



COLLEGE OF AGRICULTURAL AND
ENVIRONMENTAL SCIENCES
AGRICULTURAL EXPERIMENT STATION
TELEPHONE: (530) 754-8378 / 752-7010
FAX: (530) 754-8379

WESTERN REGION PEST MANAGEMENT CENTER
DEPARTMENT OF ENVIRONMENTAL TOXICOLOGY
ONE SHIELDS AVENUE
DAVIS, CALIFORNIA 95616-8588
<http://www.wrpmc.ucdavis.edu>

November 29, 2005

Dr. Demson Fuller
Chemical Review Manager
Special Review and Reregistration
US Environmental Protection Agency

RE: Formentanate Hydrochloride Use on Alfalfa Grown for Seed

Dear Demson,

This letter is in response to your request on November 17, 2005, regarding the use of formetanate hydrochloride on alfalfa grown for seed. According to your e-mail, the USEPA may have worker handling concerns. You stated the preliminary occupational risk assessment shows worker risk for mixer/loaders using wettable powders for aerial application (total MOE is 57). The registrant stated in their comments during phase 3 that default acreage assumption used to calculate this risk estimate was too high (1200 acres).

You wanted to know if I could provide you with information for formetanate on alfalfa seed fields. In particular, is there a more realistic number of the amount of formetanate used to treat alfalfa for seed?

Data from the California Department of Pesticide Regulation's Pesticide Use Report for 2003 show 31 applications of formetanate hydrochloride made to alfalfa (both hay and seed crops) in California. 2,055 acres were treated with 1,395 lb ai. The median application rate was 0.74 lb ai/ac. The ranges of rates ranged from 0.2 to 0.92 lb ai/ac. All fields received one application, with the exception of two fields being treated twice. Data from the California Agricultural Commissioners' shows 1,152,293 acres of alfalfa in California in 2003. In 2005 a good estimate of seed alfalfa production in California is 20,000 acres. This figure comes from the 18,000 acres of certified acres that were approved and a slight increase to reflect the non-certified production acres. There were 26,000 acres that certification was applied for in 2005 of which 18,000 were approved. It is expected to go up slightly in 2006 based on current information, according to Betsy Peterson, California Seed Association.

Dr. Demson Fuller
November 29, 2005
Page 2

I was able to review each individual pesticide application of formetanate to alfalfa in 2003. The pesticide use report does not differentiate between the types of alfalfa grown, therefore both hay and seed crops are in these data. I sorted the applications by date to determine the number of acres treated each day in each county. I found that the maximum daily acres treated in 2003 were 351 acres in five applications. These treatments occurred in a single county in California, but 328 of these acres were treated by aircraft and the remaining 23 acres were treated by ground equipment. It is improbable that one applicator was involved in all five of these applications. The range of acres treated per day for the 18 application dates in 2003 is 32 to 351. The average number of acres treated during each application was 122. It is also unlikely that all of these acres are seed crops, considering seed alfalfa is less than 2 percent of the alfalfa grown.

If you have any further questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Rick Melnicoe". The signature is written in a cursive style with a small flourish at the end.

Rick Melnicoe

cc Teung Chin, USDA, OPMP