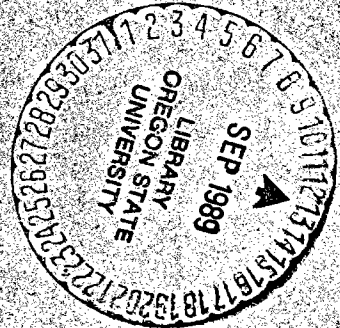


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OREGON PESTICIDE USE ESTIMATES FOR 1987



Special Report 843

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OREGON STATE UNIVERSITY EXTENSION SERVICE

OREGON PESTICIDE USE ESTIMATES FOR 1987

National Pesticide Impact Assessment Program
Oregon Pesticide Impact Assessment Program
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**OREGON STATE UNIVERSITY
EXTENSION SERVICE**

*Agricultural Experiment Station
(Special report)*

John W. Rinehold
James M. Witt
Extension Service
Department of Agricultural Chemistry
Oregon State University
Corvallis, Oregon

TABLE OF CONTENTS

List of Tables and Figures	v
I Introduction	vii
II Procedures	1
III Results	
Oregon Statewide Pesticide Use Estimates	
Alfalfa hay	7
Alfalfa seed crop	7
Apples	8
Asparagus	9
Barley	10
Blackberries	10
Blueberries	11
Broccoli	11
Cabbage	12
Carrot seed crop	12
Carrots	13
Cauliflower	13
Chemical fallow	14
Cherries	14
Christmas trees	15
Clover and vetch seed crops	15
Conservation Reserve Program	16
Cranberries	16
Cucumbers	16
Currants	16
Dry beans	17
Dry onions	17
Dry peas	17
Easter lilies	18
Filberts	18
Forestland	19
Garbonzo beans	19
Garlic	19
Golf courses	20
Grain corn	20
Grain storage	20
Grapes	21
Grass seed crops	21
Grasshopper control	22
Green onions	22
Green peas	22
Greenhouses	22
Gypsy moth control program	23
Hops	23
Industrial and Residential	23
Irrigation canal	24
Kentucky bluegrass seed crop	24
Lettuce	25
Lettuce seed crop	25
Melons	25
Mint	25
Noxious weed control	26
Nursery	27
Oats	28
Peaches	29

Pears	29
Potatoes	30
Prunes and plums	31
Pumpkins and squash	32
Radishes	32
Rangeland and Pasture	33
Rape seed crop	33
Raspberries	33
Recreational areas	34
Rhubarb	34
Rights-of-way (farm yard)	34
Rights-of-way (power)	35
Rights-of-way (railroad)	35
Rights-of-way (state roads)	35
Rights-of-way (utility)	36
Rutabagas	36
Rye	36
Silage corn	36
Snap beans	37
Spinach	37
Strawberries	38
Sugarbeet seed crop	38
Sugarbeets	39
Sweet corn	39
Table beets	40
Tomatoes	40
Vector control	41
Vegetable and flower seed crops	41
Walnuts	42
Wheat	42
IV Summary	45
V Appendixes	
A Statewide Survey - Ranking by Common Name in Alphabetical Order	51
B Statewide Survey - Ranking by Pounds Used in Descending Order	53
C Countywide Survey - Ranking by County by Common Name in Alphabetical Order	55

LIST OF TABLES AND FIGURES

Table 1	Comparing the 1981, 1986, and 1987 Surveys	5
Table 2	Pesticides Used in Oregon by Class, 1987	45
Table 3	Comparison of the Top Ten Pesticides Used, 1987	45
Table 4	Top Ten Herbicides, 1987	46
Table 5	Top Ten Insecticides, 1987	46
Table 6	Top Ten Fungicides, 1987	46
Figure 1	Pesticides Used in Oregon by Class, 1987	45
Figure 2	Use of Dichloropropene in 1987	46
Figure 3	Use of Oil in 1987	46
Figure 4	Use of 2,4-D in 1987	47
Figure 5	Use of Dicamba in 1987	47
Figure 6	Use of Atrazine in 1987	47
Figure 7	Use of Calcium Polysulfide (lime sulfur) in 1987	48
Figure 8	Use of Sulfur in 1987	48
Figure 9	Use of Copper in 1987	48
Figure 10	Use of Glyphosate in 1987	49

I INTRODUCTION

The Oregon Pesticide Impact Assessment Program (OPIAP) prepares and distributes reports to local, state, and national levels concerning pesticide use, benefits and risks, toxicology, and behavior in the environment. These reports are for use in educational programs in extension and provide data to the United States Department of Agriculture (USDA), Environmental Protection Agency (EPA), Oregon Department of Agriculture (ODA), and other agencies who make or influence regulatory decisions.

This report summarizes the use of pesticides in 1987 on 75 crops and sites including cultivated agriculture, forestry, rights-of-way, urban and miscellaneous uses. It contains pesticide use information by crop including acres planted, pounds used, rates applied, and type of application.

This report summarizes the use of pesticides in 1987 on 75 crops and sites

A good statewide pesticide use survey is necessary. First, the public is entitled to know what is being used, where it is used, and how much is used. The OPIAP can provide pesticide use figures which are a reasonably good estimate of actual use.

Second, the EPA in part determines which pesticides may be re-registered when considering risks and benefits. The OPIAP con-

ducts pesticide use/benefit studies on selected chemicals each year. These have included the following since the previous state survey in 1981: parathion, EBDCs, captan, aldicarb, daminozide, amitrole, toxaphene, diazinon, mevinphos, oxydemeton methyl, and dicofol. These pesticide reviews include crop economic data, crop/pest biology, pesticide exposure, and pesticide use. A recent state wide survey, where the county is the basic unit, pinpoints the significant county(s) and crops(s). The survey therefore speeds data collection and with such data at hand we are better able to respond quickly to critical requests which sometimes require reply within a few days. This response ultimately benefits the grower and the consumer.

Third, the endangered species should be protected from unnecessary exposure to specific pesticides. This may in the end eliminate use of certain pesticides in the

habitats of such species. An endangered species may require discontinued use of a particular pesticide in an area. That area may be a state, a county, or other political or geographic area. By defining the smallest area of pesticide use, the county level in this survey, limitations can be by county. In many cases areas of known use are defined by soil types (onions in peat bogs), terrain (some tree fruits on slopes), or special crop requirements. Therefore areas of pesticide use can be designated to some degree in specific regions rather than county wide or statewide.

Fourth, regulatory agencies must protect the sanctity of ground water. The Oregon Department of Health (ODH), Department of Environmental Quality (DEQ), EPA, and other agencies require pesticide use data to determine whether an area is susceptible to pesticides entering the ground water, and in such cases if regulatory action is warranted. In 1985, the DEQ began testing groundwater in Malheur, Multnomah, Washington, Marion, Linn, and Lane Counties. The OPIAP, working independently, assisted the DEQ in identifying the crops grown and the pesticides used in the specific areas where the DEQ planned to sample potable well water. This pesticide groundwater study by DEQ was expanded in 1986 and 1987 and repeated in Malheur County and included Morrow, Umatilla, Klamath, and Curry Counties. The ODH surveyed small community water supplies in Crook, Deschutes, and Jefferson Counties. The EPA had run a general pesticide use survey in 1985 in the state of Washington with all of the input coming from the Extension Service. They proposed the same type of effort in Oregon in 1986. The OPIAP however, felt that though the effort in Washington was a first step, it could be improved upon in a similar Oregon program. By the spring of 1986 other agencies and scientists became involved in a more thorough groundwater investigation and formed a Groundwater Task Force. One of the goals of this task force was to provide a statewide pesticide use survey.

Fifth, farm workers who labor in the immediate environment where pesticides are used must be protected from exposure. This survey identifies those pesticides used on each crop, and thus greatly reduces chance exposure of a farm worker to an unknown chemical.

Therefore, because of these things, a stricter accounting of pesticide use is essential. This report examines 1987 use.

II PROCEDURES

The Oregon Pesticide Impact Assessment Program (OPIAP) published the Oregon Pesticide Use Estimates for 1981. That survey tabulated statewide pesticide use at just over 13,800,000 pounds (active ingredient) on their 51 crops and crop groupings. The primary sources of data were pesticide dealers, agricultural consultants, extension, and research persons. That was our first attempt at a statewide survey covering many crops and many pesticides. Many gaps were apparent. Many crops were grouped together. For example, wheat, barley, oats, and rye were listed under small grains. Other crops were absent such as sugarbeet for sugar and carrots, and not all the data about a crop was necessarily gathered, for example "rights-of-ways" was incomplete.

The OPIAP expanded upon the 1981 survey procedure in this survey and enlisted the support of more people. The survey covered the years 1986 and 1987 with the county as the smallest political unit surveyed. It contained more crops and more detail than the previous survey.

The 1987 survey was broken into two phases: 1986 pesticide dealer preliminary survey, and the 1987 county agent/dealer final survey.

PHASE 1 - The 1986 Preliminary Survey

In 1986, 55 principal dealers were selected to participate in this survey. Of the dealers selected 49 participated in the survey; 25 serving the Willamette Valley, three serving southwestern Oregon, seven serving central and north central Oregon, seven serving the Columbia Basin, and eight serving eastern Oregon. Dealers who qualified for this survey employed at least one full time fieldman who was knowledgeable about the crops grown in his area, and gave pesticide recommendations at the farm. This preliminary survey is the response of 49 pesticide dealers representing over 100 fieldmen statewide.

The 1986 portion of this survey included only 45 cultivated crops. It wasn't in the scope of the project to move beyond agriculture in the first year. However, the 1987 survey included sites which required different methodologies and largely depended upon a considerable amount of time and effort from county agents. These additional sites included: forest, rangeland and pasture, rights-of-way (state, and interstate road rights of way, railroad, utilities,), vector control, noxious weed control, and parks, nurseries, and urban use.

A survey questionnaire was the basic tool for collecting the estimates. The Pesticide Label Information Retrieval System (PLIRS) supplied a complete list of pesticides registered for each crop. We were thus able to identify every registered use for each crop. Because many crops had a multitude of labels registered, questionnaires with many crops were bulky. Because large size discouraged dealers from completing the survey, questionnaires

were shortened by removing those pesticides for which ample evidence existed that they were not used on that crop. This was accomplished by interviewing some dealers. From those discussions crop/pesticide lists were compiled for each area and on each crop. This greatly simplified the survey. The longest questionnaire, 37 pages long, was made for the Columbia Basin.

Crop acres were tabulated originally for 1985, but were subsequently revised for 1986. These were obtained from the Commodity Data Sheets compiled by the Extension Economic Information Office (EEIO) at Oregon State University. The EEIO publishes commodity data sheets which contain the harvested acres, yield, and value of sales for most crops grown in Oregon. These data sheets were the sole source for the crop acreage estimates for 1986. However pesticide use cannot necessarily be based on harvested acres. Many crops like tree fruits, for example, must grow at least 3 to 5 years before fruiting, but the same or similar spray schedule is required. In Morrow county, 800 new acres of fruit trees are just now coming into production. Likewise Christmas trees must grow for about seven years before harvest and only those harvested are counted by the EEIO. The 1986 acres in most cases reflected harvested acres, but the 1987 acres are estimates given by the county agents for each county and are mostly planted acres. A somewhat different problem is acres of fallow grain land. In dry land region the soil moisture is such that it

This preliminary survey is the response of 49 pesticide dealers

will not sustain a crop unless the land is allowed to remain fallow for one year, therefore only one wheat crop is harvested in any two year period. A large portion of the wheat land along the Columbia river remains fallow, and weed control helps conserve soil moisture. The commodity data sheets do not record the amount of grain land that is fallow in eastern Oregon even though the land is cultivated every other year and pesticides are applied every year. This was taken into account in both the 1986 and 1987 surveys. Other land in eastern Oregon is managed under the Conservation Reserve Program. The 1986 survey did not account for this land.

Since a pesticide questionnaire designed for the entire state would limit the ability of any one area to respond to that region exactly, individual questionnaires were developed for separate cropping areas: southern Willamette Valley, central and northern Willamette Valley, Multnomah County, central and north central Oregon, Columbia Basin (except fruit), Baker and Union Counties,

Malheur County, Hood River and Wasco Counties (tree fruit), Jackson and Josephine Counties, and Klamath County. The questionnaires listed the crop, pesticides used, and rates applied. Dealers were asked to estimate the percentage of the acreage treated with each pesticide for each crop. The areas they estimated were the county or counties they served. Many dealers served only one county or only a portion of a county, others served two or three counties.

The questionnaires on tree fruits (Hood River and Wasco Counties, Jackson and Josephine Counties, and eastern Umatilla County) were developed differently. Because of the complex pesticide requirements of the tree fruit industry, each cooperator was asked to describe the pesticide use in 1986. This included the crop, pesticide, rate applied, percent applied, and number of times applied. Some sprays, like a dormant oil, are applied only once while others like cherry fruit fly cover sprays receive multiple applications with the same or different products. Some products like endosulfan may be applied for different pests at different times and at different rates.

Dealers were given personal instruction on how to complete the form. By doing so we felt reasonably assured that the figures received would truly represent their best estimates. A natural temptation would be to simply give pounds of pesticide sold, however this would not tell in which county it was applied nor how much was applied nor on which crop, unless that particular pesticide was used solely on one crop. Dealers occasionally were unable to give estimates on one crop while very able to do so on another. In such cases we asked them to make their

Dealers were given personal instruction on how to complete the form

best guess, but if they really didn't know, to say so. Dealers were visited in each county except for Klamath, Jackson, Josephine, Baker, and Union counties. These dealers received a questionnaire by mail and were also telephoned.

