

Table 1. Reduction percentages of *Earias insulana* infestation on cotton treated with different insecticide formulations and their mixtures with adjuvants in 2010 growing season

Insecticides formulations/adjuvants	Rate of application	1 st spray			2 nd spray			3 rd spray			4 th spray			GP	GA (%)
		1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean		
		%R			%R			%R			%R				
Top Film	30 cm ³ /100	0	0	0	0	0	0	0	0	0	0	0	0	40.63	0 ^g
Tritone K	L water	0	0	0	0	0	0	0	0	0	0	0	0	40.63	0 ^g
Dursban	1 L/Feddan	53.33	60	56.67	81.33	82.86	82.1	88.8	85.45	87.13	88.77	86.44	87.61	8.5	83.2 ^{bcd}
Pyrifos El Nasr		53.33	56	54.67	78.67	79.05	78.86	85.6	82.55	84.07	85.96	85.08	85.52	9.875	80.5 ^{de}
Halothrin Gold El Nasr	400	50	55	52.5	66.67	69.05	67.86	78	74.55	76.27	78.95	77.97	78.46	11	72.9 ^f
Lambada Mox	cm ³ /Feddan	46.67	52	49.33	73.33	77.14	75.24	84	82.55	83.27	84.56	83.73	84.15	10.88	78.5 ^{ef}
Top Film + Dursban	30 cm ³ /100	72.22	76.67	74.44	88.89	88.89	88.89	92	91.52	91.76	92.98	92.09	92.54	6.25	89.7 ^{ab}
Top Film + Pyrifos El Nasr	L water + 1 L/Feddan	66.67	68	67.33	84	84.76	84.38	88.8	88.36	88.58	90.18	89.15	89.66	7.125	85.9 ^{bcd}
Top Film + Halothrin Gold El Nasr	30 cm ³ /100 L water +	66.67	72	69.33	86.67	86.67	86.67	92	91.27	91.64	92.98	91.86	92.42	5.75	88.6 ^{abc}
Top Film + Lambada Mox	400 cm ³ /Feddan	77.78	80	78.89	91.11	92.06	91.59	96	95.15	95.58	96.49	95.48	95.99	4.125	93.2 ^a
Tritone K + Dursban	30 cm ³ /100	60	68	64	84	86.67	85.33	88.8	86.91	87.85	87.37	87.8	87.58	7.625	84.9 ^{bcd}
Tritone K + Pyrifos El Nasr	L water + 1 L/Feddan	50	60	55	76.67	80.95	78.81	80	85.45	82.73	87.72	88.14	87.93	7.625	81.2 ^{cde}
Tritone K + Halothrin Gold El Nasr	30 cm ³ /100 L water +	66.67	68	67.33	84	84.76	84.38	90.4	88.36	89.38	90.18	90.51	90.34	6.875	86.4 ^{abcd}
Tritone K + Lambada Mox	400 cm ³ /Feddan	66.67	72	69.33	86.67	86.67	86.67	90.4	89.82	90.11	92.98	91.86	92.42	6	88.1 ^{abc}
Control		0	0	0	0	0	0	0	0	0	0	0	0	40.63	0 ^g

%R= reduction percentages of infestation; GP= general population average; GA= general reduction average.

L.S.D_{0.01} least significant difference at 0.01 level of probability.

Means followed by the same letter in a column are not significantly different at 1% level of probability (Duncan Test).

Table 2. Reduction percentages of *Earias insulana* infestation on cotton treated with different insecticide formulations and their mixtures with adjuvants in 2011 growing season

