2001 NAHMS Dairy Cattle and Dairy Facilities Chemical Usage

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(for the complete report, search on the keywords 'Agricultural Chemicals' at www.usda.gov/nass/search.htm)

This report is the first issued by the National Agricultural Statistics Service (NASS) on the use of agricultural chemicals on dairy cattle and dairy facilities. This publication is part of a series on Agricultural Chemical Usage, which also provides statistics for on-farm chemical usage for nursery and floriculture crops, field crops, fruits, vegetables, and other species of livestock and livestock production facilities. NASS collects on-farm chemical use data to enhance the quality of information used in the evaluation of issues related to agricultural chemicals. Pest management data are used to measure Integrated Pest Management (IPM) adoption levels and evaluate the impact of alternative pesticide regulations, policies, and practices. The agricultural chemical usage estimates in this report are based on data compiled from the 2002 General Dairy Management Survey, which was conducted in late December 2001 through January 2002. The 21 States in this survey account for approximately 85% of the milk cow inventory in the United States, based on 2001 data published in the NASS Milk Production release dated February 15, 2002.

This report provides insecticide use information on dairy cattle and dairy facilities in the 21 selected States. All data refer to the on-farm use of chemical active ingredients contained in insecticides which were applied during 2001 calendar year. Insecticides are defined as chemical products used for the control of insects. Insecticides are regulated by the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA). Insecticides are applied to dairy cattle and dairy facilities to control files, mange, lice, grubs, and other external pests.

Chemical usage on dairy cattle is published on a rate per head per application and rate per head per year basis. Some dairy cattle received no chemical applications in 2001; whereas, other dairy cattle received multiple applications of the same chemical. In other cases, dairy cattle received applications of several different chemicals. The number of times a chemical is applied varies significantly based on product formulation, method of application, and pest stress at particular locations. The rate per head data cannot be used to calculate the actual number of head treated with a particular chemical. Dairy cattle inventories are reprinted in this report from a previous NASS release for informational purposes only.

Some active ingredients, such as petroleum distillate, piperonyl butoxide, and xylene are primarily carriers, diluents, synergists, or repellents. These active ingredients are classified by the EPA as pesticides, and are therefore included in this report.

This report excludes pharmaceutical products that treat dairy cattle for internal pests. A pharmaceutical is classified as a drug and is regulated by FDA. Pharmaceuticals generally target internal livestock pests such as viruses, bacteria, or worms. Some products can be classified as either a pesticide or a pharmaceutical because they treat both external and internal pests. Examples of dual purpose products are doramectin and ivermectin. These products can be applied to dairy cattle internally through oral dosage or injection, or applied externally as a pour-on.

Besides pharmaceuticals, disinfectants and sanitizers are also excluded. Only insecticide data are collected and summarized.

Insecticide applications made to dairy cattle facilities are also included in this report. For survey purposes, milking parlors, pens, sheds, and barns are examples of dairy cattle facilities. Herbicide and termite chemical applications are excluded, as are all rodenticides.

In the 21 States surveyed, there were 1,743 reports summarized for chemicals applied directly to dairy cattle and 989 reports summarized for chemicals applied to dairy facilities.

The U.S. map on Page 96 depicts graphically the total number of summarized reports for each State in the 2001 survey.