The 1986 survey covered 45 cultivated crops. Some of these were crop groupings: small grains, annual grass seed crops, caneberries, clover seed crops, and grass seed crops. Some were crops that had differing varieties or cultivars which required different pesticide treatments: apples, pears, cherries, grapes, melons, onions, potatoes, and corn. Each crop has its individual rate, treatment type (seed, soil, foliar, protectant, space, bait), formulation (e.g. wettable powder, soluble powder, granular, emulsifiable concentrate), and number of applications per year. Although most crops received only one application of a particular pesticide each year, others especially tree fruits may have two or more. When a dealer expresses the per-

centage of acres treated normally the estimate is less than 100%. When, however, a crop is treated several times, the percentage can go above 100%. For example if 75% of the apples received an application of dodine (Cyprex) and following this received a second application of dodine, the total percentage treated would be 2 X 75% or 150%. The pesticide rates applied to crops varied. The actual rate for a given pesticide is normally given as a range such as 0.5 to 0.75 pounds per acre. Most of the rates were taken either from the Pacific Northwest Pest Control Handbooks or from the pesticide labels, and are usually stated in this report as active ingredient. This report records the pounds used in active ingredient rather than formulation. An active ingredient is the actual pure or technical grade

This report records the pounds used in active ingredient rather than formulation

product which produces the effect. For example, a formulator may dilute a garden dust such as captan to 5%. As a result a five pound can of dust would contain only one-quarter pound of captan; in other words, one-quarter pound of active ingredients in five pounds of formulation. Use of formulation instead of active ingredient would give inflated pesticide use estimates.

To assist the dealers in recognizing pesticides, trade names were given along with common names. To illustrate, bleach is a common name, but Purex and Clorox are trade names. Trade names were used when a single proprietary product is registered, e.g. Roundup, or when several products are used but one or two dominate the market, e.g. Lexone and Sencor (metribuzin). Trade names are not used when numerous products are registered, e.g. Esteron, Weedone, Weedmaster, and Weed N' Feed and when common names and trade names are identical, e.g. captan and malathion.

All the pesticides and their respective rates were placed in a dBase III database file. The results from the 1986 survey were placed in a second database file (4332 records). The acres harvested (or acres planted) were placed in a third database file. These databases were used to generate our 1986 preliminary report which gave a considerable amount of information including some simple statistics. Some of the estimates received were presumed "wild estimates" whenever they exceeded two standard deviations from the mean percentage. Choosing 2 standard deviations was subjective, but it was believed necessary to eliminate those numbers which simply did not reflect the consensus. In these cases we again contacted the dealers for confirmation of estimates and to resolve differences.

The geographic location of each dealer generally

determined the counties in which he did business. Thus to have a reasonable picture of county use some knowledge of where the dealers sold pesticides was needed. There were 23 dealers who gave agriculture services primarily within their county, 17 dealers into two counties, and 7 dealers into three counties. Some counties had no dealer whom we surveyed, and their estimates were derived by assuming that the adjacent county use was similar. These extrapolated estimates were of course not the actual use and may be inflated. We derived the 1986 use estimates in this manner for the following counties: Columbia, Crook, Deschutes, Douglas, Grant, Josephine, Wallowa, and Wheeler. These counties account for 4% of the total state pesticide use on cultivated agricultural land in 1986. No estimates were made for Clatsop, Coos, Harney, Lake, Lincoln, and Tillamook counties in 1986. These counties have little cultivated agriculture. The estimates for the remaining counties were derived by multiplying the mean percentage of acres treated by the rate of application and by the total number of acres in that county. The estimates were rounded as follows: 1 to 99 pounds were not rounded; 100 to 999 were rounded to the nearest 10 pounds; 1,000 to 9,999 to the nearest 100; 10,000 to 99,999 to the nearest 1,000; 100,000 to 999,999 to the nearest 10,000; greater than 1,000,000 to the nearest 100,000.

Having completed the initial tabulation for the 1986 survey, the participating dealers re-evaluated the results, looking for obvious errors as well as citing estimates with which they did not agree. Each dealer received a printout for each county that he served, and he was asked to review and comment on each one separately. Of the 47 dealers, 28 (60%) reviewed and returned the county tabulations for their areas. Each modified entry was entered into the database for that dealer and crop. Where a large difference appeared, data were examined more closely, and in these cases we asked for a consensus of opinion among fieldmen. Incorrect rates often caused errors in our pesticide use estimates because the total use was derived from the rates, and in these cases the dealers corrected the rate on the form. A second type of problem was categories of crops. Wheat, barley, oats, and rye were combined together under small grains in the initial survey. Pesticide use differences among these small grains were ignored. When we did finally separate small grains into the four crops it was not possible to divide the pesticide use evenly among them. For example the wild oat herbicides difenzoquat and diclofop which are used in wheat, cannot be used on oats. They kill tame oats as easily as wild oats. The preliminary survey estimates were derived from these corrected data.

PHASE 2 - The 1987 Final Survey

In September 1987, the OPIAP met with one or more county agents representing each county at group meetings located at John Day, Wilsonville, and Roseburg. At those meetings each agent received a packet which contained

information and a questionnaire for the 1987 survey.

The packets contained the following for each county: 1986 county crop acres; a pesticide use questionnaire for cultivated agriculture; pesticide use questionnaire for other sites; the preliminary 1986 pesticide use survey for their county; pesticides listed in numerical order by pounds used for their county; pesticides listed in alphabetical order with pounds used for their county; a list of dealers and others from whom pesticide use data had been obtained; maps of their county. Each agent was asked to revise the acre estimates to 1987 acres planted.

Most county agents completed the form by working with other knowledgeable persons

Every possible pesticide use was listed in the 1987 questionnaire. The insecticides, fungicides, herbicides, fumigants, vertebrate poisons, plant growth regulators, desiccants, and bactericides which were used in Oregon were listed in alphabetical order by common name. Each agent received a pesticides-use questionnaire with six column headings: Common Name, Trade Name, Pounds Used (active ingredient/acre), Treatments/Year, Acres Treated, and Type of Application (foliar, soil, dip, bait, seed).

Most county agents completed the form by working with other knowledgeable persons including other county agents, pesticide dealers, agriculture consultants and fieldmen from their area. They consulted individually or in-concert, that is, all confer at the same time and through discussions agree on a figure (or a mean and range). This then becomes the "best collective judgment of knowledgeable experts" and is known as the "Delphi Method of Estimation". The county agents would arrive at their county estimates by the above method, or estimating use all by themselves, or something in between. We asked them to describe for us how they arrived at their estimate. Because estimating the amount used for any crop required individuals with experience and knowledge of pesticide use, it was important to identify the individuals participating.

This "questionnaire" was actually a series of "prompts". For each cultivated crop grown we provided the EEIO harvested acre estimate and the list of pesticides registered in Oregon for that crop. We asked that they adjust the acre estimates to 1987. The EEIO acre estimates that we used did not always agree with the agent's estimate, and in these cases we reported the agent's estimate. The county agents were to draw a line through a pesticide if it was not used on that crop, identify the most commonly used rate(s), estimate treatments/year, and the

percent acres treated. They also indicated if a pesticide was used in a seed treatment, a dip, or a bait, and whether it was applied to the foliage (includes all portions of the plant above ground) or to the soil. The 1986 preliminary survey was used as an aid in estimating, and was not considered "probably right".

Most crops were covered in the final survey. This included those grown on cultivated land (alfalfa hay to wheat); arable, non-cultivated land (range and pasture); forestland, urban (home and industrial), rights-of-way (railroads, roadside, power, water, fence line), vector control, noxious weed control, and nurseries.

The 1986 preliminary survey was used as an aid in estimating, and was not considered "probably right"

Agencies involved in pesticide use often keep records. State highway rights-of-way use was obtained from the State Department of Highways. County road departments provided county roadside rights-of-way treatments and noxious weed control. These could not be separated because most of the noxious weed control is along rights-of-way which are points of entry for weed seed. Each vector control district submitted actual 1987 use data. The local offices for the USDA, Forest Service, Bureau of Land Management, state forests, company forests, etc. gave exact figures for their uses in some cases. We should note, however, because of a court order, no federal lands can be sprayed with herbicides. The Oregon Department of Agriculture (ODA) provided the number of gallons of B.T. applied in their gypsy moth program and the Animal Plant Health Inspection Service (APHIS) provided the gallons of malathion used in their grasshopper control program in southeastern Oregon.

Some crops and sites are not recorded specifically in this survey, either because they were grouped under a commodity or because they were not surveyed. The nursery industry, representing over 500 nurseries, was not surveyed by individual ornamental plant except in the case of Easter lilies. The thousands of varieties of plants from azaleas to zinnias are grown in greenhouses, lath houses, and are planted in pots or the open field. Often cultural methods of weed control are used such as black plastic or gravel beds. The data presented represents the industry as a whole and no one single crop.

The EEIO reports acres harvested of the major and minor crops in the state. However some crops which have minute acres are not recorded and as such we have no record. We did not attempt to survey that which we did

not know. Crops in this category might be greens such as kale, mustard, Chinese cabbage and bok choy, or other vegetables such as turnips, celery, and kohlrabi.

Grass seed crops were combined and legumes seed crops were combined. Within the grass seed crops are colonial bentgrass, creeping bentgrass, chewings fescue, tall fescue, red fescue, annual ryegrass, perennial ryegrass, orchardgrass and other miscellaneous grasses. Within the legumes are included crimson clover, red clover, hairy vetch, common vetch, subterranean clover, lotus major clover, white clover, arrowleaf clover and other miscellaneous clovers. We did not include Austrian winter peas in the legume seed but under the category of dry peas because the pesticide use patterns are similar among the peas crops.

We did not distinguish among urban uses. These included use in homes, yards and gardens as well as in industry such as around buildings and in parking lots. Rights-of-ways and vector control were handled separately whenever applications were made in urban areas.

We did not include grass hay. Even though acres grown statewide are very large their pesticide use in practically zero. No dealer or county agent submitted use estimates for dill, apricots, elderberries, gooseberries, lima beans, and turf sod.

Livestock and poultry and their living areas are treated with various insecticides as dips, dusts, aerosol and emulsifiable concentrates. These include but are not limited to the pesticides: fenvalerate, permethrin, pyrethrins, DDVP, crotoxyphos, ronnel, trichlorfon, methoxychlor, fenthion, GX118, toxaphene, malathion, lindane, phosmet, dioxathion, methoprene, and chlorpyrifos. We did not include these in the survey.

Wood preservative such as pentachlorophenol, creosote, ACA, and CCA were not included in the survey.

All final estimate data was entered into a dBase III database (5731 records) and processed with programs specially written for the survey.

Problems in the Survey and Validity of the Use Estimates

In the 1986 preliminary survey, most of the dealers (95%) were contacted personally regarding the questionnaire, so the results are better than if it had only been mailed out. Estimates varied among dealers. For example, in the southern Willamette Valley, the estimated percent of annual grass seed acres receiving 2,4-D (given by five cooperators) was 80%, 80%, 80%, 80%, and 90%. The mean was 82% and the range is 10. These estimates are quite close. However, in the northeastern portion of the Willamette Valley the use of B.T. on broccoli among five dealers was 50%, 20%, 10%, 10%, and 5% for a mean of 19% and a range of 45. Occasionally estimates vary more as where two dealers located only a few miles apart gave estimates for dodine (Cyprex) on apples at 5% and 100%.

Actual differences measured among dealers serving each region at least show how much opinions vary. Much of this survey is an opinion poll whereas records from agencies like the Department of Highways are objective, having accurate records. While we can state how many pounds of pesticides the state highway receive accurately, we must depend upon the dealer's and county agent's best guess for the agricultural crops.

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between two neighboring dealers may differ because the pesticide use was different. Out of a total of 1316 comparisons between dealer pairs (made in 1986), it was found that the average range between any two comparisons was about 22. This could mean 78% to 100% or 1% to 23% or something in between. But it gives an idea of the variability among "experts". It is important to note that when the percentage of acres treated is high the corresponding difference among estimates is much smaller

[the EPA] works on the premise that all pesticides will be used on a specific crop at registered rates at the maximum number of times.

Comparisons were made between dealers which were either adjacent to one another or were at least within five miles. Estimates from 17 pairs of such dealers were made. Normally dealers have a number of growers whom they serve, ones with whom they routinely do business. Growers normally do not shop around for pesticides as one would for a pair of shoes. Growers generally stay with the same dealer year to year. Estimates between two neighboring dealers may differ because the pesticide use was different. Out of a total of 1316 comparisons between dealer pairs (made in 1986), it was found that the average range between any two comparisons was about 22. This could mean 78% to 100% or 1% to 23% or something in between. But it gives an idea of the variability among "experts". It is important to note that when the percentage of acres treated is high the corresponding difference among estimates is much smaller than when the percentage of acres treated is low. For example compare these two sets of estimates: 50% and 100%; 2% and 10%. While the first set has a relatively large range (50), the actual increase is 2-fold. The second set has a relatively small range (8) but has a 5-fold increase in value. The impact will differ upon which end of the range the estimate falls.

Each county agent was responsible for the 1987 estimate in his county and he was given freedom on how he tabulated that data. This was a weakness. Although some counties made extraordinary efforts in col-

lecting data a few did relatively little.

The EPA commonly adds all the pesticide production figures and arrives at an estimate, but that estimate simply reflects manufactured product nation wide and not for Oregon. Totalling sales records for Oregon, which industry can do, only tells what is sold and not what is applied. Moreover, sales information crosses crop categories, that is, one product may be used on 40 or more crops. Furthermore, sales reports do not generally follow political borders such as county or state lines. Surveying pesticides must begin at the local level. The local pesticide dealers and fieldmen have that knowledge. The EPA generally accepts any pesticide use data simply because it is so rare. In most cases they have no data and therefore work on the premise that all pesticides will be used on a specific crop at registered rates at the maximum number of times.

