

(*Ommatissus lybicus*

Bergevin Berg.) : Tropiduchidae Homoptera)

Chrysopa vulgaris Schn, chrysopidae : Neuroptera.

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Mashal,)

.(and Abeidate, 2007

Bergevin Berg. :

(*Ommatissus* Tropiduchidae Homoptera)

(Mashal, and 1999 *lybicus*

Abeidate, 2006)

2009

(Abdulla,*et.al.*,1998)

(Gharib, 1966)

.2012/4/30

2011/7/18

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- Bitaw, and) (Ben Saad, 1990
- Etofenoprox Fenitrothion S- 100 ULV (2008 2004) 7.5 ULV
- (1980) (2004)
- (Howard *et al* ,2001)
- (2000)
- 2011/2/19 2007 2005
- 70
- 2006
- 15
- (2006)
- 22
- 20 Thiamethoxam 2006
- Arnaldo) (and Torres, 2005 (2007)
- (Reil, and J.A.eutel. 1976a,b)
- (20/ 15) : . (Berry,1998)
- Cascade 5 EC flufenoxuron Shour (Crowder. 1980)
- Oil ORO (20/ 150)
- eL(mineral oil 830g/ 200cm)
- Fytoclean (Potassium salt of fatty (2006 2008 1980
- (20/ 200)acid) (
- : (20/ 10) 2006 Payandeh, A., Kamali, K. & Fathipour, Y.
- (sypermethrin)(20/ 15) .(2010
- : (1997)

نسبة الموت في الأفراد = 1 - $\frac{\text{اعداد الأفراد في الشاهد قبل المعاملة} \times \text{اعداد الأفراد بعد المعالجة في المعاملة}}{\text{اعداد الأفراد في الشاهد بعد المعاملة} \times \text{اعداد الأفراد في المعاملة قبل المعالجة}}$

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2011/3/19

(Reil and Beutel, 1976,a,b) .

1956

:(1)

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a13.97%	ab35.89%	31.36%	bc6.11%	a89.69%	a98.13%	c35.30%	d31.01%	e18.36%	f 11.94%	f 5.11%	c 6.55%	
b6.85%	b32.50%	18.21%	c3.11%/	bc70.47%	bc89.83%	bc41.01%	c48.14%	cd35.45%	c38.91%	c33.31%	b14.22%	
a11.69%	ab35.14%	22.21%	b7.11%	a89.11%	a96.99%	c35.11%	e15.39%	d28.77%	de25.24%	de13.36%	cd2.30%	
ab8.10%	c19.89%	11.2 0%	b9.91%	d22.11%	d60.02%	d5.69%	e15.11%	2.36%	e19.31%	ef 9.61%	d1.45%	
ab8.4 0%	c19.2 1%	24.63%	a80.19%	c65.80%	bc85.80%	a73.11%	b86.35%	ab74.34%	ab53.88%	a68.35%	a60.39%	
b6.66%	d8.22%	18.31%	a85.61%	c55.88%	c80.43%	a70.14	ab89.82%	b70.11%	b43.96%	b48.68%	a51.33%	

