Typical Use Rates for 2,4-D on Pasture and Rangeland in California

Date: January 12, 2005

To: Harold D. Coble
Agronomist
USDA/ARS/OA

From: Rick Melnicoe
Director, Western Region Integrated Pest Management Center

Dear Harold,

Attached is an Excel file that provides information from California for the year 2002 on the use of several formulations of 2,4-D on pasture and rangeland. These data should answer your question for California.

Rick
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<table>
<thead>
<tr>
<th>Crop or Site</th>
<th>AI</th>
<th>Num. of Fields</th>
<th>% Base Acres Treated</th>
<th>Base Acres Treated</th>
<th>Cum. Acres Treated</th>
<th>Total Lbs AI</th>
<th>Med rate</th>
<th>Min rate</th>
<th>Max rate</th>
<th>Num. apps</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASTURELAND</td>
<td>2,4-D</td>
<td>1</td>
<td>0.10</td>
<td>41</td>
<td>41</td>
<td>32</td>
<td>0.78</td>
<td>0.78</td>
<td>0.78</td>
<td>1</td>
</tr>
<tr>
<td>RANGELAND</td>
<td>2,4-D</td>
<td>1</td>
<td>0.02</td>
<td>20</td>
<td>20</td>
<td>5</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>1</td>
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<tr>
<td>PASTURELAND</td>
<td>2,4-D, 2-ETHYLHEXYL ESTER</td>
<td>13</td>
<td>0.95</td>
<td>396</td>
<td>418</td>
<td>386</td>
<td>1.41</td>
<td>0.71</td>
<td>2.83</td>
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<tr>
<td>PASTURELAND</td>
<td>2,4-D, ALKANOLAMINE SALTS (ETHANOL AND ISOPROPANOL AMINES)</td>
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<td>0.07</td>
<td>30</td>
<td>30</td>
<td>7</td>
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<td>PASTURELAND</td>
<td>2,4-D, BUTOXYETHANOL ESTER</td>
<td>7</td>
<td>0.66</td>
<td>276</td>
<td>276</td>
<td>317</td>
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<td>65</td>
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<td>PASTURELAND</td>
<td>2,4-D, DIMETHYLAMINE SALT</td>
<td>192</td>
<td>21.13</td>
<td>8,818</td>
<td>9,983</td>
<td>10,345</td>
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<td>6.94</td>
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<td>20</td>
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</tbody>
</table>
Description of all columns used in the pesticide use table

"Num. of Fields" is the number of fields that were treated with an AI.
"% Base Acres Treated" is the percent of acres of crop planted, as calculated from the PUR, that were treated one or more times by each active ingredient (AI).
"Base Acres Treated" is the total number of acres planted that were treated one or more times by each AI.
"Cumulative Acres Treated" is the sum of the acres treated for each application even when the same area was treated more than once.
"Total Lbs AI" is the sum of pounds of each AI used on this crop.
"Med rate" is the median rate of all applications.
"Min rate" is the smallest rate after removing the lowest 2.5% of the rate values.
"Max rate" is the largest rate after removing the highest 2.5% of the rate values.
"Num. apps." is the number of applications of the AI in the crop. Applications of the same AI to the same field within 2 days is counted as one application.
"Med apps/field" is the median number of applications per field, taken over only fields treated with the AI.
"Min apps/field" is the smallest number of applications per treated field after removing the lowest 2.5% of values.
"Max apps/field" is the largest number of applications per treated field after removing the highest 2.5% of values
"Num. WFE apps" is the number of "whole field equivalent (WFE)" applications. A WFE application is the acres treated divided by acres planted in that field.
"Med WFE/ field" is the median number of WFE applications per field, taken over all treated fields
"Min WFE/ field" is the smallest number of WFE applications per treated field after removing the lowest 1.0% of values
"Max WFE/ field" is the largest number of WFE applications per treated field after removing the highest 1.0% of values.