A method in determining the reliability of the pesticide use estimates is to compare them with another similar survey. The only other such survey was our 1986 preliminary survey. In 1981 the OPIAP compared its survey with that of the Economic Research Service and found that the results arrived at by differing methodologies varied from 24% to 69%. This deviation was the percent

Table 1 Comparing the 1981, 1986, and 1987 Surveys

Crop	Pounds Used (active ingredient)		
	1981	1986	1987
Small grains	2,980,000	2,520,000	1,340,000
Forage	330,000	780,000	260,000
Grass and legume seed	700,000	500,000	1,380,000
Field crops	3,900,000	5,500,000	6,960,000
Tree fruits	1,900,000	2,950,000	3,050,000
Small fruits	580,000	560,000	420,000

difference between the means (pounds pesticide used) of major commodities and not individual crops pesticide combinations. In comparing the 1981 survey, the 1986 preliminary survey and the 1987 final survey major differences among commodity groups were small in some cases and large in others. These commodity groups and total pounds pesticide used are listed in table 1.

By comparing the results between the 1981 and 1986 survey, we were better able to recognize both over and under estimated uses. This helped in the final survey.

Estimates may be compared to a nation wide survey completed by Resources For the Future (RFF). RFF has compiled pesticide use surveys for the entire United States in the past by collecting various data from agencies across the county. They have done a remarkable job in collecting and have probably the best numbers available nation wide. Even so they are handicapped by the quality of data they receive. For example, the RFF and PIAP conducted surveys in two different ways. The RFF survey

estimates were made by two extension specialists who gave their best estimates according to their knowledge and experience. The OPIAP survey is described in this report. The OPIAP survey reflects more accurately Oregon herbicide use than the RFF survey because it has a larger base to make the estimates and considers the affect of differences between communities with their respective climates and pests.

The gross herbicide use estimates were fairly close, the OPIAP about 4,650,000 pounds and the RFF about 5,269,000 pounds of herbicides used in Oregon on agricultural land. Although these estimates appear close, individual estimates of pesticide use on each crop vary considerably.

The diversity of Oregon climate and geography made this survey difficult. The OPIAP final survey rarely relied on a small sample to estimate uses in a neighboring county as might be the case in a state where geography and crops are uniformly distributed. Variability among regions in Oregon are severe. The Willamette Valley has a Mediter-

anean climate with an average rainfall of about 40 inches. However rainfall in the coast range, only 20 miles west is sometimes over 100 inches. Much of the cultivated agriculture of eastern Oregon receives less than 10 inches. Land forms also are important. The western Oregon valleys are generally low, less than 500 feet while the plateau in much of eastern Oregon is a mile high. Adding to all this are large mountain ranges crisscrossing the state.

As one might expect, most of the crops are regional, but in spite of this, significant acres of several crops are grown in each area. These include small grains, potatoes, onions, pears, corn, green peas, mint, cherries, and alfalfa. Some of these differences were described in the 1981 survey report.

We chose for our survey to use the local pesticide dealers as the basis for all estimates and enlisted the support of the area county agents. Until mandatory use records on all pesticides become a reality, we know of no other method that is both efficient and accurate as beginning at the grower level.

III RESULTS

OREGON STATEWIDE PESTICIDE USE ESTIMATES

Statewide Survey for 1987
Oregon Pesticide Impact Assessment Program

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
ALFALFA HAY						
435800 Acres				Counties Reporting 29 out of 30 Percent Acres Reported >99%		
Herbicides						
2,4-DB		0.5 - 1.25 lb	1	Foliar	4800 (1%)	3500
Benefin	Balan	1.12 - 1.5 lbs	1	Soil	2900 (1%)	3600
Chlorpropham	Furloc	4.0 - 6.0 lbs	1	Soil	620 (<1%)	2500
Diuron	Karmex	1.6 - 2.4 lbs	1	Soil	6800 (2%)	14000
EPTC	Eptam	2.0 - 4.0 lbs	1	Soil	13000 (3%)	39000
Glyphosate	Roundup	- 0.75 lb	1	Foliar	5600 (1%)	5300
Hexazinone	Velpar	0.5 - 0.75 lbs	1	Foliar	45000 (10%)	30000
MCPA		0.35 - 0.5 lb	1	Foliar	270 (<1%)	190
Metribuzin	Lexone, Sencor	0.375 - 1.0 lb	1	Soil	42000 (10%)	25000
Paraquat	Gramoxone	0.375 - 0.75 lb	1	Foliar	10000 (2%)	5400
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	27000 (6%)	39000
Propham	Chemhoe	3.0 - 6.0 lbs	1	Foliar	410 (<1%)	1500
Sethoxydim	Poast	0.19 - 0.47 lb	1	Foliar	52 (<1%)	13
Simazine	Princep	0.8 - 1.6 lbs	1	Soil	26000 (6%)	31000
Terbacil	Sinbar	0.4 - 1.2 lbs	1	Soil	260 (<1%)	97
Trifluralin	Treflan	-	1	Soil	50 (<1%)	100
Insecticides						
Carbaryl	Sevin	0.75 - 1.5 lbs	1	Foliar	13000 (3%)	9900
Carbofuran	Furadan	0.25 - 1.0 lbs	1	Soil, foliar	16000 (4%)	9200
Chlorpyrifos	Lorsban, Lorsban 4E	0.25 - 1.0 lb	1	Foliar	30000 (7%)	20000
Diazinon		- 1.0 lb	1	Foliar	850 (<1%)	1300
Dimethoate	Cygon	0.33 - 0.5 lb	1	Foliar	5500 (1%)	2300
Malathion		- 1.25 lb	1	Foliar	2600 (1%)	3100
Methidathion	Supracide	0.5 - 1.0 lb	1	Foliar	110 (<1%)	80
Methomyl	Lannate, Nudrin	0.225 - 0.9 lb	1	Foliar	150 (<1%)	110
Methoxychlor	Marlate	0.5 - 2.0 lbs	1	Foliar	140 (<1%)	280
Mevinphos	Phosdrin	0.25 - 0.5 lb	1	Foliar	1500 (<1%)	730
Parathion		- 0.5 lb	1	Foliar	7100 (2%)	3600
Phosmet	Imidan	- 1.0 lb	1	Foliar	11000 (2%)	11000
Vertebrate Poison						
Strychnine		0.025 - 0.04 lb	1	Bait	8500 (2%)	330
Zinc phosphide		0.1 - 0.25 lbs	1	Bait	120 (<1%)	17
ALFALFA SEED CROP						
10170 Acres				Counties Reporting 5 out of 6 Percent Acres Reported >99%		
Dessicant						
Diquat	Diquat	0.38 - 0.75 lb	1	Foliar	6400 (62%)	4700

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
2,4-DB		- 2.0 lbs	1	Foliar	1700 (17%)	1500
Benefin	Balan	1.12 - 1.5 lbs	1	Soil	650 (6%)	780
Chlorpropham	Furloe	4.0 - 6.0 lbs	1	Soil	660 (7%)	2700
Dinoseb		- 2.25 lbs	1	Foliar	180 (2%)	410
EPTC	Eptam	2.0 - 4.0 lbs	1	Soil	660 (6%)	1100
Hexazinone	Velpar	0.625 - 0.75 lb	1	Soil	1300 (13%)	830
Metribuzin	Sencor	0.375 - 1.0 lb	1	Soil	650 (6%)	650
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	210 (2%)	430
Sethoxydim	Poast		1	Foliar	21 (<1%)	8
Simazine	Princep	0.8 - 1.6 lbs	1	Soil	1600 (16%)	1700
Trifluralin	Treflan	0.75 - 1.0 lb	1	Soil	650 (6%)	490
Insecticides						
Carbofuran	Furadan	0.25 - 1.0 lb	1	Foliar	5300 (52%)	5300
Chlorpyrifos	Lorsban 4E	0.5 - 1.0 lb	1	Foliar	950 (9%)	950
Demeton	Systox	0.125 - 0.5 lb	1	Foliar	6000 (59%)	6000
Dimethoate	Cygon	- 0.5 lb	1	Foliar	5300 (52%)	2700
Disulfoton	Disyston	- 1.0 lb	1	Foliar	650 (6%)	650
Endosulfan	Thiodan	- 0.5 lb	1	Foliar	4700 (46%)	2600
Fluvalinate	Spur	0.025 - 0.1 lb	1	Foliar	290 (3%)	3
Methidathion	Supracide 2E	0.5 - 1.0 lb	1	Foliar	950 (9%)	640
Mevinphos	Phosdrin 4EC	0.25 - 1.0 lb	1 - 4	Foliar	2500 (25%)	1300
Naled	Dibrom	- 0.5 lb	1	Foliar	5300 (52%)	2700
Oxydemeton methyl	Metasystox R	0.375 - 1.5 lb	1 - 2	Foliar	4900 (48%)	2500
Propargite	Comite	1.3 - 2.0 lbs	1	Foliar	3400 (33%)	5400
Trichlorfon	Dylox	0.5 - 1.0 lb	1	Foliar	1100 (11%)	1100
Vertebrate Poison						
Strychnine	Orco Gopher Bait	- 4.0 lbs bait	1	Bait	1100 (11%)	22

APPLES
9145 Acres

Counties Reporting 19 out of 22
Percent Acres Reported 98%

Fungicides						
Benomyl	Benlate	0.75 - 1.5 lbs	1	Foliar	890 (10%)	830
Calcium polysulfide	Lime Sulfur		1	Foliar	1100 (12%)	35000
Captan		2.0 - 4.0 lbs	1 - 2	Foliar	620 (7%)	1700
Chlorothalonil	Bravo		1	Foliar	60 (1%)	120
Copper		- 8.0 lbs	1	Foliar	610 (7%)	8000
Dichlone		0.125 - 0.25 lb/gal	1	Foliar	830 (9%)	330
Dinocap	Karathane	- 0.75 lb	1	Foliar	720 (8%)	540
Dodine	Cyprex	- 1.625 lbs	1 - 2	Foliar	19000 (206%)*	32000
Ferbam		1.5 - 6.0 lbs	1 - 3	Foliar	45 (<1%)	270
Maneb	Maneb Flowable 2	3.6 - 4.8 lbs/100 gal	1 - 3	Foliar	470 (5%)	2100
Sodium polysulfide		-	1	Foliar	81 (1%)	1200
Sulfur		- 6.0 lbs	1 - 2	Foliar	1700 (19%)	21000
Triadimefon	Bayleton	- 3.0 oz	1 - 2	Foliar	6000 (66%)	1100
Triforine	Funginex	- 0.5 lb	1	Foliar	250 (3%)	130
Zinc sulfate	Zinc sulfate (36%)	-	1	Foliar	1300 (14%)	5600
Ziram		- 6.0 lbs	1 - 2	Foliar	1900 (21%)	12000

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
2,4-D	Pennamine D	1.0 - 2.0 lbs	1 - 2	Foliar	2400 (26%)	4000
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	310 (3%)	1600
Diuron	Karmex, Diuron 4L, Direx	- 1.2 lbs	1 - 2	Soil	1100 (12%)	1500
Glyphosate	Roundup	- 2.0 lb	1 - 2	Foliar	3400 (37%)	7000
Napropamide	Devrinol	- 4.0 lbs	1	Soil	650 (7%)	2600
Oryzalin	Surflan	- 4.0 lbs	1	Soil	1100 (12%)	4300
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	2400 (26%)	1900
Pronamide	Kerb, Kerb 50W	1.0 - 4.0 lbs	1	Soil	30 (<1%)	65
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	1100 (12%)	3500
Terbacil	Sinbar	- 1.2 lbs	1	Soil	310 (3%)	380

Insecticides						
Azinphos methyl	Guthion, Guthion 50W	0.5 - 1.25 lbs	1 - 2	Foliar	22000 (246%)*	20000
Carbaryl	Sevin	2.0 - 2.5 lbs	1 - 3	Foliar	5500 (60%)	13000
Chlorpyrifos	Lorsban 4E	- 1.5 lbs	1 - 2	Foliar	6400 (69%)	9700
Cyhexatin	Plictran	0.5 - 1.0 lb	1 - 2	Foliar	4000 (44%)	3000
Demeton	Systox	0.5 - 2.0 lbs	1	Foliar	980 (11%)	1200
Diazinon		2.0 - 2.5 lbs	1 - 3	Foliar	1800 (20%)	4200
Dicofol	Kelthane	0.8 - 1.6 lbs	1	Foliar	86 (1%)	140
Dimethoate	Cygon	- 2.0 lbs	1	Foliar	170 (2%)	330
Endosulfan	Thiodan	- 2.0 lbs	1	Foliar	5700 (62%)	11000
Ethion	Ethion	- 6.0 lbs	1	Foliar	220 (2%)	1300
Fenbutatin	Vendex	0.5 - 1.0 lb	1	Foliar	27 (<1%)	20
Formetanate	Carzol	2.0 - 8.0 oz/100 gal	1	Foliar	38 (<1%)	52
Malathion		3.0 - 4.5 lbs	1 - 4	Foliar	75 (1%)	230
Mancozeb	Dithane M45	-	1 - 3	Foliar	32 (<1%)	160
Methidathion	Supracide	- 1.0 lb	1	Foliar	2100 (23%)	2100
Methomyl	Lannate, Nudrin	0.45 - 1.8 lbs	1	Foliar	27 (<1%)	30
Methyl parathion	Penncap M	- 1.0 lb	1	Foliar	40 (<1%)	40
Morestan		0.125 - 0.25 lb	1	Foliar	45 (<1%)	45
Oil	Superior oil, Supreme oil	1.5 - 2.0 gal/100 gal	1	Foliar	8500 (93%)	270000
Oxamyl	Vydate L	- 1.0 lb	1 - 2	Foliar	2500 (27%)	2500
Parathion		1.0 - 1.25 lbs	1	Foliar	3400 (37%)	3900
Phosalone	Zolone	- 3.0 lbs	1 - 3	Foliar	990 (11%)	3000
Phosmet	Imidan	2.0 - 2.5 lbs	1 - 3	Foliar	3700 (41%)	8100
Propargite	Omite	1.8 - 2.25 lbs	1 - 2	Foliar	690 (8%)	1600

