Request for Information on Dimethipin Use Rate on Cotton

Date: May 9, 2005

To: Rick Melnicoe

Director, Western Integrated Pest Management Center

From: Philip Poli

Environmental Protection Specialist USDA/Office of Pest Management Policy

EPA has a question concerning the application rate on cotton for the chemical "Dimethipin." Dimethipin is a plant growth regulator registered for use as a preharvest cotton defoliant and herbicide, which may be applied using groundboom sprayers and fixed wing aircraft. Dimethipin inhibits the synthesis of plant proteins responsible for stomatal control.

This loss of stomatal control causes leaves to rapidly lose water, stressing the plant and leading to the production of ethylene, which ultimately results in leaf abscission and defoliation of the cotton plant. If you know of someone who should respond to EPA's question, please pass it along to them. EPA's question is listed below.

Philip Poli

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To: Philip Poli

Environmental Protection Specialist USDA/Office of Pest Management Policy

Good Afternoon, Phil,

I'd like to know the frequency with which cotton growers use the maximum seasonal application rate (0.56lbs. a.i./A) for dimethipin. We are currently discussing risk mitigation options, including a possible rate reduction because the most common dimethipin use rate is 0.31lbs a.i./A. Thus, I'd like to know more about how significant it is to maintain the maximum application rate.

Thank you,

Amaris Johnson, Chemical Review Manager U.S. Environmental Protection Agency Office of Pesticide Programs/SRRD

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