

**Table 2. Land Treated With Insecticides, Herbicides, Fungicides, and Other Chemicals: 1969 and 1964**

|  | For control of—          |            |            |                            |        |           |           |                               |            |      |
|--|--------------------------|------------|------------|----------------------------|--------|-----------|-----------|-------------------------------|------------|------|
|  | Weeds and grass in crops |            |            | Weeds and brush in pasture |        |           |           | Insects and diseases in crops |            |      |
|  | Farms reporting 1969     | Acres      |            | Farms reporting            | Acres  |           | Acres     |                               | 1969       | 1964 |
|  | 1969                     | 1964       | 1969       | 1964                       | 1969   | 1964      | 1969      | 1964                          | 1969       | 1964 |
| United States, total                     | 644,984                  | 84,913,547 | 59,629,354 | 78,056                     | 64,238 | 4,967,459 | 3,166,802 | 46,149,827                    | 37,633,100 |      |
| <b>Economic class of farm</b>            |                          |            |            |                            |        |           |           |                               |            |      |
| Class 1.....                             | 119,352                  | 35,882,810 | 16,776,607 | 14,428                     | 7,041  | 2,128,571 | 934,071   | 25,881,506                    | 16,305,313 |      |
| Class 2.....                             | 177,400                  | 25,101,981 | 16,120,120 | 18,942                     | 13,506 | 1,073,624 | 695,250   | 10,688,255                    | 8,591,946  |      |
| Class 3.....                             | 169,272                  | 15,581,572 | 16,224,157 | 18,460                     | 20,572 | 858,912   | 713,177   | 5,841,549                     | 7,228,421  |      |
| Class 4.....                             | 108,933                  | 6,026,957  | 8,172,522  | 14,248                     | 14,378 | 540,032   | 499,950   | 2,470,825                     | 3,889,194  |      |
| Class 5.....                             | 70,027                   | 2,320,227  | 2,335,948  | 11,978                     | 8,741  | 366,320   | 324,354   | 1,267,692                     | 1,618,226  |      |
| <b>Type of farm</b>                      |                          |            |            |                            |        |           |           |                               |            |      |
| Cash-grain.....                          | 206,892                  | 41,130,278 | 28,095,629 | 12,088                     | 10,652 | 508,441   | 335,354   | 15,503,069                    | 10,444,073 |      |
| Tobacco.....                             | 14,565                   | 433,014    | 396,200    | 1,307                      | 764    | 15,256    | 11,364    | 711,156                       | 759,583    |      |
| Cotton.....                              | 20,447                   | 4,510,401  | 3,805,238  | 705                        | 1,402  | 57,479    | 131,100   | 3,624,426                     | 7,171,551  |      |
| Other field crop....                     | 17,111                   | 2,861,013  | 1,988,640  | 645                        | 711    | 44,121    | 28,951    | 2,651,785                     | 2,103,389  |      |
| Vegetable.....                           | 8,142                    | 1,212,588  | 570,966    | 163                        | 138    | 10,145    | 5,391     | 1,962,715                     | 1,558,846  |      |
| Fruit and nut.....                       | 12,784                   | 823,223    | 520,669    | 358                        | 438    | 13,036    | 19,144    | 3,986,477                     | 2,861,690  |      |
| Poultry.....                             | 8,274                    | 580,252    | 552,174    | 1,667                      | 1,714  | 62,111    | 51,450    | 229,342                       | 237,892    |      |
| Dairy.....                               | 108,158                  | 6,270,806  | 5,363,344  | 10,232                     | 11,687 | 308,346   | 294,817   | 2,257,408                     | 2,020,625  |      |
| Livestock other than poultry and dairy.. | 189,655                  | 20,151,549 | 12,970,680 | 37,558                     | 24,851 | 1,910,096 | 1,054,836 | 10,149,780                    | 6,053,740  |      |
| Livestock ranches...                     | 3,485                    | 332,285    | 261,273    | 6,825                      | 4,276  | 1,726,934 | 957,818   | 276,112                       | 312,288    |      |
| General.....                             | 50,832                   | 6,409,905  | 5,031,641  | 5,819                      | 7,149  | 282,862   | 249,443   | 4,486,805                     | 3,927,144  |      |
| Miscellaneous.....                       | 4,649                    | 198,233    | 72,900     | 689                        | 456    | 28,632    | 27,134    | 310,752                       | 182,279    |      |

crops indicate that a high percentage of the cotton, Irish potatoes, sugarbeets, and vegetable crops are treated for weed and grass control.

Data by class of farm indicate that the large, more productive farms accounted for more than a proportional share of the acreage treated in 1969 and of the increase since 1964. The increasing use of pre-emergent chemicals and the relatively low cost per acre are important factors.

The acres of pastureland treated for the control of weeds and brush accounted for 44 percent of the acres of cropland pasture and improved pasture in 1969. The acres of pastureland treated increased by 56 percent from 1964 to 1969. Most of the treated acreage in 1964 and 1969 was on livestock farms and livestock ranches which indicates that most of this acreage treated was improved pasture.

The 46.1 million acres treated for the control of insects and diseases accounted for about 18 percent of the cropland harvested in 1969. The acres treated increased by about 22 percent from 1964 to 1969. Cash-grain farms and livestock farms account for about 56 percent of the total acres treated for control of insects and diseases. This is an indication that corn for grain may be the crop most often treated. Crops which would be expected to have the highest percentage of the acres treated are cotton, Irish potatoes, sorghums, peanuts, fruits, nuts, and vegetables.