Plant Growth Regulator						
DNOC	Elgetol	0.8 - 1.6 lb	1	Foliar	3200 (35%)	3800
Daminozide	Alar	4.0 - 6.0 lbs	1	Foliar	640 (7%)	3100
Ethephon	Ethrel	- 1.25 lbs	1	Foliar	170 (2%)	210
NAA	NAA-200	0.45 - 1.2 oz	1	Foliar	4000 (44%)	600

Vertebrate Poison						
Strychnine		0.025 - 0.04 lb	1	Bait	31 (<1%)	1
Zinc phosphide		0.1 - 0.25 lb	1	Bait	29 (<1%)	5

ASPARAGUS
3120 Acres

Counties Reporting 2 out of 2
Percent Acres Reported 100%

Herbicides						
Chloramben	Amiben G	- 3.0 lbs	1	Soil	830 (27%)	2500
Dalapon	Dowpon M	- 14.8 lbs	1	Soil	300 (10%)	4400
Diuron	Karmex	0.8 - 3.2 lbs	1 - 2	Soil	1600 (51%)	2700
Glyphosate	Roundup	- 2% solution	1	Foliar	300 (10%)	60
Metribuzin	Lexone, Sencor	1.0 - 2.0 lbs	1 - 2	Soil	2700 (86%)	3900
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	200 (6%)	150

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Azinphos methyl	Guthion	0.25 - 0.75 lb	1	Foliar	340 (11%)	85
Disulfoton	Disyston	- 1.0 lb	1 - 2	Soil, foliar	4800 (154%)*	4800

BARLEY
248550 Acres

Counties Reporting 30 out of 30
Percent Acres Reported 100%

Fumigant						
Methyl bromide		- 1.0 lb/100 sq.ft.	1	Soil	60 (<1%)	26000

Fungicides						
Captan	Captan 400	- 0.75 oz/100 lbs	1	Seed		460
PCNB	Terrachlor, Terra-coat	0.5 - 1.0 lb	1	Seed		9000
Thiabendazole	Mertect 340-F	0.25 - 0.7 lb	1	Foliar	2100 (1%)	640
Thiram	Vitavax 200	0.035 - 0.05 lb/100 lbs	1	Seed		8500
Triadimefon	Bayleton	2.0 - 4.0 oz	1	Foliar	3100 (1%)	840

Herbicides						
2,4-D		0.5 - 1.0 lb	1	Foliar	100000 (41%)	75000
Assert	Assert	- 0.75 lb	1	Soil		24
Bromoxynil	Buctril, Bronate	0.25 - 0.375 lb	1	Soil	20000 (8%)	4500
Chlorsulfuron	Glean	0.1875 - 0.25 oz	1	Soil	17000 (7%)	480
Dicamba	Banvel	1.0 - 3.0 oz	1	Soil	59000 (24%)	6000
Diclofop	Hoelon	0.75 - 1.25 lbs	1	Soil, foliar	9800 (4%)	8700
Difenzoquat	Avenge	0.63 - 1.0 lb	1	Soil	1200 (<1%)	980
Diuron	Karmex	- 1.6 lbs	1	Soil	6000 (2%)	9500
Glyphosate	Roundup, Landmaster	0.28 - 0.33 lbs	1	Foliar	9500 (4%)	4200
MCPA	Bronate, MCPA	0.5 - 1.0	1	Foliar	33000 (13%)	22000
Metribuzin	Lexone, Sencor	0.25 - 0.5 lb	1	Soil	4200 (2%)	1400
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	220 (<1%)	140
Picloram	Tordon	0.125 - 0.25 lb	1	Soil	130 (<1%)	32
Simazine	Princep	- 1.0 lb	1	Soil		50
Triallate	Fargo	1.2 - 1.6 lbs	1	Foliar	640 (<1%)	800
Trifluralin	Treflan	- 0.75 lb	1	Soil	100 (<1%)	75

Insecticides						
Carboxin	Vitavax, Vitavax 200	1.5 - 2.25 oz/100 lbs	1	Seed		14000
Dimethoate	Cygon	- 0.375 lb	1	Foliar	2800 (1%)	1000
Disulfoton	Disyston	0.25 - 1.0 lb	1	Soil	6900 (3%)	5400
Lindane	Lindane 30C, Lindane 75%	- 0.02 lb	1	Seed		1700
Malathion		1.0 - 1.25 lbs	1	Foliar	360 (<1%)	330
Metalaxyl	Apron	- 1.2 oz	1	Seed		3
Parathion		4.0 - 6.0 oz	1	Foliar	5200 (2%)	1600

Plant Growth Regulator						
Ethephon	Cerone	0.25 - 0.5 lb	1	Foliar	350 (<1%)	70

BLACKBERRIES
5880 Acres

Counties Reporting 11 out of 12
Percent Acres Reported >99%

Fungicides						
Benomyl	Benlate	0.375 - 0.5 lb	1	Foliar	3400 (58%)	1600
Calcium polysulfide	Lime Sulf-r	- 12 lbs/100 gal	1	Foliar	4400 (75%)	180000
Copper		1.5 - 3.0 lbs	1 - 2	Foliar	4200 (72%)	17000
DCNA	Botran	- 1.0 lb/100 gal	1	Foliar	25 (<1%)	88
Metalaxyl	Ridomil	- 2.0 lbs	1	Soil, foliar	7 (<1%)	13
Sulfur		0.75 - 1.5 lbs	1 - 2	Foliar	220 (4%)	1800

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
Dichlobenil	Casoron	- 4.0 lbs	1	Soil	490 (8%)	1900
Dinoseb		1.25 - 2.5 lbs	1 - 2	Foliar	5000 (84%)	11000
Diphenamid	Enide	- 6.0 lbs	1	Soil	330 (6%)	1700
Diuron	Karmex	1.6 - 3.2 lbs	1	Soil	2900 (49%)	8300
Napropamide	Devrinol	- 4.0 lbs	1	Soil	760 (13%)	3000
Oryzalin	Surflan	2.0 - 4.0 lbs	1	Soil	31 (1%)	93
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	40 (1%)	30
Pronamide	Kerb	0.5 - 3.0 lbs	1	Soil	19 (<1%)	34
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	25 (<1%)	76
Terbacil	Sinbar	0.8 - 1.6 lbs	1	Soil	170 (3%)	170

Insecticides						
Azinphos methyl	Guthion	0.25 - 0.5 lb	1	Foliar	2400 (41%)	1200
B.T.	Dipel, Javelin	0.67 - 1.0 lb	1	Foliar	1900 (32%)	34
Carbaryl	Sevin	- 2.0 lbs	1	Soil, foliar	2400 (40%)	4700
Cyhexatin	Plictran	- 1.0 lb	1	Foliar	53 (1%)	53
Diazinon		- 1.0 lb	1	Foliar	2300 (40%)	2900
Malathion		1.75 - 2.0 lbs	1	Foliar	2200 (37%)	4400
Oil			1	Foliar	3400 (57%)	90000

BLUEBERRIES

1681 Acres

Counties Reporting 12 out of 16
Percent Acres Reported 97%

Fungicides						
Benomyl	Benlate	- 0.375 lb	1	Foliar	180 (11%)	91
Calcium polysulfide	Lime Sulfur	- 12 lb/100 gal	1	Foliar	20 (1%)	600
Captan		1.0 - 2.0 lbs	1	Foliar	460 (27%)	580
Copper		1.5 - 3.0 lbs	1 - 2	Foliar	1100 (64%)	4500
Triforine	Funginex	- 0.3 lb	1 - 3	Foliar	900 (53%)	940
Vinclozolin	Ronilan	1.5 - 2.0 lbs	1	Foliar	15 (1%)	30

Herbicides						
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	110 (7%)	510
Diuron	Karmex	1.6 - 2.4 lbs	1	Soil	270 (16%)	540
Glyphosate	Roundup	- 2% solution	1	Foliar	100 (6%)	100
Napropamide	Devrinol	- 4.0 lbs	1	Soil	26 (2%)	100
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	82 (5%)	61
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	30 (2%)	45
Simazine	Princep	1.0 - 1.6 lbs	1	Soil	330 (19%)	870
Terbacil	Sinbar	0.8 - 1.6 lbs	1	Soil	80 (5%)	64

Insecticides						
Azinphos methyl	Guthion	0.5 - 1.0 lb	1	Foliar	150 (9%)	110
Carbaryl	Sevin	- 1.5 lbs	1	Foliar	170 (10%)	240
Carbofuran	Furadan	- 2.0 lbs	1	Soil	23 (1%)	46
Diazinon		- 1.0 lb	1	Foliar	89 (5%)	110
Malathion		1.5 - 2.0 lbs	1	Foliar	66 (4%)	130
Methiocarb	Mesuroil	0.375 - 0.75 lb	1	Soil	460 (27%)	670
Methomyl	Lannate, Nudrin	0.45 - 0.9 lb	1	Foliar	110 (7%)	77
Oil			1	Foliar	82 (5%)	2000

BROCCOLI

2915 Acres

Counties Reporting 9 out of 9
Percent Acres Reported 100%

Fungicides						
Chlorothalonil	Bravo	1.2 - 1.4 lbs	1 - 2	Foliar	1400 (48%)	1700
Copper		0.375 - 1.5 lbs	1	Foliar	160 (5%)	160
Metalaxyl	Ridomil	0.5 - 1.0 lb	1 - 2	Foliar	830 (29%)	210

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
Bensulide	Betasan	-	1	Soil	160 (5%)	800
DCPA	Dacthal	-	1	Soil	41 (1%)	370
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar	400 (14%)	410
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	39 (1%)	78
Napropamide	Devrinol	1.0 - 2.0 lbs	1	Soil	44 (2%)	120
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	21 (1%)	21
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	2500 (85%)	2000
Insecticides						
Azinphos methyl	Guthion	0.5 - 0.75 lb	1	Foliar	53 (2%)	40
B.T.	Dipel, Javelin	0.25 - 2.0 lbs	1	Foliar	260 (9%)	3
Carbaryl	Sevin	- 1.0 lbs	1	Foliar	2200 (74%)	2600
Carbofuran	Furadan	0.5 - 1.0 lb	1	Foliar	390 (13%)	200
Chlorpyrifos	Lorsban	0.04 - 0.09 lb/1000 ft	1	Soil	22 (1%)	2
Dimethoate	Cygon	-	1 - 2	Foliar	160 (5%)	80
Disulfoton	Disyston	- 1.0 lb	1	Soil	1200 (42%)	1200
Endosulfan	Thiodan	0.75 - 1.5 lbs	1	Foliar	420 (14%)	420
Fenvalerate	Pydrin	0.1 - 0.2 lb	1 - 2	Foliar	990 (34%)	170
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	1800 (62%)	3600
Metaldehyde		1.2 - 2.4 lbs	1	Bait	11 (<1%)	210
Methamidophos	Monitor	0.5 - 1.0 lb	1	Foliar	650 (22%)	500
Methomyl	Lannate, Nudrin	0.45 - 0.9 lb	1	Foliar	390 (13%)	290
Mevinphos	Phosdrin	0.25 - 0.5 lb	1	Foliar	1600 (56%)	1000
Oxydemeton methyl	Metasystox R	0.375 - 0.5 lb	1 - 2	Foliar	1900 (66%)	1700
Permethrin	Ambush, Pounce	0.05 - 0.1 lb	1 - 2	Foliar	2000 (68%)	200

CABBAGE

925 Acres

Counties Reporting 2 out of 3
Percent Acres Reported 90%

Fungicides						
Benomyl	Benlate	- 1.0 lb	1	Foliar	55 (6%)	41
Chlorothalonil	Bravo	1.2 - 1.4 lbs	1	Foliar	170 (18%)	240
Metalaxyl	Ridomil	0.5 - 1.0 lb	1	Foliar	170 (18%)	170
PCNB	Terrachlor	- 40 lbs	1	Soil	22 (2%)	890
Herbicides						
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar	56 (6%)	170
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	85 (9%)	85
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	510 (55%)	320
Insecticides						
Azinphos methyl	Guthion	0.5 - 1.0 lb	1	Foliar	280 (30%)	210
B.T.	Dipel, Javelin	0.25 - 2.0 lbs	1	Foliar	160 (18%)	3
Chlorpyrifos	Lorsban	0.04 - 0.09 lb/1000 ft	1	Soil	9 (1%)	6
Disulfoton	Disyston	- 1.0 lb	1	Soil	56 (6%)	56
Endosulfan	Thiodan	0.75 - 1.0 lb	1	Foliar	340 (37%)	340
Fenvalerate	Pydrin	0.1 - 0.2 lb	1	Foliar	150 (16%)	22
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	840 (91%)	1700
Methomyl	Lannate	0.45 - 0.9 lb	1	Foliar	75 (8%)	51
Mevinphos	Phosdrin	- 0.25 lb	1	Foliar	160 (18%)	41
Oxydemeton methyl	Metasystox R	0.375 - 0.75 lb	1	Foliar	310 (34%)	140
Permethrin	Ambush, Pounce	0.05 - 0.1 lb	1	Foliar	27 (3%)	2

CARROT SEED CROP

50 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Herbicides						
Linuron		0.75 - 1.5 lbs	1	Soil	5 (10%)	5
Trifluralin	Treflan	0.5 - 1.0 lb	1	Soil	45 (90%)	34

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Dimethoate	Cygon	- 0.25 lb	1	Foliar	5 (10%)	2

CARROTS

1335 Acres

Counties Reporting 6 out of 9
Percent Acres Reported 73%

Fumigant						
Dichloropropene	Telone II		1	Soil	38 (3%)	11000

Fungicides						
Copper	-		1	Foliar	40 (3%)	48
Mancozeb	-		1	Foliar	20 (1%)	24
Maneb	-		1	Foliar	20 (1%)	28

