

# 2010 Survey of Myzus persicae Resistance

Version 2.4

Prepared by: IRAC Sucking Pest Working Group

February 2010

Dear Colleague,

The IRAC Sucking Pest Working Group has agreed as one of its strategic objectives to conduct a survey of the current global insecticide resistance status of Myzus persicae. This will give us an up to date snapshot of the pest, its sensitivity to various chemistries and will allow us to compile future guidelines on resistance management strategies.

In order for us to succeed, we are asking for your cooperation in helping us to collect the latest information on resistance of Myzus persicae in all relevant countries.

We have compiled an easy to complete questionnaire to monitor Myzus persicae resistance. The questionnaire covers local resistance issues as well as the regulatory status of the relevant products to control Myzus persicae in the country you are operating in.

We intend to publish the results of this questionnaire in a peer reviewed journal with all people who filled in the questionnaire listed as authors. Our intention is to also provide all those who complete the survey with an early version of the results and analysis from all the regions surveyed.

If you are responsible or have information relevant to more than one country, please use a separate questionnaire for each country.

Please return your completed questionnaires to the IRAC Sucking Pest WG Leader, Jonathan Henen (address details below) no later than the 31<sup>st</sup> March 2010.

Thank you in advance for your active participation and support.

Best regards,

Jonathan Henen IRAC Sucking Pest WG Leader jonathan.henen@ma-industries.com Makhteshim Agan Group P. O. Box 298 Ben Gurion Airport 70100 Israel

Disclaimer:

The information collected in this survey is only for the purpose of assessing the status of Myzus persicae resistance and resistance management strategies in Europe. It is understood that the information is provided without guarantees and is based on best knowledge at the time of submission.

Date:	: Name: E-mail:	:							
Olya									
Basic field data of your country									
1.	Country								
2.	Planted area of stone fruit:		ha						
3.	Area treated against Myzus persicae on stone fruit	t:	ha						
4.	Please indicate the 3 stone fruit crops most heavily	r treated against Myzus							
	persicae:								
5.	Recommended economic threshold of infestation in	n stone fruit							
6.	Mean + maximum number of treatments								
7.	Planted area of vegetables: (for other field crops, note information in sections II		ha						
8.	Area treated against Myzus persicae on vegetable	PS:	ha						
9.	Please indicate the 3 vegetable crops most heavily persicae:	-							
10.	Recommended economic threshold of infestation in	n vegetables	54						
11.	Mean + maximum number of treatments								

## I. Resistance aspects

1. Resistance situation of products used in the region

## Please fill in the table in Appendix 1 (unless no resistance is reported)

- 2. Are the following groups aware of resistance in *Myzus persicae*? Are they doing anything about *Myzus* resistance? If yes, what are they doing?
  - a) Growers:

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b) Distributors (Insecticide Dealers):
c) Industry (Crop Protection Industry):
d) Officials (Regulatory, Scientific, Advisory community):

# II. Toolbox of Products / Compounds in the country

1. Products / Compounds currently registered for *Myzus persicae* control in your country per chemical class:

Compound	Chemical class (IRAC MoA Group)	Application method (Seed, Soil, or Foliar)	Comments
	-		

2. Compounds **expected to disappear** (next five years) in your country/region due to regulatory issues:

Compound	Chemical class (IRAC MoA Group)	Application method (Seed, Soil, Foliar)	Reason for disappearance and year
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3. New products or techniques expected to appear on the market (in the next 5 years)

Compound	Chemical class (IRAC MoA Group)	Application method (Seed, Soil, Foliar)	Comments
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#### III. Farmers Spraying Programs and resistance management practices

Describe how farmers deal with *Myzus persicae* in selected crops: (Give examples of programs describing product choice, spray timing and interval, alternations, mixtures, tank-mixtures, soil or foliar, preventative or curative, knockdown or systemic, etc. Indicate if the program works or if control is unsatisfactory)

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Please fill in the table below informing of the incidence level (high, medium, low) of Myzus periscae split on growth stages and the active ingredients used to control Myzus persicae.

Stone fruit	-	4		1	<b>N</b>	<b>*</b>
Stage:	Dormant	Budburst	Flowering	Young fruits	Fruit growth	Harvest
Days: BBCH:	0 00-03	3-10	10-30	30-50	50-120	120-150
Peach-Potato Aphid Myzus persicae Incidence level – Stone fruit	00-03	07-07	51-69	71-79	81-89	91-99
Products used (active ingredients)						
Peppers, other vegetables	*	***	*	*	×	-
Stage:	Nursery	Leaves & Shoots	Flowering	Fruit Development	Ripening	Harvest
Days: BBCH:	0-20 00-13	20-50 13-49	50-70 50-70	70-90 71-79	90-100 81-89	100-120 90-99
Peach-Potato Aphid Myzus persicae Incidence level - Peppers						
Products used (active ingredients)						
Other Crop:						
Peach-Potato Aphid Myzus persicae Incidence level						
Products used (active ingredients)						
Other Crop: Peach-Potato Aphid Myzus persicae Incidence level						
Products used (active ingredients)						
		l				
OtherStage: DaysCropsBBCH:	Seedbed	Leaves & Shoots	Flowering	Fruit Development	Ripening	Harvest
Peach-Potato Aphid Myzus persicae Incidence level						
Products used (active ingredients)						
Peach-Potato Aphid Myzus persicae Incidence level						
Products used (active ingredients)						

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#### Myzus persicae Resistance Management - Projects or Activities

Are there any planned or ongoing projects or activities regarding Insecticide Resistance Management in your country? Please explain:

#### IV. Interaction

IRAC has produced a poster on Resistance Mechanisms in *Myzus persicae*, and also publishes methods for monitoring resistance in field populations. <u>http://www.irac-online.org</u> What do you expect from IRAC and the Industry respectively for future actions, programs or promotions:

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## V. Local experts and Publications on Myzus persicae resistance

Please name any prominent experts working on *Myzus persicae* resistance and list local publications on resistance (if available).

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#### VI. Other Comments



# **APPENDIX 1**

#### Resistance against *Myzus persicae* STATUS 2009 – Stone fruit

Country / Region: \_\_\_\_\_

		Area affected	by resistance in % of treated area		Year of	Registered dose either:		Resistance detection			
Product affected by resistance	Crop	high resistance (product is ineffective)	<b>mid</b> resistance (performance not satisfactory)	low resistance (performance decreased)	first detection of resistance	G ai /hl	G ai /ha	Laboratory bioassay	Field observation	Study, authors, if published	
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								2			
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#### Resistance against *Myzus persicae* STATUS 2009 – Vegetables

Country / Region: \_\_\_\_\_

			Area affected by resistance in % of treated area			Year of	Registered dose either:		Resistance detection		
	Product affected by resistance	Crop	high resistance (product is ineffective)	<b>mid</b> resistance (performance not satisfactory)	low resistance (performance decreased)	first detection of resistance	G ai /hl	G ai /ha	Laboratory bioassay	Field observation	Study, authors, if published
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