**Land Treated With Chemicals in 1969**

Data presented in table 3 provide information about the use of chemicals by economic class of farm and type of farm for 1969. Additional data on acreage treated, by class of farm, can be

**Table 3. Land Treated With Insecticides, Herbicides, Other Pesticides, and Other Chemicals: 1969**

|  | For control of—      |           |           |                            |            |             |                    |           |            |                          |            |             |
|--|----------------------|-----------|-----------|----------------------------|------------|-------------|--------------------|-----------|------------|--------------------------|------------|-------------|
|  | Insects on hay crops |           |           | Insects on all other crops |            |             | Nematodes in crops |           |            | Weeds and grass in crops |            |             |
|  | Farms reporting      | Acres     | Dollars   | Farms reporting            | Acres      | Dollars     | Farms reporting    | Acres     | Dollars    | Farms reporting          | Acres      | Dollars     |
| United States, total                     | 49,911               | 2,180,223 | 8,627,706 | 403,484                    | 39,881,566 | 296,971,125 | 34,059             | 1,267,101 | 17,334,850 | 644,984                  | 84,913,547 | 345,683,739 |
| <b>By economic class</b>                 |                      |           |           |                            |            |             |                    |           |            |                          |            |             |
| Class 1.....                             | 11,851               | 1,078,934 | 4,879,465 | 88,205                     | 22,252,692 | 197,436,523 | 6,966              | 686,194   | 10,963,047 | 119,352                  | 35,882,810 | 179,538,389 |
| Class 2.....                             | 14,562               | 532,064   | 1,841,783 | 96,087                     | 9,449,164  | 49,365,777  | 7,494              | 281,093   | 2,948,910  | 177,400                  | 25,101,981 | 87,205,961  |
| Class 3.....                             | 10,809               | 314,924   | 1,034,749 | 89,405                     | 5,061,171  | 27,702,515  | 8,504              | 174,994   | 1,885,472  | 169,272                  | 15,581,572 | 48,815,736  |
| Class 4.....                             | 7,471                | 164,344   | 550,043   | 72,832                     | 2,091,688  | 13,892,534  | 7,074              | 88,218    | 1,075,836  | 108,933                  | 6,026,957  | 20,761,179  |
| Class 5.....                             | 5,218                | 89,957    | 321,666   | 56,955                     | 1,026,851  | 8,573,776   | 4,021              | 36,602    | 461,585    | 70,027                   | 2,320,227  | 9,362,474   |
| <b>By type of farm</b>                   |                      |           |           |                            |            |             |                    |           |            |                          |            |             |
| Cash-grain.....                          | 5,018                | 159,045   | 610,591   | 90,309                     | 14,581,323 | 48,504,346  | 2,539              | 247,706   | 1,471,301  | 206,892                  | 41,130,278 | 139,909,249 |
| Tobacco.....                             | 1,007                | 10,799    | 56,238    | 51,062                     | 682,905    | 9,476,480   | 15,095             | 159,591   | 2,616,797  | 14,565                   | 433,014    | 2,591,556   |
| Cotton.....                              | 578                  | 39,544    | 223,177   | 20,136                     | 3,478,983  | 38,720,954  | 977                | 91,444    | 845,838    | 20,447                   | 4,510,401  | 27,980,710  |
| Field-crop.....                          | 797                  | 42,424    | 218,516   | 15,896                     | 2,149,586  | 23,656,292  | 2,387              | 162,949   | 3,250,973  | 17,111                   | 2,861,013  | 22,211,842  |
| Vegetable.....                           | 339                  | 27,843    | 208,250   | 11,198                     | 1,562,087  | 35,325,557  | 1,526              | 120,353   | 2,467,471  | 8,142                    | 1,212,588  | 11,031,321  |
| Fruit and nut.....                       | 408                  | 12,591    | 100,147   | 29,841                     | 2,391,593  | 59,078,707  | 2,207              | 56,321    | 1,818,918  | 12,784                   | 823,223    | 8,036,943   |
| Poultry.....                             | 685                  | 14,269    | 49,181    | 4,539                      | 197,488    | 1,603,161   | 526                | 8,376     | 110,736    | 8,274                    | 580,252    | 2,651,706   |
| Dairy.....                               | 17,140               | 602,249   | 2,147,543 | 34,578                     | 1,569,020  | 6,840,666   | 806                | 36,084    | 259,441    | 108,158                  | 6,270,806  | 25,398,232  |
| Livestock other than poultry and dairy.. | 15,176               | 583,407   | 1,900,405 | 100,313                    | 9,238,754  | 32,420,205  | 3,260              | 175,682   | 1,321,626  | 189,655                  | 20,151,549 | 73,610,484  |
| Livestock ranches...                     | 1,609                | 121,979   | 304,288   | 1,257                      | 131,654    | 789,289     | 57                 | 2,837     | 23,767     | 3,485                    | 332,285    | 853,191     |
| General.....                             | 6,885                | 556,653   | 2,756,732 | 37,389                     | 3,674,517  | 35,740,047  | 3,709              | 186,008   | 2,231,378  | 50,832                   | 6,409,905  | 29,251,632  |
| Miscellaneous.....                       | 269                  | 9,420     | 52,638    | 6,966                      | 223,656    | 4,815,421   | 970                | 19,750    | 916,604    | 4,649                    | 198,233    | 2,186,873   |