

Table(1): Effect of some defoliation treatments on some agronomic characters of cotton in 2005 and 2006 seasons, Mallawi.

TREATMENTS	Leaf abscission %		Earliness %		No. of open bolls / plant		Boll weight (gm)		Seed cotton yield (Kent / fad)		Lint %		Seed index	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Control	56.5	51.8	63.6	58.2	12.6	13.9	2.63	2.52	10.55	11.12	40.12	40.33	10.8	10.5
Dropp (20gm / fad)	91.0	80.3	81.9	78.6	14.9	16.7	2.47	2.36	10.37	10.86	41.06	41.01	10.1	9.4
Ethrel (250cm ² / fad)	88.6	78.8	78.2	76.3	14.2	16.5	2.52	2.49	10.48	11.18	40.68	40.74	10.3	10.2
Calcium superphosphate (15kg/fad)	63.0	56.1	67.8	61.9	13.1	14.3	2.68	2.60	10.68	11.28	39.96	40.22	11.1	10.6
L.S.D 5%	7.8	6.4	5.6	5.8	1.2	1.6	0.11	0.14	N.S.	N.S.	0.83	N.S.	0.9	0.1

Table(2): Effect of spraying certain chemical termination on the mean population dynamics of pests and predators during growing cotton season, Mallawi 2005 and 2006, combined data.

Defoliations	Pests				Predators			
	Aphis	Jassid	Whit fly	Red spider	Lady bird	Lacewing	Rove beetle	True spider
Dropp	574.90*	174.40	143.90	24.40	88.20	105.70	64.90	39.90
Ethrel	739.70	192.20	165.70	33.60	80.20	112.20	61.80	37.20
Superphosphate	606.70	155.60	141.20	28.20	69.90	83.50	63.50	43.10
Control	1328.90	332.40	279.10	51.70	121.50	132.70	73.40	43.60
T – test	4.40		5.81		3.99		12.99	

t 0.05 = 2.571

t 0.01 = 4.032

* significant at 5% level .

** highly significant at 1% level .

Table(3): Effect of Spraying chemical termination (defoliants) on number of *Bemisia tabaci* and their associated parasitoids for growing cotton season, Mallawi 2005 and 2006, combined data.

Pests Defoliations	Before Spray							After 1 week							After 2 week						
	*L III	PU .	H.	L.	M.	T.	%Of Par	L III	PU .	H.	L.	M.	T.	%Of Par	L III	PU .	H.	L.	M.	T.	%Of Par
Dropp	40	34	18	34	22	56	75.67	38	20	14	28	16	44	75.86	28	15	12	18	13	31	72.10
Ethrel	33	20	16	22	15	37	69.81	47	22	18	33	18	51	73.91	33	19	16	20	16	36	69.23
Superphosphate	43	26	21	30	18	48	60.75	47	29	23	31	22	53	69.74	45	20	9	29	27	56	86.15
Control	42	25	20	30	17	47	70.15	72	34	34	45	27	72	67.92	64	23	17	38	32	70	80.45
	After 3 week							After 4 week							After 5 week						
Dropp	26	15	14	16	11	27	65.85	42	25	15	29	21	50	76.92	41	18	16	32	11	43	72.88
Ethrel	38	25	21	26	16	42	66.67	45	28	16	27	30	57	78.08	47	29	22	34	20	54	71.05
Superphosphate	43	22	22	25	18	43	66.15	26	19	12	16	17	33	73.33	49	31	18	36	26	62	77.50
Control	56	40	26	38	32	70	72.92	51	28	18	32	29	61	77.22	59	26	25	37	23	60	70.59
	After 6 week							After 7 week							After 8 week						
Dropp	27	8	7	17	11	28	80.00	41	23	19	29	16	45	70.31	82	18	38	41	21	62	62.00
Ethrel	51	12	13	31	19	50	79.36	52	40	21	36	35	71	77.17	89	22	27	46	38	84	75.68
Superphosphate	23	12	9	18	8	26	74.29	52	24	22	33	21	54	71.05	67	25	24	35	33	68	73.91
Control	64	13	21	39	22	61	74.39	64	30	27	33	34	67	71.28	94	28	39	44	39	84	68.85

* Taking 10 Leaves from the top or the plant from treatment every week and Examined at laboratory by the Microscope.

L III = Number of larval third instar.

PU = Number of pupae.

H = Healthy without parasitism.

L = Parasite *Encarsia lutea* (Masi)

M = *Eretmocerus munds* (Merect.)

% of the Par. = % of parasitism.

Table(4): Percent of infestation by bollworms, and number of larvae after spraying chemical termination (defoliants), during cotton growing season, Mallawi 2005, and 2006, combined data .

Defoliants Data of sampling	Dropp		Ethrel		Superphosphate		Control	
	No. of Larvae	% infestation	No. of Larvae	% infestation	No. of Larvae	% infestation	No. of Larvae	% infestation
18 / 8	25	* 31	23	27	47	45	59	57
25 / 8	20	29	17	22	22	31	29	41
1 / 9	28	35	28	36	27	36	35	48
8 / 9	21	24	25	28	26	28	32	34
15 / 9	20	22	24	23	20	23	25	32
22 / 9	17	21	13	17	10	14	19	22
29 / 9	24	29	26	30	35	41	46	52
6 / 10	16	19	19	23	22	28	33	38

* Taking 100 green bolls Randomized from each treatment weekly .

Table(5): Percent reduction in the number of remained green bolls, the infestation bolls and percent of damage loss by bollworms after using defoliants during growing cotton season, Mallawi 2005, and 2006, combined data.

Defoliations	No. of green bolls remained after picking	No. of infested bolls after picking	Percent of infestation by bollworms	Percent of reduction of infestation by bollworms	No. of larval of infestation bolls	Percent reduction of larval after picking	Percent reduction of damage in yield
Dropp	39	13	33.33	94.12	24	90.66	17.07
Ethrel	62	33	53.23	85.06	49	80.93	18.50
Superphosphate	130	79	60.77	64.25	94	63.42	23.20
Control	288	221	76.74	-	255	-	27.39