

Chemical Applications on Lettuce

The Arizona Agricultural Statistics Service continues their series of on-farm agricultural chemical use statistics. The data presented in this summary are part of the data series on chemical use funded through the Water Quality Initiative.

The Water Quality Initiative is a multi-agency program designed to provide information for farmers, ranchers, and foresters to address on-farm and off-farm environmental issues. In the past, there has been an inadequate amount of farm level data to determine the magnitude of water quality problems or to permit an assessment of alternatives for farmers and other affected parties. This summary and other

agricultural chemical reports help fill the needs of analysts evaluating the complex environmental issues.

The Arizona Agricultural Statistics Service is responsible for collecting on-farm agricultural chemical use information to support the evaluation of water quality and food safety issues. The Economic Research Service (ERS) conducts research on the impact of alternative pesticide regulations, policies, and practices.

Included in this summary is farm use of pesticides during 2000 on lettuce grown in Arizona.

Lettuce: Agricultural Chemical Applications, 2002

| Active Ingredient | -----Head Lettuce----- | | | | | -----Other Lettuce----- | | | | |
|-----------------------------|------------------------|---------------|----------------------|--------------------|---------------|-------------------------|---------------|----------------------|--------------------|---------------|
| | Area applied | Applica-tions | Rate per application | Rate per crop year | Total applied | Area applied | Applica-tions | Rate per application | Rate per crop year | Total applied |
| | Percent | Number | Lbs per acre | | 1,000 Lbs | Percent | Number | Lbs per acre | | 1,000 Lbs |
| <u>Herbicides:</u> | | | | | | | | | | |
| Benefin | 40 | 1.2 | 1.21 | 1.49 | 31.0 | | | | | |
| Bensulide | 27 | 1.0 | 3.93 | 3.94 | 56.5 | 17 | 1.5 | 3.98 | 6.10 | 19.7 |
| Pronamide | 41 | 1.1 | 0.74 | 0.82 | 17.6 | 65 | 1.6 | 0.79 | 1.27 | 15.3 |
| <u>Insecticides:</u> | | | | | | | | | | |
| Acephate | 14 | 1.0 | 0.79 | 0.80 | 6.0 | | | | | |
| Bt (Bacillus thur.) 1/ | 8 | 1.0 | | | | | | | | |
| Cypermethrin | 35 | 1.0 | 0.08 | 0.08 | 1.5 | | | | | |
| Diazinon | 34 | 1.0 | 0.48 | 0.48 | 8.5 | 34 | 1.3 | 0.47 | 0.61 | 3.8 |
| Dimethoate | 10 | 1.1 | 0.24 | 0.28 | 1.4 | | | | | |
| Endosulfan | 18 | 1.0 | 0.92 | 0.94 | 8.7 | 4 | 1.1 | 0.87 | 1.00 | 0.7 |
| Esfenvalerate | 11 | 1.0 | 0.04 | 0.05 | 0.3 | | | | | |
| Imidacloprid | 18 | 1.0 | 0.18 | 0.19 | 1.7 | 22 | 1.9 | 0.22 | 0.43 | 1.8 |
| Indoxacarb | 27 | 1.0 | 0.06 | 0.07 | 0.9 | 33 | 1.6 | 0.06 | 0.11 | 0.7 |
| Lambda-cyhalothrin | 18 | 1.0 | 0.03 | 0.03 | 0.3 | 28 | 1.5 | 0.03 | 0.04 | 0.2 |
| Methomyl | 65 | 1.1 | 0.71 | 0.79 | 26.6 | 68 | 1.2 | 0.72 | 0.93 | 11.8 |
| Permethrin | 82 | 1.5 | 0.17 | 0.26 | 11.3 | 93 | 1.8 | 0.16 | 0.29 | 5.0 |
| Spinosad | 93 | 2.3 | 0.07 | 0.17 | 8.0 | 96 | 3.3 | 0.08 | 0.25 | 4.5 |
| Tebufozide | 22 | 1.1 | 0.12 | 0.13 | 1.5 | 26 | 1.2 | 0.12 | 0.15 | 0.7 |
| Zeta-cypermethrin | 57 | 1.4 | 0.04 | 0.07 | 2.0 | | | | | |
| <u>Fungicides:</u> | | | | | | | | | | |
| Maneb | 44 | 1.0 | 1.22 | 1.24 | 28.5 | 37 | 2.2 | 1.39 | 3.11 | 21.1 |

1/ Rates and total applied are not available because amounts of active ingredient are not comparable between products.