

Table (1): Reduction percentage of *Myzus persicae* and *Aphis gossypii* infesting potato cultivar plants, which affected by some biocides comparing with chemical insecticides during 2003 season.

Components	Rate / 100 L.W.	Diamant variety												Spunta variety											
		1 st Spray						2 nd Spray						1 st Spray						2 nd Spray					
		I.E		R.E		G.E		I.E		R.E		G.E		I.E		R.E		G.E		I.E		R.E		G.E	
		M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.
Biofly <i>B.bassiana</i>	100 ml	28.6 F	27.73 h	65.23 e	66.8 f	57.9 e	58.99 e	33.43 f	16.12 g	61.95 g	59.0 g	56.25 e	50.42 e	28.97 d	26.54 g	70.39 e	67.16 d	62.1 d	59.04 d	27.28 g	27.12 f	65.33 d	63.39 e	57.72 d	56.14 d
Semocidin (Fenvalerate)	150 ml	86.81 b	86.36 b	87.42 b	85.69 c	87.3 b	85.83 b	85.6 b	83.01 b	84.94 c	86.54 c	85.04 b	85.83 a	90.31 ab	89.71 b	91.49 c	90.71 b	91.25 a	89.71 a	87.52 b	86.15 b	91.36 b	90.10 b	90.59 ab	89.31 a
K.Z.oil Mineral oil	1.75 L.	61.46 e	58.9 g	69.52 d	69.71 ef	67.91 d	67.54 d	59.7 e	66.22 f	62.44 f	86.54 c	64.01 d	60.33 a	64.22 c	60.74 f	70.93 e	69.46 d	69.59 d	67.71 c	67.3 e	58.94 e	71.35 c	66.22 d	70.54 c	64.76 c
M.T.I. Dinotifuran	100 gm	84.63 b	77.03 d	80.46 c	78.45 d	81.3 c	78.17 c	83.64 bc	74.22 c	78.58 fd	75.96 d	80.6 c	74.89 ab	82.72 ab	78.96 d	91.74 bc	94.43 ab	89.94 a	91.34 a	81.02 c	80.42 c	91.17 b	91.65 ab	89.14 b	89.41 a
Kendo (Fenpyroximate)	95ml	94.18 a	9.421 a	89.95 ab	88.71 b	90.8 a	89.81 a	92.66 a	92.67 a	88.88 b	88.03 bc	89.63 a	89.18 a	97.5 ab	94.82 a	92.49 abc	90.83 b	93.49 a	91.63 a	98.37 a	97.01 a	91.07 b	89.67 b	92.53 a	91.14 a
Jojoba	500ml	59.92 e	62.51 f	72.25 d	70.27 e	69.79 d	68.71 d	59.26 e	58.01 e	70.72 e	70.13 e	68.43 d	67.71 c	61.36 c	62.24 f	76.44 d	75.27 c	73.42 b	72.67 b	60.29 f	60.1 e	71.91 c	71.01 c	69.59 c	68.83 b
Marshal (carbosulfan)	150gm	82.07 c	81.23 c	92.02 a	90.53 ab	90.03 ab	88.67 ab	81.88 c	81.29 b	91.38 ab	90.71 ab	89.79 a	88.95 a	83.5 ab	82.04 c	95.16 a	94.71 a	92.83 a	92.18 a	84.56 b	82.72 bc	92.48 b	91.37 ab	90.89 ab	89.64 a
Polo (diafentihuron)	150ml	69.42 d	38.16 e	92.84 a	92.07 a	88.15 ab	87.28 ab	68.71 d	67.92 d	93.14 a	92.87 a	88.09 ab	87.89 a	72.74 bc	72.08 e	94.83 ab	94.51 ab	90.41 a	90.02 a	74.73 d	75.13 d	93.48 a	93.16 a	89.73 ab	89.55 a
L.S.D		2.447	3.238	3.238	2.93	27.36	3.257	3.179	3.722	2.934	2.87	3.62	3.46	15.42	2.736	3.35	3.568	3.35	2.826	3.295	5.12	2.289	2.667	2.736	2.029

I.E = Initial effect , R.E. = Residual effect , G.E. = General effect, Residual = Means of (5 + 8 + 11 +14) days after spray

M.= *Myzus persicae* , A. = *Aphis gossypii* , Initial = Means of 1+3 days after spray

Table (2): Reduction percentage of *Myzus persicae* and *Aphis gossypii* infesting potato cultivar plants, which affected by some biocides comparing with chemical insecticides during 2004 season.

