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TRI-CITIES

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Agricultural Research Service
U.S. Department of Agriculture
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The following information is provided to you from the Western Integrated Pest Management Center regarding the need to retain two annual applications of dimethoate on cotton, field corn, popcorn, wheat, citrus, pears, alfalfa, safflower, pecans, peppers, and grass seed. This letter is being submitted on behalf of a six-state Pacific Northwest (PNW) region comprised of Alaska, Idaho, Oregon, Montana, Utah, and Washington in response to your March 3, 2006 request. Of the eleven crops of interest, the relevant uses in our region are in alfalfa, alfalfa seed, and grass seed. Due to the short turnaround time required for this response, I was unable to gather input from Oregon, Idaho, Utah, or Montana on their needs with respect to alfalfa and alfalfa seed crops. The considerable amount of information I received from two Washington sources may or may not be directly applicable in these states. I would be happy to attempt to obtain additional information from the other states if additional time is allotted.

Alfalfa

Dimethoate is used for the control of pea aphid, blue aphid, and cowpea aphid in alfalfa; however, in the Columbia Basin, it is no longer effective for the control of spotted alfalfa aphid. Typically dimethoate is applied in the first or second cutting. In years of high pest pressure a second dimethoate application is also required in the fall. In the case of two dimethoate applications, the applications are always separated by at least 60 days. Alfalfa growers need the ability to apply a second spray of dimethoate when necessary.

Aerial application is required for dimethoate use on alfalfa as accessing fields with ground equipment damages the crop when the hay is ready to harvest.

Alfalfa Seed

In Washington, alfalfa seed growers would also like to retain the ability to make two applications of dimethoate. Dimethoate is applied early in the season and then in some cases it is also used late in the season as a cleanup spray. When two applications of dimethoate are used, as with alfalfa, the second application is made at least 60 days after the first. Because dimethoate no longer controls spotted alfalfa aphid in the Columbia Basin, when spotted alfalfa aphid are

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present methyl parathion is now being used as the cleanup spray. In years when spotted alfalfa aphid is not present growers prefer to use dimethoate for the cleanup spray as it is effective and inexpensive. When dimethoate is used as a cleanup spray, aerial application is critical because it is late in the season and ground equipment will damage the crop.

Dimethoate use is important in alfalfa seed production because it can be used in rotation with pyrethroids in a resistance management program, it is inexpensive, and it provides knock-down for several important pests including lygus, alfalfa weevil, and several aphid species. Other insecticides, such as pyrethroids, have a substantially longer residual. Exposure of pollinators to pyrethroid residues during bloom has a negative impact on seed set and can kill or have sub-lethal effects on the pollinators themselves.

Grass Seed

Dimethoate use is viewed as critical in grass seed production in the Pacific Northwest (PNW). As you may be aware there are many types of grass seed grown regionally and dimethoate use patterns vary somewhat depending upon the specific crop and the growing region. Typically, dimethoate is used in the spring for the control of aphids, thrips, and plant bugs (the causal agent for silvertop disease). In the fall dimethoate is used for the control of winter grain mite and, in areas where direct seeding is practiced, for the control of aphids. The second (fall) application of dimethoate has become even more important because of recent increased incidence of barley yellow dwarf virus, a virus vectored by aphid species. Barley yellow dwarf virus can severely limit seedling growth and development in some grass species. In other grass species thrips and plant bugs cause the most crop damage, making the spring dimethoate application very important. For all these pests dimethoate provides reliable control and thus ensures good yields.

For much of the PNW grass seed production, only a single application of dimethoate is needed; however, for the reasons stated above growers require labeling that will allow for both a spring and fall dimethoate application.

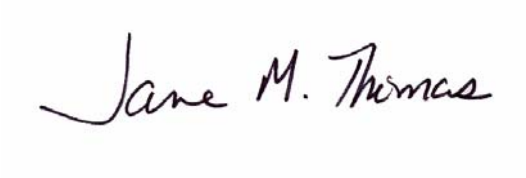
Aerial application for grass seed crops is also necessary for two reasons. First, dimethoate is often applied when the crop is in the boot stage and seed heads have formed. Accessing fields with ground equipment damages seed heads and reduces crop yields. Second, some of the grass seed crops are very tall (one grass species is seven feet high at the time dimethoate applications are made). The use of ground equipment on such tall grass seed crops is not practical.

Succulent Peas

On a separate note, I know from our previous conversations that you are working with EPA on the need for at least two dimethoate applications per season and the ability for aerial application on succulent peas. The growers in the PNW very much appreciate your assistance with this.

I have included a contact list should you have further questions. I hope that you find this information useful.

Sincerely,



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Dimethoate: Risk Mitigation
Contact List

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