Herbicides						
Fluazifop	Fusilade	0.25 - 0.375 lb	1	Foliar	4 (<1%)	2
Linuron	Lorox	0.75 - 1.5 lbs	1	Soil	980 (73%)	1100
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	25 (2%)	25
Trifluralin	Treflan	0.5 - 1.0 lb	1	Soil	570 (42%)	430

Insecticides						
Diazinon		0.5 - 2.0 lbs	1	Foliar	540 (40%)	1100
Mevinphos	Phosdrin	0.25 - 1.0 lb	1	Foliar	170 (13%)	85
Oxamyl	Vydate	2.0 - 8.0 lbs	1	Soil	22 (2%)	150
Parathion		- 0.5 lb	1	Foliar	19 (1%)	19

CAULIFLOWER

3600 Acres

Counties Reporting 7 out of 8
Percent Acres Reported >99%

Fungicides						
Chlorothalonil	Bravo	1.2 - 1.4 lbs	1	Foliar	860 (24%)	1300
Copper		0.375 - 1.5 lbs	1	Foliar	85 (2%)	85
Maneb		- 1.2 lbs	1	Foliar	760 (21%)	790
Metalaxyl	Ridomil	0.5 - 1.0 lb	1	Foliar	130 (4%)	130
PCNB	Terrachlor	- 40 lbs	1	Soil	130 (4%)	5300

Herbicides						
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar	26 (1%)	79
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	18 (1%)	18
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	2400 (67%)	1800

Insecticides						
Azinphos methyl	Guthion	0.5 - 0.75 lb	1	Foliar	190 (5%)	160
B.T.	Dipel, Javelin	0.25 - 1.0 lb	1	Foliar	180 (5%)	3
Carbaryl	Sevin	- 1.0 lb	1	Foliar	2300 (65%)	2300
Chlorpyrifos	Lorsban	0.04 - 0.09 lb/1000 ft	1	Soil	33 (1%)	3
Disulfoton	Disyston	- 1.0 lb	1	Soil	1700 (48%)	1700
Endosulfan	Thiodan	0.75 - 1.0 lb	1	Foliar	110 (3%)	110
Fenvalerate	Pydrin	0.1 - 0.2 lb	1 - 2	Foliar	780 (22%)	210
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	500 (14%)	990
Metaldehyde		1.2 - 2.4 lbs	1	Bait	53 (1%)	1100
Methamidophos	Monitor	0.5 - 1.0 lb	1	Foliar	840 (23%)	630
Methomyl	Lannate, Nudrin	0.45 - 0.9 lb	1	Foliar	670 (19%)	490
Mevinphos	Phosdrin	- 0.25 lb	1	Foliar	2000 (57%)	940
Oxydemeton methyl	Metasystox R	0.375 - 0.5 lb	1	Foliar	2300 (65%)	1200
Parathion		- 0.5 lb	1	Foliar	28 (1%)	14
Permethrin	Ambush, Pounce	0.05 - 0.1 lb	1	Foliar	2200 (62%)	220

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
CHEMICAL FALLOW						Counties Reporting 5
Herbicides						
2,4-D	Landmaster, 2,4-D, Cur...	- 0.6 lb	1	Foliar		730
Chlorsulfuron	Glean	0.016 - 0.023 lb	1	Soil		4
Dicamba	Banvel	0.25 - 0.5 lb	1	Soil		2
Diclofop	Hoelon	0.75 - 1.25 lbs	1	Soil, foliar		690
Glyphosate	Landmaster, Roundup	0.5 - 12.0 lbs	1	Foliar		7
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar		24
Picloram	Tordon, Tordon 22K	0.25 - 0.75 lbs	1	Soil		2
Pronamide	Kerb	0.25 - 0.38 lb	1	Soil		30
Propham	Chemhoe	3.0 - 4.0 lbs	1	Soil		

CHERRIES
13815 Acres

Counties Reporting 13 out of 17
Percent Acres Reported 99%

Fungicides						
Benomyl	Benlate	0.75 - 1.0 lb	1	Foliar	3300 (24%)	11
Calcium polysulfide	Lime Sulfur	- 18 lbs/100 gal	1	Foliar	1900 (14%)	690
Captan		- 3.0 lbs	1 - 5	Foliar	3900 (28%)	160
Chlorothalonil	Bravo	2.3 - 4.2 lbs	1 - 2	Foliar	4000 (29%)	120
Copper	Kocide 101	5.0 - 6.0 lbs	1 - 2	Foliar	8900 (64%)	1200
Dichlone	Kolo 100	- 0.4 lb	1 - 4	Foliar	400 (3%)	
Dodine	Cyprex	- 1.625 lbs	1 - 4	Foliar	2400 (17%)	3
Iprodione	Rovral	0.5 - 1.0 lb	1 - 2	Foliar	2000 (14%)	2
Sodium polysulfide		-	1	Foliar	42 (<1%)	
Sulfur	Kolo 100	- 6.0 lbs	1 - 2	Foliar	18000 (127%)*	1800
Thiophanate	Topsin M	0.8 - 1.0 lb	1	Foliar	10 (<1%)	
Triforine	Funginex	- 0.6 lb	1	Foliar	1800 (13%)	1
Zinc sulfate	Zinc sulfate (36%)	-	1	Foliar	180 (1%)	

Herbicides						
2,4-D	Pennamine D	1.0 - 2.0 lbs	1	Foliar	3400 (25%)	5
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	2100 (15%)	11
Diuron	Karmex, Direx	-	1	Soil	110 (1%)	
Glyphosate	Roundup	- 2.0 lbs	1	Foliar	1100 (8%)	2
Napropamide	Devrinol	- 4.0 lbs	1	Soil	1500 (11%)	5
Norflurazon	Solicam	2.0 - 4.0 lbs	1	Soil	25 (<1%)	
Oryzalin	Surflan	- 4.0 lbs	1	Soil	3000 (22%)	12
Oxyfluorfen	Goal	- 1.0 lb	1	Soil	1800 (13%)	1
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	3000 (22%)	2
Pronamide	Kerb	1.0 - 4.0 lbs	1	Soil	5 (<1%)	
Simazine	Princep	2.0 - 4.0 lbs	1	Soil	3100 (22%)	9

Insecticides						
Azinphos methyl	Guthion	0.75 - 1.5 lbs	1	Foliar	200 (1%)	
Carbaryl	Sevin	4.0 - 8.0 lbs	1	Foliar	1800 (13%)	
Chlorpyrifos	Lorsban	0.75 - 1.5 lbs	1	Foliar	140 (1%)	
Diazinon		2.0 - 2.5 lbs	1 - 2	Foliar	3900 (28%)	9
Dimethoate	Cygon, Cygon 2.67 EC	1.25 - 2.0 lbs	1	Foliar	3600 (26%)	4
Endosulfan	Thiodan	2.0 - 2.5 lbs	1	Foliar	1800 (13%)	
Lindane	Lindane 20EC	- 0.75 lb	1	Foliar	550 (4%)	
Malathion	Malathion ULV	- 1.0 lb	1 - 3	Foliar	29000 (208%)*	21
Methidathion	Supracide	1.0 - 2.0 lbs	1	Foliar	1500 (11%)	
Methiocarb	Mesuroil	0.375 - 0.75 lb	1 - 3	Foliar	2300 (17%)	
Methoxychlor	Marlate	- 4.0 lbs	1	Foliar	35 (<1%)	
Oil	Superior oil, Supreme oil	-	1	Foliar	7900 (57%)	250
Parathion		1.0 - 1.25 lbs	1 - 3	Foliar	6700 (49%)	
Phosalone	Zolone	-	1 - 2	Foliar	23 (<1%)	
Phosmet	Imidan	- 2.0 lbs	1 - 2	Foliar	40 (<1%)	
Rotenone		- 4.0 lbs	1 - 2	Foliar	30 (<1%)	

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Plant Growth Regulator						
Ethephon	Ethrel	- 0.625 lb	1	Foliar	1300 (9%)	790
Gibberellic acid	Pro-Gibb 4%		1	Foliar	1100 (8%)	76

Vertebrate Poison						
Strychnine		0.025 - 0.04 lbs	1	Bait	280 (2%)	9
Zinc phosphide		0.1 - 0.25 lb	1	Bait	290 (2%)	45

CHRISTMAS TREES
18970 Acres

Counties Reporting 10 out of 17

Fungicides						
Chlorothalonil	Bravo	1.0 - 4.0 lbs	1	Foliar	7500 (39%)	14000

Herbicides						
2,4-D	Esteron	- 2.0 lbs	1	Foliar	1000 (5%)	1300
Atrazine	AAtrax	2.0 - 4.0 lbs	1	Soil	5200 (28%)	38000
Dalapon	Dowpon	3.0 - 11.0 lbs	1	Soil	78 (<1%)	370
Glyphosate	Roundup	1.0 - 2.0 lbs	1	Foliar	1800 (9%)	10000
Hexazinone	Velpar	1.0 - 2.0 lbs	1	Soil	4700 (25%)	14000
Oxyfluorfen	Goal	1.0 - 2.0 lbs	1	Soil	20 (<1%)	100
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	420 (2%)	820
Sethoxydim	Poast	0.3 - 0.5 lb	1	Foliar	63 (<1%)	190
Simazine	Princep	2.0 - 4.0 lbs	1	Soil	200 (1%)	7200
Triclopyr	Garlon	- 3.0 lbs	1	Foliar	100 (1%)	52

Insecticides						
Acephate	Orthene	- 1.0 lbs	1 - 3	Foliar	200 (1%)	4500
Carbaryl	Sevin	- 1.0 lb/100 gal	1	Foliar	450 (2%)	450
Diazinon		- 0.5 lb/100 gal	1	Foliar	240 (1%)	140
Dicofol	Kelthane	- 0.9 lb	1	Foliar		990
Endosulfan	Thiodan	- 2.0 lbs	1	Foliar	1300 (7%)	6300
Malathion		-	1	Foliar	210 (1%)	110
Oxydemeton methyl	Metasystox R	0.25 - 3.0 lbs	1	Foliar		300
Propargite	Omite	-	1	Foliar	170 (1%)	500

CLOVER & VETCH SEED CROP
51850 Acres

Counties Reporting 12 out of 12
Percent Acres Reported 100%

Herbicides						
2,4-DB		0.75 - 1.5 lb	1	Foliar	1100 (2%)	790
Benefin	Balan	0.75 - 1.5 lbs	1	Soil	750 (1%)	900
Dinoseb		1.125 - 3.0 lbs	1	Soil	200 (<1%)	200
Diquat	Diquat	0.5 - 0.75 lb	1	Foliar	2700 (5%)	3900
Diuron	Karmex	- 1.6 lbs	1	Soil	9600 (18%)	15000
EPTC	Eptam	2.0 - 3.0 lbs	1	Soil	1400 (3%)	3700
MCPA		- 0.25 lb	1	Foliar	5000 (10%)	1400
Pronamide	Kerb	0.75 - 2.0 lbs	1	Soil	5700 (11%)	6400
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	750 (1%)	560

Insecticides						
Chlorpyrifos	Lorsban	0.25 - 1.0 lb	1	Soil, foliar	550 (1%)	550
Demeton	Systox	0.375 - 0.5 lb	1 - 2	Foliar	1900 (4%)	2600
Dicofol	Kelthane	0.6 - 1.5 lbs	1	Foliar	100 (<1%)	100
Malathion		1.0 - 1.5 lbs	1	Foliar	3600 (7%)	3800
Metaldehyde		1.2 - 2.4 lbs	1	Bait	3000 (6%)	7000
Methoxychlor	Marlate	2.0 - 3.0 lbs	1	Foliar	4800 (9%)	7100
Oxydemeton methyl	Metasystox R	0.375 - 0.5 lb	1	Foliar	5600 (11%)	2800
Propargite	Comite	1.3 - 1.6 lbs	1	Foliar	300 (1%)	490

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Poun Us
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CONSERVATION RESERVE PROGRAM

Counties Reporting 3

		Herbicides				
2,4-D	Landmaster, Weedmaster...	- 1.0 lb	1	Foliar		260
Dicamba	Weedmaster, Banvel	0.1 - 0.75 lb	1	Soil		22
Glyphosate	Landmaster, Roundup		1	Foliar		320
MCPA		- 1.0 lbs	1	Foliar		10

CRANBERRIES

1255 Acres

Counties Reporting 3 out of 3
Percent Acres Reported 100%

		Fungicides				
Chlorothalonil	Bravo	3.1 - 5.2 lbs	1	Foliar	760 (60%)	23
Maneb		- 1.6 lbs	1	Foliar	760 (60%)	31

		Herbicides				
2,4-D		2.0 - 4.0 lbs	1	Foliar	1000 (80%)	20
Dichlobenil	Casoron	- 4.0 lbs	1	Soil	500 (40%)	20
Glyphosate	Roundup	- 20% solution	1	Wick	380 (31%)	7
Napropamide	Devrinol	- 4.0 lbs	1	Soil	760 (60%)	45
Simazine	Princep	- 2.0 lbs	1	Soil	760 (60%)	15

		Insecticides				
Malathion		- 1.5 lbs	1	Foliar	1000 (80%)	10
Parathion		- 0.75 lb	1	Foliar	740 (59%)	5

CUCUMBERS

1955 Acres

Counties Reporting 5 out of 8
Percent Acres Reported 80%

		Fungicides				
Benomyl	Benlate	0.125 - 0.25 lb	1	Foliar	9 (<1%)	
Captan		- 1.5 lbs	1	Foliar	9 (<1%)	
Copper		1.125 - 1.5 lbs	1	Foliar	13 (1%)	
Metalaxyl	Ridomil	1.5 - 1.0 lb	1	Foliar	32 (2%)	

