



April 12, 2005

Ref: 2005-5-1

Philip Poli  
Office of Pest Management Policy  
Agricultural Research Service  
U.S. Department of Agriculture  
1400 Independence Ave. SW, Room 3865  
Washington, DC 20250

The following information is provided to you from the Western Integrated Pest Management Center regarding the use of azinphos methyl in the six-state Pacific Northwest (PNW) region comprised of Alaska, Idaho, Oregon, Montana, Utah, and Washington. This information is being sent in response to your request to Rick Melnicoe, Western Integrated Pest Management Center Director, March 21, 2005.

In your request you asked for information about azinphos methyl use on: parsley, nursery stock, Brussels sprouts, almonds, pistachios, and walnuts. Of the listed uses, in the PNW azinphos methyl is used only on Brussels sprouts grown in Oregon. A completed use and benefit questionnaire providing information on this use is attached.

As stated on the attached questionnaire, the use of azinphos methyl is important to the Oregon Brussels sprouts growers and we request that EPA retain this use. Thank you very much for giving us this opportunity to provide input.

Sincerely,

A handwritten signature in cursive script that reads "Jane M. Thomas".

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## AZM CHEMICAL USE AND BENEFIT INFORMATION

The US Environmental Protection Agency is reviewing the registration of the active ingredient Azinphos-Methyl (trade name: Guthion) and needs the information identified below in order to make informed decisions about the exposure, use, and relative benefits of this chemical. Please use a separate sheet for each crop production year from 2000 to present if applicable.

CROP: \_\_\_Brussels sprouts YEAR: 2004 CHEMICAL:**Azinphos Methyl (Guthion)** STATE: OR COUNTY: Oregon Counties, Multnomah and Marion

TYPICAL ACRES GROWN PER YEAR: 27 %OF ACRES TREATED PER YEAR 100

FOR A TYPICAL APPLICATION, WHAT IS THE MAXIMUM NUMBER OF ACRES TREATED PER DAY: \_\_\_if treatment is required all the acres will be treated the same day

IN LBS ACTIVE INGREDIENT /ACRE, WHAT IS THE  
MINIMUM APPLICATION RATE? 0.5 lbs ai/application  
TYPICAL APPLICATION RATE? 0.75 lbs ai/application  
MAXIMUM APPLICATION RATE? 0.75 lbs ai/application

NUMBER OF APPLICATIONS PER GROWING SEASON (assume 1 growing season per year) may be up to 3 depending upon cabbage aphid pressure

WHAT ARE THE TYPICAL DATES OF APPLICATION? The months when applications occur are usually late June, July, August and September

WHAT ARE THE TARGET PESTS? The target pest is the cabbage aphid. It is a very difficult aphid to control, because it lodges and hides in leave curls and can rapidly multiply. The presence of the aphids or its feces on sprouts renders them unmarketable.

Some issues to consider:

- 1) how critical is the most devastating pest(s) to crop production; very critical, higher than the cabbage maggot.
- 2) can these pest(s) be partially controlled by manipulating planting dates; Planting dates are base upon timing harvests for market niches. Changing dates will miss those niches. The lost of that competitive advantage results sales losses. Essentially then, there would be no reason to even plant the sprouts.
- 3) how effective is parasites/predators complex in controlling these pest(s); Because of the very large numbers of aphids that can occur, parasite or predators are inconsequential in their control.
- 4) what is the parasite/predator population dynamics before pests reach the economic threshold; I am not aware of any research that has been complete on this subject. If there is data, it is not used in Oregon sprout production systems.
- 5) can this be augmented with the release of these biological control agents: Lady Bugs generally fly away when the have been released for other crops in the Willamette Valley. Small wasps that oviposit in aphids have not been used in our area.
- 6) what is the economic threshold for critical pest(s) on this crop; Because food store buyers base purchases upon the cosmetic appearance of sprouts, the economic threshold is essentially "0" %. If the supply is very low, some blemished product may be sold. But the supply is usually good. Local sales try to promote their product as "local and therefore better". Consequently, the economic threshold must be very low.
- 7) what is the economic injury level for critical pest(s) on this crop; There will always be some loss because of aphid infestations. If it exceeds 10%, the cost to eliminate damaged sprouts will be too high. The crop may still be harvested and sold, because growers need to support the buyers with whom they have established market niches.
- 8) what is the market (fresh/processed) for this crop? 100% fresh market sales, generally in Oregon grocery stores with some sold in the greater northwest metropolitan centers.

WHAT IS THE METHOD OF APPLICATION? Tractor mounted boom sprayer.

WHAT IS THE TYPICAL LENGTH OF TIME BETWEEN CHEMICAL APPLICATION AND HARVESTING (PHI)? 7 to 10 days.

WHAT IS THE ESTIMATED SEASONAL PER ACRE COST PER APPLICATION?

CHEMICAL: AZINPHOS-METHYL (PRODUCT) GUTHION \_\_\_\_\_  
EQUIPMENT AND SUPPLIES \_\_\_\_\_  
LABOR \_\_\_\_\_  
OTHER \_\_\_\_\_

WHAT IS THE 3 YEAR AVERAGE MARKET PRICE (FRESH/ PROCESSED) FOR THIS CROP? \_\_\_\_\_

You have chosen a chemical application approach that best meets your production needs. Can you please describe in the space below the reasons for your choice and the benefits to you? It would be very helpful if you could describe the benefits of your current strategy in terms of the alternatives that you have considered or those that are available. Some factors to consider are: **1) Benefits to rotational crops; 2) Regulatory restrictions; 3) target pests, environmental conditions such as soil type, proximity to water bodies, topography, and weather; 4) Yield and quality factors; 5) Costs; 6) Health and safety; and 7) Production flexibility. (OVER)**

**MAY WE CONTACT YOU WITH FOLLOW-UP QUESTIONS, IF NEEDED? IF SO, PLEASE PROVIDE:**

Your Name (please print): Robert B. McReynolds

Your Phone Number: 503-678-1264 #25

Your e-mail Address [bob.mcreynolds@oregonstate.edu](mailto:bob.mcreynolds@oregonstate.edu)

PLEASE RETURN THIS COMPLETED FORM TO:

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