LSD p=.05

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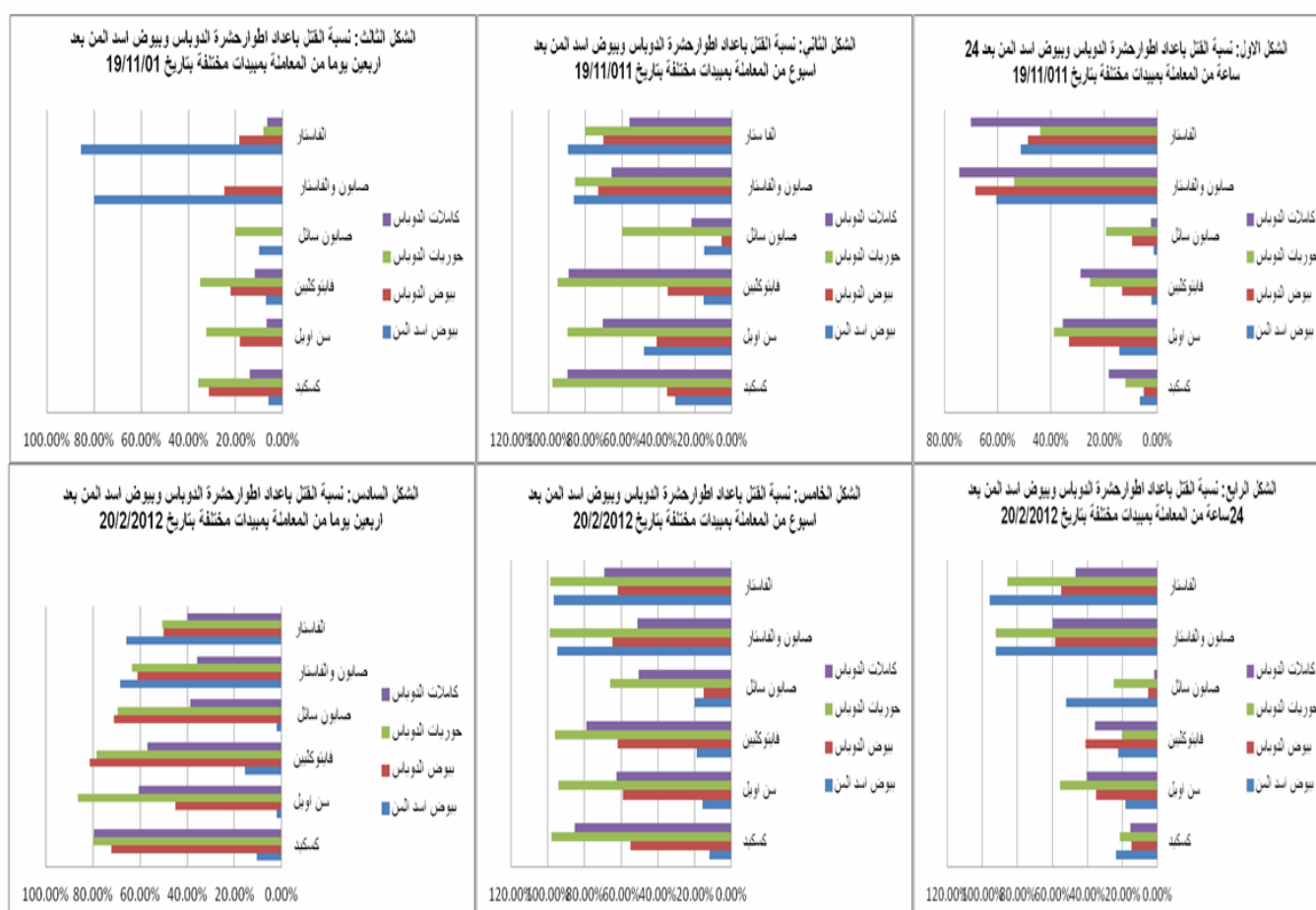
40

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:(2)

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a79.50%	ab80.18%	b72.10%	bc10.58%	a85.34%	a99.00%	b55.12%	c11.91%	d15.50%	d21.60%	d14.89%	cd23.55%	
b60.69%	a86.50%	d45.11%	d2.11%	c62.51%	a98.05%	ab59.22%	bc15.81%	bc40.54%	b55.50%	c35.01%	d18.33%	
c56.81%	ab78.58%	a81.36%	b15.50%	ab78.98%	a98.00%	a61.81%	b18.97%	c35.66%	d19.89%	bc41.11%	cd22.55%	
d38.81%	bc69.58%	b71.00%	d2.01%	d50.56%	b45.98%	c15.11%	b20.14%	e2.00%	cd25.00%	e5.36%	b52.14%	
d35.69%	cd63.58%	cd60.98%	a68.51%	d51.08%	a99.01%	a64.88%	a94.84%	a59.58%	a92.36%	a58.36%	a92.39%	
d40.11%	d50.55%	cd50.14%	a65.84%	bc69.36%	a98.58%	a61.8	a96%.81	bc46.88%	b85.55%	a55.11%	a95.88%	

LSD p=.05

Hanson,et) (2009)

(al,2004

(2009)

(Nicolaou 2004)

(2002)

(František, and Jitka2006)

(ranshaw and Baxendalec2011)

(2009)

. (Mickler 2012)

(2004)

(2009)

2000

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. 451-446 (3) 11

2004

1980

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Chrysoperla mutata MacL

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Ommatissus lybicus

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2006

Ommatissus lybicus de Berg

. 38 " "

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Evaluating the Effect of Some Biotic Insecticides on Palm Dubas (*Ommatissus lybicus* Bergevin Berg.) : Tropiduchidae: Homoptera) and Eggs of Lace Wings (*Chrysopa vulgaris* Schn ,Chrysopidae : Neuroptera) Numbers

Muna Mohamad Mashal, Basil Faisal Obaidat, and Asem Habes Abu-Aloosh

ABSTRACT

Seven treatments were applied to control palm dubas, using CRBD in two experiments on Degla noor cultivar of ten years old date palm trees in aqaba-Jordan. chemicals were used as follows : Cascade, Sun oil (mineral oil), Fytoclean, detergent, detergent with Alfastar, Alfastar and control with no application. Results indicated that all treatments were significantly killing dubas insects . However, the effect of Alfastar with the detergent was the highest treatment in killing the palm dubas after a day from application although there were significantly differences effects of Fytoclean and sun oil. After seven days, all treatments were significantly different with preferably to Fytoclean in killing eggs of dubas and with Cascade in killing nymphs and adults of dubas. This effect remains for 40 days with preferably to Cascade in killing the adults and the Fytoclean in killing nymphs and Alfastar with detergent in killing eggs of dubas. On the other hand, the Alfastar had a negatively significant effect on lace wings eggs.

Keywords: Date Palm, Degla-Noor, Dobas,Biotic Insecticides, Lace Wing, Aqaba.

¹⁾ National Center of Agricultural Research and Extension.
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