	N.S.	N.S.	2.2

Table 8: Effect of flower thinning, gibberellic acid (GA_3) and ethrel on TSS%, acidity % and TSS/acid ratio of Manfalouty pomegranate cultivar at the second sampling date during 2006 and 2007 seasons.

Characteristic / Treatment	TSS %		Acidity %		TSS/acid ratio	
	2006	2007	2006	2007	2006	2007
1) Flower thinning	15.0	14.2	0.831	0.781	18.1	18.2
2) 50 ppm GA_3	14.8	13.9	1.090	0.885	13.6	15.6
3) 100 ppm GA_3	14.4	14.2	1.089	0.888	13.4	16.0
4) 150 ppm GA_3	14.0	13.6	0.992	0.925	14.1	14.7
5) Flower thinning + 100 ppm GA_3	14.9	14.3	0.850	0.768	17.6	18.5
6) 1000 ppm Ethrel	13.9	14.6	0.951	0.768	14.7	18.9
7) 50 ppm GA_3 + 1000 ppm Ethrel	14.2	13.5	0.902	0.742	15.7	18.1
8) 100 ppm GA_3 + 1000 ppm Ethrel	13.9	13.7	0.992	0.845	14.2	16.2
9) 150 ppm GA_3 + 1000 ppm Ethrel	14.4	13.5	0.965	0.768	14.9	17.5
10) Control	13.8	13.9	0.992	0.888	13.9	15.7
$LSD_{0.05}$	N.S.	N.S.	N.S.	N.S.	2.7	2.3