Insecticides formulations/adjuvants	Rate of application	1 st spray			2 nd spray			3 rd spray			4 th spray			GP	GA (%)
		1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean		
		%R			%R			%R			%R				
Top Film	30 cm ³ /100	0	0	0	0	0	0	0	0	0	0	0	0	44.5	0 ^f
Tritone K	L water	0	0	0	0	0	0	0	0	0	0	0	0	44.5	0 ^f
Dursban	1 L/Feddan	46.15	54.55	50.35	78.79	80.43	79.61	87.04	83.33	85.19	87.3	84.62	85.96	8.5	80.8 ^{bcd}
Pyrifos El Nasr		13.46	37.5	25.48	69.7	70.11	69.9	79.17	75	77.08	80.16	78.85	79.5	10.13	71.5 ^{cde}
Halothrin Gold El Nasr	400	13.46	26.14	19.8	58.33	64.67	61.5	76.85	70.83	73.84	76.19	75	75.6	11.88	66.6 ^c
Lambada Mox	cm ³ /Feddan	23.08	31.82	27.45	65.91	67.39	66.65	79.17	77.08	78.13	80.16	76.92	78.54	10.38	70.8 ^{de}
Top Film + Dursban	30 cm ³ /100	61.54	68.18	64.86	84.85	84.78	84.82	88.89	88.33	88.61	90.48	90.77	90.62	6.125	86.2 ^{ab}
Top Film + Pyrifos El Nasr	L water + 1 L/Feddan	51.92	65.91	58.92	81.06	78.26	79.66	83.8	83.33	83.56	86.11	84.62	85.36	6.75	81 ^{abc}
Top Film + Halothrin Gold El Nasr	30 cm ³ /100 L water +	61.54	68.18	64.86	84.85	84.78	84.82	90.74	90	90.37	88.89	90.77	89.83	6	86.5 ^{ab}
Top Film + Lambada Mox	400 cm ³ /Feddan	67.95	77.27	72.61	89.9	90.94	90.42	93.83	94.44	94.14	94.71	94.87	94.79	4.5	91.5 ^a
Tritone K + Dursban	30 cm ³ /100	42.31	48.86	45.59	77.27	80.98	79.13	83.8	83.33	83.56	84.13	84.62	84.37	7.375	79.2 ^{bcd}
Tritone K + Pyrifos El Nasr	L water + 1 L/Feddan	32.69	48.86	40.78	69.7	78.26	73.98	76.85	85.42	81.13	86.11	84.62	85.36	8	77.5 ^{bcd}
Tritone K + Halothrin Gold El Nasr	30 cm ³ /100 L water +	51.92	60.23	56.08	69.7	78.26	73.98	86.11	83.33	84.72	86.11	88.46	87.29	6.875	80.6 ^{abc}
Tritone K + Lambada Mox	400 cm ³ /Feddan	51.92	60.23	56.08	81.06	80.98	81.02	86.11	85.42	85.76	90.08	88.46	89.27	6	83.1 ^{ab}
Control		0	0	0	0	0	0	0	0	0	0	0	0	44.5	0 ^f

%R= reduction percentages of infestation; GP= general population average; GA= general reduction average.

L.S.D_{0.01} least significant difference at 0.01 level of probability.

Means followed by the same letter in a column are not significantly different at 1% level of probability (Duncan Test).

Table 3. Reduction percentages of *Pectinophora gossypiella* infestation on cotton treated with different insecticide formulations and their mixtures with adjuvants in 2010 growing season

