

STUDIES ON CERTAIN MITE AND INSECT PESTS ATTACKING SQUASH IN EGYPT

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ABSTRACT

Experiments were conducted to investigate the susceptibility of three squash cultivars (Revera, Eskandarany and Mabrouka) to *Polyphagotarsonemus latus* (Banks) and *Bemisia tabaci* (Genn.) infestation; relationship between leaf phytochemical components and *P. latus* and *B. tabaci* infestation; the population dynamics of the broad mite *P. latus* and whitefly *B. tabaci* infesting squash; its response to some surrounding environmental factors (daily mean temperature, daily mean relative humidity and average wind speed); and finally its control by some insecticides

For such purpose, trial was conducted at Kaha Plant Protection Research Institute station, Qalubiya Governorate during summer and nili of 2011 and 2012 seasons in the open field

Different stages of *P. latus* and *B. tabaci* populations showed insignificantly negative correlations with temperature in summer season and positive in nili season. The direction of this relationship may be due to that those pests prefers moderate temperature, while daily average temperature during summer season was 27-31 ° C and 18.5-30 ° C during nili season. Relative humidity had opposite results

Eskandarany cultivar was the most susceptible cultivar to *P. latus* and *B. tabaci* different stages infestations. On the other hand, Revera cultivar was infested with low numbers of *P. latus* and *B. tabaci* different stages infestations.

Finally, Congest proved to be the most effective pesticide in reducing *P. latus* movable stages (80.3%), while NeemAzal had the lowest effect (18.9%) on *P. latus*. Orizon proved to be the most effective pesticide in reducing *B. tabaci* immature stages (83.6%), while Biosect had the lowest effect (42.86%) on *B. tabaci*.

Key words: *Polyphagotarsonemus latus*, *Bemisia tabaci*, squash, susceptibility, climatic factors, control.

DEDICATION

I dedicate this work to whom my heart felt thanks; to my parents and sisters for all the support they lovely offered along the period of my post graduate study.

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CONTENTS

	Page
INTRODUCTION.....	1
REVIEW OF LITERATURE.....	5
1. Effect of different bio-fertilizer types on the population fluctuations of broad mite, <i>P. latus</i> (Banks) and whitefly, <i>B. tabaci</i> (Genn.) Biotype (B).....	5
2. Relationship between broad mite, <i>P. latus</i> (Banks) & whitefly, <i>B. tabaci</i> (Genn.) Biotype (B). infestation and phytochemical components of squash leaves.....	8
3. Efficiency of pesticide on the broad mite, <i>Polyphagotarsonemus latus</i> population in different cultivars of squash	12
4. Efficiency of insecticides on whitefly, <i>Bemisia tabaci</i> Biotype (B) population in different cultivars of squash	22
MATERIAL AND METHODS.....	25
RESULTS AND DISCUSSION.....	37
1. Susceptibility of three squash cultivars to broad mite <i>Polyphagotarsonemus latus</i> infestation.....	37
a- <i>P. latus</i> Eggs	37
1. Summer season	37
2. Nili season.....	39
b - <i>P. latus</i> Immature.....	39
1- Summer season.....	39
2- Nili season.....	41

c- <i>P. latus</i> adult	44
1- Summer season.....	44
2- Nili season.....	44
d- The relation between leaf phytochemical components and <i>P. latus</i> infestation	47
1- <i>P. latus</i> immature stage	47
a. Eskandarany.....	47
b. Mabrouka.....	48
c. Revera.....	48
2-<i>P. latus</i> adult stages	50
a. Eskandarany.....	50
b. Mabrouka.....	52
c. Revera.....	52
2. Susceptibility of three squash cultivars to whitefly <i>Bemisia tabaci</i> infestation	53
a- <i>B. tabaci</i> Eggs	53
1- Summer season.....	54
2- Nili season.....	56
b. <i>B. tabaci</i> nymphs	57
1-Summer season.....	57
2-Nili season.....	60
c- The relation between leaf phytochemical components and <i>B. tabaci</i> infestation	60
1. Eskandarany.....	60
2. Mabrouka	62
3. Revera	62

3. Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> population density	63
a- <i>P. latus</i> eggs	63
1. Summer season.....	63
2. Nili season.....	66
b- <i>P. latus</i> immature	66
1-Summer.....	66
2- Nili season.....	67
c- <i>P. latus</i> adult	70
1-Summer season.....	70
2-Nili season.....	70
4- Effect of interaction between different bio-fertilizer types and three squash cultivars on the population fluctuations of broad mite, <i>P. latus</i> (Banks)	73
a- <i>P. latus</i> egg	73
1- Summer season.....	73
2- Nili season.....	74
b- <i>P. latus</i> immature	77
1- Summer season.....	77
2- Nili season.....	80
c- <i>P. latus</i> adult	83
1- Summer season.....	83
2- Nili season.....	88
5- Effect of different bio-fertilizers on <i>Bemisia tabaci</i> population density	91
a- <i>B. tabaci</i> eggs	91