		Herbicides				
Bensulide	Prefar	5.0 - 6.0 lbs	1	Soil	84 (4%)	42
Chloramben	Amiben	1.5 - 4.5 lbs	1	Soil	290 (15%)	90
Dinoseb		3.0 - 4.0 lbs	1	Soil	72 (4%)	25
Naptalam		3.0 - 4.0 lbs	1	Soil	84 (4%)	25
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	34 (2%)	3

		Insecticides				
Carbaryl	Sevin	- 1.0 lbs	1	Foliar	140 (7%)	27
Carbofuran	Furadan	- 0.75 lb	1	Foliar	140 (7%)	27
Diazinon		0.5 - 0.75 lb	1	Foliar	130 (7%)	13
Mevinphos	Phosdrin	0.125 - 0.25 lb	1	Foliar	18 (1%)	
Parathion		- 0.5 lb	1	Foliar	18 (1%)	

CURRENTS

10 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

		Fungicides				
Benomyl	Benlate	0.5 - 1.0 lb	1	Foliar		8
Calcium polysulfide	Lime Sulfur	6.0 - 15 lbs	1	Foliar		600

		Insecticides				
Methoxychlor	Marlate	2.0 - 3.0 lbs	1	Foliar		10

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
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DRY BEANS

11620 Acres

Counties Reporting 3 out of 5
Percent Acres Reported 90%

Herbicides						
Bentazon	Basagran	0.75 - 1.0 lb	1	Soil	1000 (9%)	1000
EPTC	Eptam	3.0 - 4.0 lbs	1	Soil	3200 (28%)	10000
Oryzalin	Surflan	0.5 - 1.25 lbs	1	Soil	1000 (9%)	500
Pendimethalin	Prowl	0.75 - 1.25 lbs	1	Soil	1600 (13%)	1600
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	2200 (19%)	1400

Insecticides						
Dimethoate	Cygon	- 0.5 lb	1	Foliar	1800 (15%)	780

DRY ONIONS

14080 Acres

Counties Reporting 7 out of 9
Percent Acres Reported >99%

Fumigant						
Dichloropropene	Telone II	- 186 lbs	1	Soil	3000 (21%)	560000

Fungicides						
Chlorothalonil	Bravo	1.0 - 2.0 lbs	1 - 2	Foliar	5000 (36%)	6900
Copper		- 1.5 lbs	1	Foliar	140 (1%)	260
Mancozeb	Dithane M45, Manzate 200	1.6 - 2.4 lbs	1	Foliar	6000 (43%)	12000
Maneb		1.2 - 1.6 lbs	1 - 2	Foliar	6500 (46%)	9400
Metalaxyl	Ridomil	- 1.0 lb	1 - 2	Foliar	1700 (12%)	1100
Sulfur		0.75 - 1.5 lbs	1	Foliar	420 (3%)	470
Zineb		1.125 - 1.5 lbs	1	Foliar	55 (<1%)	11

Herbicides						
Bensulide	Prefar	5.0 - 6.0 lbs	1	Soil	5100 (36%)	28000
Bromoxynil	Buctril	0.25 - 0.375 lb	1	Soil	2000 (14%)	640
DCPA	Dacthal	6.0 - 9.0 lbs	1	Soil	6300 (45%)	48000
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	200 (1%)	600
Oxyfluorfen	Goal	0.5 - 1.5 lbs	1 - 2	Soil	9300 (66%)	6900
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	2800 (20%)	2100
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	8000 (57%)	5000

Insecticides						
Azinphos methyl	Guthion	1.5 - 2.0 lbs	1	Foliar	4600 (33%)	8100
Carbofuran	Furadan	0.5 - 1.0 lb	1	Soil	260 (2%)	26
Chlorpyrifos	Lorsban	- 0.034 lb/1000 ft	1	Soil	2300 (16%)	1200
Diazinon		- 0.5 lb	1 - 2	Soil, foliar	4600 (33%)	2300
Ethion	Ethion	0.8 - 2.0 lbs	1	Foliar	8000 (56%)	11000
Fonofos	Dyfonate	- 1.0 lb	1 - 2	Soil	3300 (23%)	3300
Malathion		1.5 - 2.0 lbs	1	Foliar	2900 (21%)	5000
Methyl parathion		- 0.75 lb	1	Foliar	9500 (67%)	7200
Mevinphos	Phosdrin	- 0.5 lb	1	Foliar	840 (6%)	420
Parathion		0.5 - 0.83 lb	1	Foliar	7400 (53%)	4900

Plant Growth Regulator						
Maleic hydrazide		- 2.0 lbs	1	Foliar	2800 (20%)	7100

DRY PEAS

12222 Acres

Counties Reporting 10 out of 11
Percent Acres Reported 99%

Fungicides						
Captan	Captan (11.8% dust)	- 0.029 lb/100 lbs	1	Seed		150
Metalaxyl	Apron	0.5 - 1.0 lb	1	Seed		32

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pound Use
Herbicides						
Barban	Carbyne	- 0.38 lbs	1	Soil	21 (<1%)	
Diclofop	Hoelon	0.75 - 1.0 lb	1	Soil, foliar	5 (<1%)	
Dinoseb		3.0 - 4.0 lbs	1	Soil	1300 (11%)	280
Ethalfuralin	Sonalan	0.75 - 0.94 lb	1	Soil	700 (6%)	53
Glyphosate	Roundup	1.0 - 1.5 lbs	1	Foliar	150 (1%)	5
MCPA		0.125 - 0.25 lb	1	Foliar	400 (3%)	8
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	250 (2%)	50
Triallate	Fargo	- 1.25 lbs	1	Soil	410 (3%)	51
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	5200 (43%)	280

Insecticides						
Carbaryl	Sevin	1.0 - 1.5 lbs	1	Foliar	210 (2%)	220
Diazinon		- 0.5 lb	1	Foliar	40 (<1%)	20
Dimethoate	Cygon	- 0.167 lb	1	Foliar		25
Disulfoton	Disyston	1.0 - 2.5 lbs	1	Foliar	250 (2%)	380
Malathion		1.0 - 2.5 lbs	1	Foliar	280 (2%)	280
Methoxychlor	Marlate	1.0 - 3.0 lbs	1	Foliar	280 (2%)	560
Parathion		- 0.5 lb	1	Foliar	650 (5%)	620
Phosmet	Imidan	- 1.0 lb	1	Foliar	1200 (10%)	650

EASTER LILIES

125 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Fumigant						
Dichloropropene	Telone II	300 - 400 lbs	1	Soil	63 (50%)	22000

Fungicides						
Benomyl	Benlate	- 6.0 lbs	1	Dip	120 (96%)	690
Copper	Bordeaux	- 10 lbs	1 - 20	Foliar	1100 (880%)*	11000
Ferbam			1	Dip	130 (104%)	940
PCNB	Terrachlor		1	Dip	130 (104%)	940

Herbicides						
Diuron	Karmex	- 2.5 lbs	1	Soil	130 (104%)	310
Glyphosate	Roundup	- 2% Spot solution	1	Foliar	20 (16%)	10
Paraquat	Gramoxone	0.75 - 1.0 lb	1	Foliar	60 (48%)	60

Insecticides						
Acephate	Orthene	- 0.5 lb	1	Foliar	130 (104%)	63
Carbofuran	Furadan	1.0 - 5.0 lbs	1 - 2	Soil	130 (104%)*	380
Fenamiphos	Nemacur	- 7.0 lbs	1	Soil	130 (104%)	880

FILBERTS

25060 Acres

Counties Reporting 9 out of 10
Percent Acres Reported 100%

Fungicides						
Copper		9.0 - 14.0 lbs	1	Foliar	8200 (33%)	110000

Herbicides						
2,4-D	Envy	1.0 - 2.0 lb	1 - 3	Foliar	35000 (138%)*	63000
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	260 (1%)	1000
Diuron	Karmex	1.6 - 3.2 lbs	1	Soil	1100 (4%)	2200
Glyphosate	Roundup	- 2% solution	1 - 2	Foliar	22000 (88%)	15000
Napropamide	Devrinol	- 4.0 lbs	1	Soil	850 (3%)	3900
Oryzalin	Surflan	2.0 - 4.0 lbs	1	Soil		60
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	11000 (43%)	10000
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	4700 (19%)	12000

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Azinphos methyl	Guthion	1.0 - 2.0 lbs	1 - 2	Foliar	15000 (62%)	23000
B.T.	Dipel, Javelin	-	1 - 2	Foliar	27 (<1%)	1
Carbaryl	Sevin	- 8.0 lbs	1 - 2	Foliar	14000 (55%)	44000
Carbofuran	Furadan	- 2.0 lbs	1	Foliar	55 (<1%)	110
Chlorpyrifos	Lorsban	3.0 - 4.0 lbs	1	Foliar	9500 (38%)	20000
Diazinon		2.0 - 4.0 lbs	1 - 3	Foliar	11000 (43%)	19000
Endosulfan	Thiodan	- 3.0 lbs	1	Foliar	8000 (32%)	13000
Fenvalerate	Pydrin	0.66 - 1.33 lbs	1 - 2	Foliar	9100 (36%)	3000
Oil		-	1	Foliar	110 (<1%)	2600
Oxydemeton methyl	Metasystox R	- 0.5 lb	1	Foliar	110 (<1%)	55
Phosalone	Zolone	4.0 - 6.0 lbs	1 - 2	Foliar	6400 (26%)	19000
Pyrethrum		- 0.25 lb	1	Foliar	1100 (4%)	280

FORESTLAND

Counties Reporting 10

Fungicides						
Thiram			1	Foliar		230
Herbicides						
2,4-D		2.0 - 4.0 lbs	1	Foliar		61000
2,4-DP	Diclorprop	- 2.0 lbs	1	Soil		260
Atrazine	AAtrex	- 4.0 lbs	1	Soil		37000
Dalapon	Dowpon	7.1 - 11.0 lbs	1	Soil		24000
Glyphosate	Roundup	1.0 - 3.0 lbs	1	Foliar		18000
Hexazinone	Velpar	1.0 - 5.0 lbs	1	Soil		4400
Imazapyr	Arsenal	- 0.25 lb	1	Soil		130
Picloram	Tordon	2.0 - 4.0 lbs	1	Soil		110
Triclopyr	Garlon	2.0 - 3.0 lbs	1	Foliar		22000

Insecticides						
Carbaryl	Sevin	- 1.0 lb	1	Foliar		100
Malathion		- 2.0 lbs	1	Foliar		10

GARBONZO BEANS

700 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Herbicides						
Alachlor	Lasso	1.5 - 3.0 lbs	1	Soil	120 (17%)	320
Dinoseb		3.0 - 6.0 lbs	1	Soil	630 (90%)	2900
Triallate	Fargo	- 1.25 lbs	1	Soil	64 (9%)	80
Trifluralin	Treflan	0.5 - 1.25 lbs	1	Soil	190 (27%)	120

GARLIC

2140 Acres

Counties Reporting 2 out of 7
Percent Acres Reported 89%

Fungicides						
Chlorothalonil	Bravo	1.0 - 2.0 lbs	1	Foliar	1200 (55%)	1800
DCNA	Botran	6.0 - 10.0 lbs	1	Foliar	130 (6%)	1000
Iprodione	Rovral	- 4.0 lbs	1	Foliar	380 (18%)	1500
Sulfur		0.75 - 1.5 lbs	1	Foliar	520 (24%)	590
Herbicides						
Bromoxynil	Buctril	0.5 - 1.0 lb	1	Soil	1900 (88%)	1200
Fluazifop	Fusilade	0.25 - 0.375 lb	1	Foliar	1200 (56%)	300
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	640 (30%)	480
Pronamide	Kerb	1.5 - 2.0 lbs	1	Soil	69 (3%)	120

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
GOLF COURSES						
Counties Reporting						5
Fungicides						
Fenarimol	Rubigan	0.25 - 5.0 lbs/acre	1	Foliar		2
Iprodione	Chipco	- 40 lbs	1	Foliar		1000
Mancozeb	Fore	- 15 lbs	1	Foliar		15
PCNB	Quintozene	- 2.0 lbs	1	Soil		160
Sulfur		- 5.0 lbs	1	Foliar		80
Thiophanate	Topsin M	- 1.5 lbs	1	Foliar		22
Thiram		- 0.67 lb	1	Foliar		1500
Triadimefon	Bayleton	- 1.0 lb	1	Foliar		770
Herbicides						
2,4-D	Weedmaster	0.25 - 1.5 lbs	1	Foliar		380
Dicamba	Weedmaster, Banvel	0.1 - 0.75 lb	1	Soil		140
Endothall	Herbicide 273	1.0 - 2.25 lbs	1	Foliar		6
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar		12
Simazine	Princep	- 2.0 lbs	1	Soil		4
Insecticides						
Chlorpyrifos	Lorsban	- 2.0 lbs	1	Soil		5
GRAIN CORN						
23750 Acres						Counties Reporting 4 out of 8 Percent Acres Reported 93%
Fungicides						
Captan	Captan (11.8% dust)	- 0.058 lb/100 lbs	1	Seed		430
Herbicides						
2,4-D		0.5 - 0.75 lb	1	Foliar	5100 (21%)	3200
Alachlor	Lasso	2.0 - 4.0 lbs	1	Soil	6300 (27%)	17000
Atrazine	AAtrex	1.5 - 3.0 lbs	1	Soil	15000 (62%)	23000
Butylate	Sutan	3.0 - 6.0 lbs	1	Soil	7400 (31%)	16000
Cyanazine	Bladex	1.2 - 4.0 lbs	1	Soil	2500 (11%)	6400
EPTC	Eradicane	3.0 - 6.0 lbs	1	Soil	5800 (24%)	26000
Glyphosate	Roundup	- 2% solution	1	Foliar	2000 (8%)	390
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	870 (4%)	2100
Vernolate	Vernam, Surpass	3.0 - 6.0	1	Soil	42 (<1%)	190
Insecticides						
Chlorpyrifos	Lorsban	0.5 - 1.0 lb	1	Foliar	1000 (4%)	770
Fonofos	Dyfonate	0.75 - 1.0 lb	1	Soil	57 (<1%)	50
Parathion		- 0.5 lb	1	Foliar	500 (2%)	250
Permethrin	Ambush	0.1 - 0.2 lb	1 - 2	Foliar	14000 (59%)	2100
Phorate	Thimet 20G	- 1.2 oz/1000 ft	1	Soil	1500 (6%)	1600
GRAIN STORAGE						
Counties Reporting						7
Fumigant						
Aluminum phosphide	Phostoxin, Gastoxin	100 - 300 pellets/1000 cu ft		Space		27000
Chloropicrin		2.5 - 3.5 lbs/1000 bu	1	Space		200
Insecticides						
Chlorpyrifos	Reldane	-	1	Protectant		3400
Malathion	Cythion	- 0.625 lb/1000 bu	1	Protectant		54000
Methoxychlor	Marlate	- 0.36 lb/1000 sq ft	1	Protectant		540