Compounds	Rate / 100L.W	Diamant variety												Spunta variety											
		1 st Spray						2 nd Spray						1 st Spray						2 nd Spray					
		I.E		R.E		G.E		I.E		R.E		G.E		I.E		R.E		G.E		I.E		R.E		G.E	
		M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.
Biofly <i>B.bassiana</i>	100 ml	27.27 f	23.6 e	63.78 e	62.25 e	56.48 f	54.52 f	26.77 g	26.32 h	62.54 f	56.5 f	55.35 d	50.47 e	27.49 f	24.17 f	64.6 e	60.76 e	57.17 e	53.44 e	29.46 g	24.37 f	64.15 d	61.78 f	56.61 d	54.3 d
Semocidin (Fenvalerate)	150 ml	88.33 a	86.32 b	92.31 a	91.21 a	91.51 a	90.23 a	87.17 b	86.17 b	88.21 b	69.83 c	88.0 a	73.1 c	91.23 b	88.04 b	92.97 b	91.09 b	92.62 b	90.48 a	90.96 b	89.67 b	92.01 a	91.27 b	91.8 a	90.95 a
K.Z.oil Minera oil	1.75 L.	61.96 e	60.69 d	67.88 d	66.86 d	66.69 e	65.63 e	60.63 e	57.18 f	64.23 f	63.61 e	63.51 c	62.30 d	62.52 e	61.8 e	68.9 d	67.63 d	67.63 d	66.46 d	62.04 f	60.02 d	67.68 c	66.89 e	66.55 c	65.52 c
M.T.I. Dinotifuran	100 gm	80.16 c	78.48 b	91.74 a	90.77 a	89.41 a	88.31 a	79.44 c	77.04 d	91.21 a	88.56 a	88.85 a	86.26 a	81.39 c	79.99 c	92.59 b	91.68 a	90.35 a	89.34 b	80.75 d	76.36 c	92.36 a	91.32 b	90.04 a	88.33 b
Kendo (Fenpyroximate)	95 ml	91.95 a	92.60 a	86.32 b	85.62 b	87.44 b	87.02 a	93.26 a	91.09 a	84.08 d	80.50 c	85.91 a	82.62 b	97.99 a	96.65 a	91.26 b	90.4 b	93.41 a	91.69 a	96.67 a	96.03 a	89.44 b	89.75 c	90.95 a	91.01 a
Jojoba	500 ml	63.12 e	61.21 d	74.56 c	73.45 c	72.27 d	71.0 d	57.14 f	51.04 g	72.71 e	67.60 d	69.60 b	64.29 d	63.89 e	61.854 e	76.58 c	72.6 c	74.04 c	70.44 c	85.88 c	46.09 e	66.45 c	71.25 d	70.34 c	66.22 c
Marshal (carbosulfan)	150 gm	84.13 b	83.52 b	90.88 a	89.67 a	89.53 a	83.51 c	79.56 c	79.79 c	85.80 c	83.71 d	84.55 a	82.92 b	89.72 b	87.31 b	96.85 a	94.98 a	95.42 a	93.44 a	85.05 c	87.47 b	99.91 a	94.87 a	92.94 a	93.39 a
Polo (diafenthiuron)	150 ml	69.87 d	68.75 c	90.54 a	89.43 a	86.41 c	85.29 b	70.15 d	65.18 e	88.52 b	86.02 a	84.84 a	81.85 b	70.71 d	69.39 d	93.7 b	93.72 a	89.1 a	88.87 b	66.36 e	73.82 c	91.06 b	93.45 a	86.12 b	89.52 b
L.S.D 0.05%		4.239	7.09	3.918	2.667	2.289	3.039	3.059	2.029	2.523	2.99	4.51	2.523	2.667	1.73	2.8	3.179	9.999	3.35	2.93	2.667	2.93	2.667	8.44	2.87

I.E = Initial effect , R.E. = Residual effect , G.E. = General effect, Residual = Means of (5 + 8 + 11 +14) days after spray

M.= *Myzus persicae* , A. = *Aphis gossypii* , Initial = Means of 1+3 days after spray

Table (3): Effects of tested compounds as mean of percent reduction on population of aphids and yield for both of two potato varieties at two seasons 2003 and 2004

Compounds	Rate/100 L.W.	1 st Season (2003)						2 nd Season (2004)					
		Diamant			Spunta			Diamant			Spunta		
		M.G.R		Yield Kg/plot	M.G.R		Yield Kg/plot	M.G.R		Yield Kg/plot	M.G.R		Yield Kg/plot
		M.	A.		M.	A.		M.	A.		M.	A.	
Biofly <i>B.bassiana</i>	100 ml	57.08 e	54.71 e	77.0 e	59.91 c	57.59 d	82.00 d	59.92 d	52.50 c	75.50 c	56.89 e	53.87 d	77.00 e
Semocidin (Fenvalerate)	150 ml	86.12 b	85.83 a	104.50 a b	90.92 a	89.51 a	109.00 a b	89.76 a	81.67 a	100.00 a	92.21 a	90.72 a b	110.0 a b
K.Z.oil Mineral oil	1.75 L.	65.96 d	63.91 d	95.25 d	70.07 b	66.24 c	100.0 c	65.1 c	63.97 b	90.50 b	67.09 d	65.99 c	95.0 d
M.T.I. (Dinotifuran)	100 gm	80.96 c	76.65 b	100.50 c	89.54 a	90.38 a	110.50 a b	89.13 a	87.29 a	102.25 a	90.20 a b	88.84 b	104.0 c
Kendo (Fenpyroximate)	95 ml	90.22 a	89.50 a	106.25 a	93.01 a	91.39 a	115.25 a	86.68 a	84.82 a	101.00 a	92.18 a	91.35 a b	112.0 a
Jojoba	500 ml	69.11 d	68.21 c	100.25 c	71.51 b	70.75 b	102.0 c	70.94 b	67.65 b	94.00 b	72.19 c	68.33 c	97.0 d
Marshal (carbosulfan)	150 gm	89.91 a	88.81 a	103.0 b c	91.86 a	90.91 a	112.0 a b	87.04 a	83.21 a	100.50 a	94.18 a	98.42 a	114.50 a
Polo (diafenthuiuron)	150 ml	88.12 a b	87.59 a	102 b c	90.07 a	89.79 a	109.50 b	85.63 a	83.57 a	70.00 a	87.61 b	89.20 b	106.00 b c
L.S.D 0.05%		3.296	3.620	72.462	3.831	3.461	75.642	4.151	5.120	70.25	4.059	3.722	71.575

M.G.R=Mean of general reduction

Yield = kg./ plot

M.= *M. persicae*

A. = *A. gossypii*