1-Summer season.....	91
2-Nili season.....	93
<i>B. tabaci</i> nymphs.....	93
1- Summer season.....	93
2- Nili season.....	95
6- Effect of interaction between different bio-fertilizer types and three squash cultivars on the population fluctuations of <i>B. tabaci</i>.....	98
a- <i>B. tabaci</i> egg.....	98
1- Summer season.....	98
2- Nili season	103
b- <i>B. tabaci</i> nymphs.....	104
1- Summer season.....	104
2- Nili season	107
7- Population fluctuation of broad mite <i>Polyphagotarsonemus latus</i> and whitefly <i>Bemisia tabaci</i> on three squash cultivars.....	114
a- <i>Polyphagotarsonemus latus</i>.....	114
1- Summer season.....	114
a- Eskandarany cultivar.....	115
b- Mabrouka cultivar.....	115
c- Revera cultivar.....	120
d- The relation between three climatic factors and plant age on the population fluctuation of <i>P.latus</i> different stages during summer and nili seasons of 2011 and	

2012.....	120
1- <i>P.latus</i> immature stage.....	121
2- <i>P.latus</i> adult stage.....	124
2- Nili season.....	129
a- Eskandarany cultivar.....	129
b- Mabrouka cultivar.....	129
c- Revera cultivar.....	132
d- The relation between three climatic factors and plant age on the population fluctuation of <i>P.latus</i> different stages during Nili season 2011 and 2012.....	135
1- <i>P.latus</i> immature stage.....	135
2- <i>P.latus</i> adult stage.....	137
b- <i>Bemisia tabaci</i>.....	143
1- Summer season.....	143
a- The relation between three climatic factors and plant age on the population fluctuation of <i>B. tabaci</i> immature stages during summer season of 2011 and 2012.....	143
2- Nili season.....	149
a- The relationship between three climatic factors and plant age on the population fluctuation of <i>B. tabaci</i> immature stages during Nili season of 2011 and 2012.....	149
8. Efficiency of different pesticides against	

<i>Polyphagotarsonemus latus</i> (Banks) and <i>Bemisia tabaci</i> (Genn.) infesting squash leave plants.....	158
a- <i>Polyphagotarsonemus latus</i> movable stage.....	158
1- First spray.....	158
2- Second spray	160
b- <i>Bemisia tabaci</i> nymphs stages.....	162
1- First spray.....	162
2- Second spray.....	164
SUMMARY.....	169
REFERENCES.....	173
ARABIC SUMMARY	

LISTT OF TABLES

No	Title	Page
1.	Tested Bio-fertilizers mixtures applied on three squash cultivars in the present study.....	26
2.	Tested pesticides on <i>P. latus</i> and <i>B. tabaci</i> infesting squash cultivars in Qualubia Governorate.....	29
3.	Mean numbers of broad mite <i>P. latus</i> eggs infestation on three squash cultivars to during summer season of 2011 & 2012.....	38
4.	Mean numbers of broad mite <i>P. latus</i> egg infestation on three squash cultivars to during nili season of 2011 &2012.....	40
5.	Susceptibility of three squash cultivars to broad mite <i>P. latus</i> immature infestation during summer season of 2011 &2012.....	42
6.	Susceptibility of three squash cultivars to broad mite <i>P. latus</i> immature infestation during nili season of 2011 &2012.....	43
7.	Susceptibility of three squash cultivars to broad mite <i>P. latus</i> adult infestation during summer season of 2011 & 2012.....	45
8.	Susceptibility of three squash cultivars to broad mite <i>P. latus</i> adult infestation during nili season of 2011 & 2012.	46
9.	Correlation between mean numbers of <i>P.latus</i> immatures	

	/inch ² and 7 phytochemical components in the three tested squash cultivar leaves.....	49
10.	Correlation between mean numbers of <i>P.latus</i> adult /inch ² and 7 phytochemical components in the three tested squash cultivar leaves.....	51
11.	Mean numbers of <i>Bemisia tabaci</i> egg infestation on three squash cultivars to during summer season of 2011& 2012.....	54
12.	Mean numbers of <i>Bemisia tabaci</i> egg infestation on three squash cultivars to during nili season of 2011& 2012.....	55
13.	Susceptibility of three squash cultivars to <i>Bemisia tabaci</i> nymphs infestation during summer season of 2011& 2012.....	58
14.	Susceptibility of three squash cultivars to <i>Bemisia tabaci</i> nymphs infestation during nili season of 2011& 2012....	59
15.	Correlation between mean numbers of <i>B. tabaci</i> immatures /inch ² and 7 phytochemical components in the three tested squash cultivar leaves.....	61
16.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> egg population density in summer season.....	64
17.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> egg population density in nili season of 2011 &2012.....	65

18.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> immature population density in summer season.....	68
19.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> immature population density in nili season of 2011 &2012.....	69
20.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> adult population density in summer season of 2011 &2012.....	71
21.	Effect of different bio-fertilizers on <i>Polyphagotarsonemus latus</i> adult population density in nili season Of 2011 &2012.....	72
22.	Effect of interaction between different bio-fertilizer types and three squash cultivars on the population fluctuations of broad mite, <i>P. latus</i> egg in summer season 2011.....	75
23.	Effect of interaction between different bio-fertilizer types and three squash cultivars on the population fluctuations of broad mite, <i>P. latus</i> egg in summer season 2012.....	76
24	Effect of interaction between different bio-fertilizer types and three squash cultivars on the population fluctuations of broad mite, <i>P. latus</i> egg in nili season 2011.....	78
25	Effect of interaction between different bio-fertilizer types and three squash cultivars on the population	