Insecticides formulations/adjuvants	Rate of application	1 st spray			2 nd spray			3 rd spray			4 th spray			GP	GA (%)
		1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean	1 st week	2 nd week	Mean		
		%R			%R			%R			%R				
Top Film	30 cm ³ /100	0	0	0	0	0	0	0	0	0	0	0	0	9.75	0 ^c
Tritone K	L water	0	0	0	0	0	0	0	0	0	0	0	0	9.75	0 ^c
Dursban	1 L/Feddan	100	83.33	91.67	88.89	83.33	86.11	100	75	87.5	100	75	87.5	1.25	87.1 ^{ab}
Pyrifos El Nasr		100	66.67	83.33	88.89	75	81.94	90.91	75	82.95	91.67	75	83.33	1.75	82 ^{ab}
Halothrin Gold El Nasr	400	75	66.67	70.83	88.89	66.67	77.78	81.82	66.67	74.24	100	66.67	83.33	2.25	76.9 ^b
Lambada Mox	cm ³ /Feddan	75	66.67	70.83	88.89	75	81.94	90.91	75	82.95	91.67	75	83.33	1.875	80.7 ^b
Top Film + Dursban	30 cm ³ /100	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Top Film + Pyrifos El Nasr	L water + 1 L/Feddan	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Top Film + Halothrin Gold El Nasr	30 cm ³ /100 L water +	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Top Film + Lambada Mox	400 cm ³ /Feddan	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Tritone K + Dursban	30 cm ³ /100	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Tritone K + Pyrifos El Nasr	L water + 1 L/Feddan	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Tritone K + Halothrin Gold El Nasr	30 cm ³ /100 L water +	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Tritone K + Lambada Mox	400 cm ³ /Feddan	100	83.33	91.67	88.89	91.67	90.28	100	91.67	95.83	100	91.67	95.83	0.625	93.5 ^a
Control		0	0	0	0	0	0	0	0	0	0	0	0	9.75	0 ^c

%R= reduction percentages of infestation; GP= general population average; GA= general reduction average.

L.S.D_{0.01} least significant difference at 0.01 level of probability.

Means followed by the same letter in a column are not significantly different at 1% level of probability (Duncan Test).

Table 4. Reduction percentages of *Pectinophora gossypiella* infestation on cotton treated with different insecticide formulations and their mixtures with adjuvants in 2011 growing season

Insecticides formulations/adjuvants	Rate of application	1 st spray			2 nd spray			3 rd spray			4 th spray			GP	GA (%)
		1 st	2 nd	Mean	1 st	2 nd	Mean	1 st	2 nd	Mean	1 st	2 nd	Mean		
		week	week		week	week		week	week		week	week			
		%R			%R			%R			%R				
Top Film	30 cm ³ /100	0	0	0	0	0	0	0	0	0	0	0	0	9.375	0 ^c
Tritone K	L water	0	0	0	0	0	0	0	0	0	0	0	0	9.375	0 ^c
Dursban	1 L/Feddan	66.67	80	73.33	88.89	81.82	85.35	90.91	83.33	87.12	91.67	83.33	87.5	1.375	85.3 ^{ab}
Pyrifos El Nasr		33.33	80	56.67	88.89	72.73	80.81	90.91	75	82.95	91.67	75	83.33	1.875	80 ^{ab}
Halothrin Gold El Nasr	400	33.33	60	46.67	77.78	63.64	70.71	72.73	66.67	69.7	91.67	66.67	79.17	2.75	70.6 ^b
Lambda Mox	cm ³ /Feddan	33.33	60	46.67	88.89	72.73	80.81	81.82	66.67	74.24	91.67	75	83.33	2.25	76 ^{ab}
Top Film + Dursban	30 cm ³ /100	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Top Film + Pyrifos El Nasr	L water + 1 L/Feddan	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Top Film + Halothrin Gold El Nasr	30 cm ³ /100 L water +	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Top Film + Lambda Mox	400 cm ³ /Feddan	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Tritone K + Dursban	30 cm ³ /100	66.67	60	63.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1.125	88 ^a
Tritone K + Pyrifos El Nasr	L water + 1 L/Feddan	66.67	80	73.33	88.89	90.91	89.9	90.91	83.33	87.12	91.67	91.67	91.67	1.125	88 ^a
Tritone K + Halothrin Gold El Nasr	30 cm ³ /100 L water +	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Tritone K + Lambda Mox	400 cm ³ /Feddan	66.67	80	73.33	88.89	90.91	89.9	90.91	91.67	91.29	91.67	91.67	91.67	1	89.3 ^a
Control		0	0	0	0	0	0	0	0	0	0	0	0	9.375	0 ^c

%R= reduction percentages of infestation; GP= general population average; GA= general reduction average.

L.S.D_{0.01} least significant difference at 0.01 level of probability.

Means followed by the same letter in a column are not significantly different at 1% level of probability (Duncan Test).