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
GRAPES					Counties Reporting 11 out of 15	
3235 Acres					Percent Acres Reported 94%	
Fungicides						
Benomyl	Benlate	0.5 - 1.5 lb	1 - 2	Foliar	580 (18%)	570
Calcium polysulfide	Lime Sulfur	6.0 - 16 lbs	1	Foliar	160 (5%)	6300
Captan		1.5 - 3.0 lbs	1 - 2	Foliar	640 (20%)	1200
Copper		- 1.5 lbs	1 - 2	Foliar	80 (2%)	160
Dinocap	Karathane	-	1 - 3	Foliar	60 (2%)	30
Folpet		- 4.0 lbs	1	Foliar	35 (1%)	140
Iprodione	Rovral	1.5 - 2.0 lbs	1 - 3	Foliar	2800 (87%)	4700
Sulfur		0.75 - 1.5 lbs	1 - 6	Foliar	5100 (158%)*	44000
Triadimefon	Bayleton	1.0 - 2.0 lbs	1 - 3	Foliar	2200 (67%)	580
Herbicides						
2,4-D		- 1.0 lb	1	Foliar	320 (10%)	320
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	13 (<1%)	65
Diuron	Karmex	1.6 - 3.2 lbs	1	Soil	600 (18%)	1300
Glyphosate	Roundup	- 2% solution	1	Foliar	640 (20%)	820
Napropamide	Devrinol	- 4.0 lbs	1	Soil	100 (3%)	500
Oryzalin	Surflan	2.0 - 4.0 lbs	1	Soil	1200 (38%)	4400
Oxyfluorfen	Goal	0.5 - 2.0 lbs	1	Soil	760 (23%)	770
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	1000 (31%)	390
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	480 (15%)	1400
Insecticides						
Azinphos methyl	Guthion	-	1	Foliar	25 (1%)	25
Diazinon		- 1.0 lb	1	Foliar	40 (1%)	40
Dicofol	Kelthane	-	1	Foliar	20 (1%)	40
Oil			1	Foliar	80 (2%)	2900
Plant Growth Regulator						
Gibberellic acid	Pro-Gibb 4%	- 0.075 lb	1 - 2	Foliar	53 (2%)	4

GRASS SEED CROP

307670 Acres

Counties Reporting 13 out of 17
Percent Acres Reported 99%

Fungicides						
Chlorothalonil	Bravo	1.2 - 2.2 lbs	1 - 2	Foliar	94000 (31%)	63000
Maneb		1.6 - 2.4 lbs	1 - 2	Foliar	60000 (20%)	250000
Nickel sulfate		- 0.5 lb	1	Foliar	7000 (2%)	3500
Tilt	Tilt	0.16 - 1.0 lb	1 - 2	Foliar	150000 (50%)	36000
Triadimefon	Bayleton	0.15 - 0.19 lb	1 - 2	Foliar	20000 (6%)	3800
Herbicides						
2,4-D		0.36 - 1.0 lb	1	Foliar	120000 (37%)	98000
Atrazine	AAtrex	- 1.2 lbs	1 - 2	Soil	170000 (57%)	220000
Bromoxynil	Buctril	0.375 - 0.5 lb	1	Soil	12000 (4%)	8500
Dicamba	Banvel	0.25 - 1.0 lb	1	Soil	110000 (35%)	44000
Diclofop	Hoelon	- 1.0 lb	1	Soil, foliar	120 (<1%)	120
Diuron	Karmex	2.0 - 2.4 lbs	1	Soil	93000 (30%)	230000
Ethofumesate	Nortron	0.75 - 1.9 lbs	1	Soil	49000 (16%)	69000
Fluazifop	Fusilade	0.25 - 1.0 lb	1 - 2	Foliar	9400 (3%)	1600
Glyphosate	Roundup	1.0 - 2.0 lbs	1 - 2	Foliar	12000 (4%)	20000
MCPA		0.5 - 1.0 lb	1	Foliar	39000 (13%)	32000
MSMA		4.5 - 6.0 lbs	1	Foliar	1300 (<1%)	5300
Paraquat	Gramoxone	- 0.5 lb	1	Foliar	4500 (1%)	3300
Sethoxydim	Poast	0.25 - 0.5 lb	1	Foliar	3700 (1%)	1300
Simazine	Princep	- 2.0 lbs	1	Soil	43000 (14%)	86000
Terbacil	Sinbar	0.4 - 1.0 lb	1	Soil	4400 (1%)	4300

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Use
Insecticides						
Carbaryl	Sevin	2.0 - 8.0 lbs	1	Foliar	2200 (1%)	220
Chlorpyrifos	Lorsban	1.0 - 4.0 lbs	1	Soil, foliar	37000 (12%)	3700
Diazinon		0.5 - 3.0 lbs	1 - 3	Foliar	12000 (4%)	1000
Dimethoate	Cygon	0.3 - 0.5 lb	1	Foliar	25000 (8%)	800
Fonofos	Dyfonate	2.0 - 4.0 lbs	1	Soil	4800 (2%)	1800

GRASSHOPPER CONTROL

Counties Reporting 4 out of 4

Insecticides						
Malathion		- 0.8 lb	1	Foliar		3900

GREEN ONIONS

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Fungicides						
Chlorothalonil	Bravo	1.0 - 1.6 lbs	1	Foliar	200 (100%)	200
Copper		- 1.5 lbs	1	Foliar	160 (80%)	300
Maneb		0.5 - 1.5 lbs	1 - 2	Foliar	310 (155%)*	400
Zineb		1.5 - 2.25 lbs	1	Foliar	100 (50%)	

Herbicides						
Oxyfluorfen	Goal	0.12 - 0.25 lb	1	Soil	67 (34%)	
Paraquat	Gramoxone	0.5 - 0.9 lb	1	Foliar	120 (60%)	100

Insecticides						
Chlorpyrifos	Lorsban	- 0.56 oz	1	Soil	100 (50%)	100
Diazinon		- 0.5 lb	1	Soil, foliar	160 (80%)	
Ethion	Ethion	-	1	Foliar	70 (35%)	

GREEN PEAS

35560 Acres

Counties Reporting 7 out of 7
Percent Acres Reported 100%

Enfenvaterate	Asana		1	Foliar	830 (2%)	
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Herbicides						
Dinoseb		3.0 - 4.0 lbs	1	Soil	10000 (28%)	2600
MCPB	MCPB Sodium Salt	0.75 - 1.0 lb	1	Foliar	8900 (25%)	2200
Metolachlor	Dual	-	1	Soil	1700 (5%)	4200
Triallate	Fargo	- 1.25 lbs	1	Soil	3900 (11%)	4900
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	17000 (49%)	9500

Insecticides						
Demeton	Systox	-	1	Foliar	260 (1%)	1000
Dimethoate	Cygon	- 0.167 lb	1	Foliar	3400 (10%)	8000
Disulfoton	Disyston		1	Foliar	640 (2%)	4000
Fenvalerate	Pydrin	0.1 - 0.2 lb	1	Foliar	100 (<1%)	1000
Parathion		- 0.5 lb	1	Foliar	5000 (14%)	29000
Phosmet	Imidan	- 1.0 lb	1 - 2	Foliar	4400 (12%)	40000

GREENHOUSES

Fungicides						
Benomyl	Benlate	0.5 - 1.0 lbs	1 - 10	Foliar		1000

Insecticides						
Acephate	Orthene	- 2.0 Tbls/gal (form)	- 10	Foliar		
Diazinon		- 1.0 Tbls/gal (form)	- 10	Foliar		

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
GYPSEY MOTH CONTROL			Counties Reporting		3 out of 3	
Insecticides						
B.T.	Dipel 8L	- 0.25 lb	1 - 3	Foliar		2500
HOPS			Counties Reporting		2 out of 3	
5350 Acres			Percent Acres Reported		99%	
Fungicides						
Copper	Kocide 606	- 1.5 lbs	1	Foliar	2700 (50%)	4000
Metalaxyl	Ridomil	- 1.0 lb	1	Foliar	3400 (63%)	1700
Zineb		1.5 - 2.25 lbs	1 - 2	Foliar	4600 (87%)	9200
Herbicides						
Norflurazon	Solicam	2.0 - 4.0 lbs	1	Soil	280 (5%)	550
Paraquat	Gramoxone	- 0.5 lb/100 gal	1	Foliar	530 (10%)	260
INDUSTRIAL & RESIDENTIAL			Counties Reporting		6	
Fumigant						
Methyl bromide		2.0 - 4.0 lbs/1000 cu ft	1 - 10	Space		4000
Fungicides						
Benomyl	Benlate	0.5 - 1.0 lb	1 - 10	Foliar		3800
Calcium polysulfide	Lime Sulfur		1 - 10	Foliar		35000
Captan		1.0 - 3.0 lbs/100 gal	1 - 10	Foliar		11000
Chlorothalonil	Bravo	0.5 - 4.0 lbs/100 gal	1 - 10	Foliar		10000
Copper		1.0 - 2.0 lbs/100 gal	1 - 10	Foliar		27000
Dodine	Cyprex	0.5 - 1.0 lb/100 ac	1 - 10	Foliar		600
Iprodione	Rovral	0.25 - 0.5 lb/100 gal	1 - 10	Foliar		270
Maneb	Dithane	0.75 - 1.25 lbs/100 gal	1 - 10	Foliar		4700
Sulfur		1.0 - 3.0 lbs/100 gal	1 - 10	Foliar		4300
Tilt	Tilt	0.25 - 0.5 pt/ac	1 - 10	Foliar		670
Triadimefon	Bayleton	2.0 - 8.0 oz/100 gal	1 - 10	Foliar		310
Herbicides						
2,4-D		2.0 - 8.0 lbs	1 - 10	Foliar		61000
Atrazine	AAtrax	2.0 - 10.0 lbs	1 - 10	Soil		20000
Bensulide	Prefar	0.3 - 0.5 lbs/1000 ft	1 - 10	Soil		1800
Bromoxynil		- 1.0 lb	1 - 10	Soil		670
Chloroxuron	Tenoran	-	1 - 10	Soil		190
Dicamba	Banvel	0.25 - 1.5 lbs	1 - 10	Soil		3100
Dichlobenil	Casoron	4.0 - 6.0 lbs	1 - 10	Soil		21000
Dinoseb		3.0 - 5.0 lbs	1 - 10	Soil, foliar		2300
Diquat	Diquat	0.5 - 1.0 lb	1 - 10	Foliar		9700
Diuron	Karmex	2.0 - 4.0 lbs	1 - 10	Soil		19000
Glyphosate	Kleenup, Roundup	1.0 - 2.0 lbs	1 - 10	Foliar		79000
Hexazinone	Velpar	0.9 - 1.8 lbs	1 - 10	Foliar		3800
Napropamide	Devrinol	4.0 - 6.0 lbs	1 - 10	Soil		16000
Oryzalin	Surflan	2.0 - 4.0 lbs	1 - 10	Foliar		8700
Paraquat	Gramoxone	0.5 - 1.0 lb	1 - 10	Foliar		3200
Pronamide	Kerb	1.0 - 2.0 lbs	1 - 10	Soil		670
Simazine	Princep	2.0 - 4.0 lbs	1 - 10	Soil		28000
Sodium chlorate	Monobor Chlorate	- 15 lbs	1 - 10	Soil		600
Sodium metaborate	Monobor Chlorate	- 35 lbs	1 - 10	Soil		1400
Triclopyr	Garlon	0.3 - 3.2 lbs	1 - 10	Foliar		8300

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Acephate	Orthene	- 2.0 Tbls/gal (form.)	- 10	Foliar		100
Azinphos methyl	Guthion	0.375 - 0.5 lb/100 gal	1 - 10	Foliar		18
B.T.		2.0 - 8.0 lbs/100 gal	1 - 10	Foliar		
Carbaryl	Sevin	0.5 - 1.0 lb/100 gal	1 - 10	Soil, foliar		260
Chlorpyrifos	Lorsban	0.25 - 1.0 lb/gal	1 - 10	Soil		400
Cypermethrin	Demon	0.1 - 0.2 lb/100 gal	1 - 10	Other		
Diazinon		1.0 - 1.5 lbs/100 gal	1 - 10	Soil, foliar		610
Dichlorvos	DDVP	- 0.5% Aersol	1 - 10	Other		
Dimethoate	Cygon	0.375 - 0.75 lb/100 gal	1 - 10	Foliar		6
Disulfote	Disyston 2G	- 5.0 lbs/1000 ft (form.)	10	Soil, foliar		80
Endosulfan	Thiodan	0.5 - 1.0 lb/100 gal	1 - 10	Foliar		16
Fenbutatin	Vendex	0.25 - 0.5 lb/100 gal	1 - 10	Soil		20
Fenvalerate	Pydrin	0.1 - 0.2 lb/100 gal	1 - 10	Foliar		1
Fonofos	Dyfonate 10G	0.7 - 5.0 lb/acre	1 - 10	Soil		16
Hydramethylnon	Maxforce	-	1 - 10	Bait		
Hydroprene	Gencor	- Aersol	1 - 10	Other		
Malathion		0.5 - 1.5 lbs/100 gal	1 - 10	Foliar		34
Metaldehyde		2.0 - 6.0 lbs/acre	1 - 10	Soil		260
Methoxychlor	Marlate	- 1.0 lb/100 gal	1 - 10	Foliar		
Mevinphos	Phosdrin	1.25 - 2.5 pts/50000 cu ft	1 - 10	Foliar		6
Naled	Dibrom	- 5.0 lbs/100 gal	1 - 10	Foliar		1
Oil		1.0 - 3.0 gal/100 gal	1 - 10	Foliar		190
Oxydemeton methyl	Metasystox R	- 0.375 lb/100 gal	1 - 10	Foliar		20
Phosmet	Imidan	- 1.0 lb/100 gal	1 - 10	Foliar		26
Propargite	Omite	1.3 - 3.0 lbs	1 - 10	Foliar		40
Propetamphos	Safrothin	0.25% - 2.0%	1 - 10	Other		
Propoxur	Baygon	- 0.5% Aersol	1 - 10	Bait		
Pyrethrum		0.1 - 0.2 oz/100 gal	1 - 10	Foliar		20

IRRIGATION CANAL

Herbicides						
2,4-D		2.0 - 3.0 lbs	1	Foliar		4
Copper	Citrine	0.5 - 2.0 ppm	1	Aquatic		30
Xylene	Cyclo Sol 31 Herbicide	-	1	Aquatic		370

KENTUCKY BLUEGRASS SEED CROP

12200 Acres

Counties Reporting 1 out of 2
Percent Acres Reported 98%

Fungicides						
Tilt	Tilt	0.1 - 1.0 lb	1	Foliar	1200 (10%)	34
Triadimefon	Bayleton	0.125 - 0.25 lb	1	Foliar	1200 (10%)	11
Herbicides						
2,4-D		0.36 - 1.0 lb	1	Foliar	8000 (66%)	60
Bromoxynil	Buctril	0.375 - 0.5 lb	1	Soil	3000 (25%)	11
Dicamba	Banvel	0.25 - 4.0 lbs	1	Soil	4000 (33%)	80
Glyphosate	Roundup		1	Foliar	7500 (61%)	15
MCPA		0.5 - 1.0 lb	1	Foliar	1500 (12%)	5
Paraquat	Gramoxone		1	Foliar	180 (1%)	
Insecticides						
Chlorpyrifos	Lorsban	0.5 - 1.0 lb	1	Soil	220 (2%)	1
Dimethoate	Cygon		1	Foliar	360 (3%)	1
Parathion			1	Foliar	80 (1%)	

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
LETTUCE		Counties Reporting 2 out of 3				
770 Acres		Percent Acres Reported 97%				
Fungicides						
Captan		1.0 - 2.0 lbs	1	Foliar	230 (30%)	340
Maneb		1.2 - 1.6 lbs	1	Foliar	300 (39%)	440
Metalaxyl	Ridomil	0.5 - 1.0 lb	1 - 2	Foliar	1200 (156%)*	240
Vinclozolin	Ronilan	- 1.5 lbs	1	Foliar	230 (30%)	340
Herbicides						
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	550 (71%)	830
Insecticides						
B.T.	Dipel, Javelin	2.0 - 4.0 lbs	1	Foliar	220 (29%)	4
Diazinon		- 0.5 lb	1	Foliar	74 (10%)	37
Endosulfan	Thiodan	- 1.0 lb	1	Foliar	450 (58%)	450
Mevinphos	Phosdrin	0.5 - 1.0 lb	1	Foliar	150 (19%)	37
Parathion		- 0.5 lb	1	Foliar	150 (19%)	75
Permethrin	Ambush	0.05 - 0.2 lb	1	Foliar	20 (3%)	1
LETTUCE SEED CROP						
Herbicides						
Benefin	Balan	-	1	Soil		94
MELONS		Counties Reporting 3 out of 9				
1200 Acres		Percent Acres Reported 80%				
Fumigant						
Metam sodium	Vapam	130 - 320 lbs	1	Soil	38 (3%)	4200
Fungicides						
Benomyl	Benlate	-	1	Foliar	6 (1%)	3
Captafol	Difolatan	1.2 - 1.6 lbs	1	Foliar	390 (33%)	540
Mancozeb	Dithane M45, Manzate 200	1.6 - 2.4 lbs	1	Foliar	390 (33%)	770
Metalaxyl	Ridomil	0.5 - 1.0 lb	1	Foliar	5 (<1%)	1
Zineb			1	Foliar	5 (<1%)	8
Herbicides						
Ethalfuralin	Sonalan	0.75 - 0.94 lb	1	Soil	310 (26%)	260
Napropamide	Devrinol	- 1.0 lb	1	Soil	2 (<1%)	2
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	5 (<1%)	5
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	110 (9%)	70
Insecticides						
Carbaryl	Sevin	-	1	Foliar	5 (<1%)	5
Diazinon		- 0.5 lb	1	Foliar	380 (32%)	190
Parathion		- 0.5 lb	1	Foliar	160 (13%)	80
MINT		Counties Reporting 16 out of 16				
34086 Acres		Percent Acres Reported 100%				
Fungicides						
Chlorothalonil	Bravo	- 2.0 lbs	1	Foliar	280 (1%)	550
Sulfur	That Big 8	3.0 - 5.0 lbs	1	Foliar	25 (<1%)	100

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
Bentazon	Basagran	0.75 - 1.0 lb	1	Soil	1600 (5%)	1500
Bromoxynil	Buctril, Brominal	0.375 - 0.5 lb	1	Soil	2500 (7%)	790
Diuron	Karmex	1.6 - 2.4 lbs	1	Soil	1500 (4%)	3800
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	45 (<1%)	39
Napropamide	Devrinol	- 4.0 lbs	1	Soil	1100 (3%)	4400
Oxyfluorfen	Goal	0.5 - 1.5 lbs	1	Soil	7600 (22%)	6000
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	12000 (36%)	8700
Pendimethalin	Prowl	0.33 - 0.5 lb	1	Soil	250 (1%)	250
Phenmedipham	Betanal	0.7 - 1.2 lbs	1	Soil	53 (<1%)	50
Terbacil	Sinbar	0.8 - 1.2 lbs	1	Soil	28000 (81%)	28000
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	210 (1%)	110

Insecticides						
Acephate	Orthene	- 1.0 lb	1	Foliar	19000 (56%)	16000
Carbofuran	Furadan	0.5 - 1.0 lb	1	Soil, foliar	2700 (8%)	2000
Chlorpyrifos	Lorsban	1.0 - 2.0 lbs	1	Foliar	8700 (26%)	13000
Dicofol	Kelthane	- 1.2 lbs	1	Foliar	3000 (9%)	3600
Fonofos	Dyfonate	2.0 - 4.0 lbs	1	Soil	8000 (24%)	24000
Malathion		- 0.9 lb	1	Foliar	2600 (8%)	2400
Methomyl	Lannate, Nudrin	- 0.9 lb	1	Foliar	4600 (14%)	3900
Oxamyl	Vydate	0.25 - 1.0 lb	1	Soil, foliar	11000 (31%)	4800
Oxydemeton methyl	Metasystox R	- 0.75 lb	1	Foliar	580 (2%)	430
Propargite	Omite, Comite	1.5 - 2.25 lbs	1 - 2	Foliar	14000 (42%)	28000

NOXIOUS WEED CONTROL

Herbicides						
2,4,5-T	Esteron 99		1	Foliar		260
2,4-D	Krovar I, Weedmaster, ...	0.25 - 8.0 lbs	1	Foliar		25000
2,4-DP	Weedone 170		1	Foliar		550
Amitrole	Amizol, Cytrol, Amitrol T	2.0 - 10.0 lbs	1	Foliar		8700
Asulam	Asulox		1	Soil		20
Atrazine	AAtrex, Atratol	1.0 - 10.0 lbs	1	Soil		14000
Bromacil	Krovar I, Hyvar X	1.2 - 3.8 lbs	1	Soil		2800
Bromoxynil	Buctril		1	Foliar		10
Chlorsulfuron	Telar, Glean	0.02 - 0.14 lb	1	Soil		56
Clopyralid	Curtail		1	Soil		11
Dalapon	Dowpon	7.5 - 16.0 lbs	1	Soil		210
Dicamba	Banvel, Weedmaster, Ba...	0.25 - 2.0 lbs	1	Soil		2000
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil		58
Diuron	Krovar I, Karmex	1.2 - 3.8 lbs	1	Soil		1700
Glyphosate	Rodeo, Roundup, Landma...	0.5 - 12.0 lbs	1	Foliar		5600
Hexazinone	Velpar		1	Foliar		1000
Imazapyr	Arsenal	- 2.0 lbs	1	Soil		26
MSMA	Bueno		1	Soil		90
Mecoprop			1	Foliar		82
Metsulfuron	Escort		1	Soil		3
Oil		- 12.0 lbs	1	Foliar		630
Oryzalin	Surflan	1.0 - 4.0 lbs	1	Soil		4
Picloram	Tordon 22K	0.25 - 1.5 lbs	1	Soil		2000
Prometon	Pramitol 25E		1	Soil		480
Pronamide	Kerb	2.0 - 4.0 lbs	1	Soil		21
Simazine	Princep	3.0 - 15.0 lbs	1	Soil		22000
Sulfometuron	Oust	0.14 - 0.23 lb	1	Soil		570
Tebuthiuron	Spike	3.0 - 15.0 lbs	1	Soil		110
Triclopyr	Garlon, Crossbow	0.3 - 3.2 lbs	1	Foliar		4900

Insecticides						
Phosmet	Imidan		1	Foliar		25

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
NURSERY						
170 Acres						
Counties Reporting 5						
Bactericides						
Terramycin		0.375 - 1.0 lb	1 - 10	Foliar		100
Fumigant						
Aluminum phosphide	Gastoxin	-	1 - 10	Space		200
Metam sodium	Vapam	120 - 320 lbs	1 - 10	Soil	10 (6%)	320
Methyl bromide		- 350 lbs	1 - 10	Soil	61 (36%)	21000
Fungicides						
Benomyl	Benlate	0.125 - 1.0 lb	1 - 10	Foliar	320 (188%)	1800
Calcium polysulfide	Lime Sulfur		1 - 10	Foliar		1000
Captan		1.0 - 3.0 lbs	1 - 10	Foliar	20 (12%)	220
Chlorothalonil	Bravo	1.0 - 5.2 lbs	1 - 10	Foliar	350 (206%)	1500
Copper		1.0 - 2.0 lbs/100 gal	1 - 10	Foliar		800
DCNA	Botran	0.375 - 1.0 lb/100 gal	1 - 10	Foliar	50 (29%)	100
Dicofol	Kelthane		1 - 10	Foliar		200
Dodine	Cyprex	0.5 - 1.0 lb	1 - 10	Foliar		100
Ferbam			1 - 10	Foliar		100
Maneb	Dithane	0.75 - 1.25 lbs/100 gal	1 - 10	Foliar		600
Metalaxyl	Ridomil	4.0 - 8.0 lbs	1 - 10	Foliar	170 (100%)	470
Sulfur		1.0 - 3.0 lbs/100 gal	1 - 10	Foliar		600
Triadimefon	Bayleton	2.0 - 8.0 lbs/100 gal	1 - 10	Foliar		100
Triforine	Funginex		1 - 10	Foliar		200
Vinclozolin	Ronilan		1 - 10	Foliar		100
Herbicides						
Bifenox	Modown	- 3.0 lbs	1 - 10	Soil	100 (59%)	600
Dichlobenil	Casoron	4.0 - 6.0 lbs	1 - 10	Soil		2000
Diphenamid	Enide	4.0 - 8.0 lbs	1 - 10	Soil	100 (59%)	400
Diuron	Karmex	1.0 - 2.0 lbs	1 - 10	Soil	17 (10%)	2100
Glyphosate	Roundup	1.0 - 5.0 lbs	1 - 10	Foliar	10 (6%)	2100
Hexazinone	Velpar	- 2.0 lbs	1 - 10	Foliar	12 (7%)	24
Napropamide	Devrinol	4.0 - 6.0 lbs	1 - 10	Soil	95 (56%)	3400
Oryzalin	Surflan	2.0 - 4.0 lbs	1 - 10	Soil		1000
Oxyfluorfen	Goal	0.25 - 2.0 lbs	1 - 10	Soil	100 (59%)	320
Pronamide	Kerb	1.0 - 2.0 lbs	1 - 10	Soil		200
Sethoxydim	Poast		1 - 10	Foliar		100
Simazine	Princep	2.0 - 4.0 lbs	1 - 10	Soil		300
Triclopyr	Garlon	0.3 - 3.2 lbs	1 - 10	Foliar		20

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Acephate	Orthene	- 1.0 lb/100 gal	1 - 10	Soil, foliar	34 (20%)	590
Azinphos methyl	Guthion	0.375 - 0.75 lb/100 gal	1 - 10	Foliar		200
B.T.	Dipel, Javelin	2.0 - 8.0 lbs/100 gal	1 - 10	Foliar		4
Bendiocarb			1 - 10	Foliar		40
Carbaryl	Sevin	0.5 - 1.0 lb/100 gal	1 - 10	Foliar		600
Carbofuran	Furadan	-	1 - 10	Foliar		400
Chlorpyrifos	Lorsban	0.25 - 1.0 lb/100 gal	1 - 10	Foliar	120 (71%)	580
Diazinon		- 0.5 lb/100 gal	1 - 10	Foliar	60 (35%)	800
Dimethoate	Cygon	0.5 - 1.0 lb/100 gal	1 - 10	Foliar		140
Disulfoton	Disyston 2G	- 5.0 lbs per 150 ft	1 - 10	Soil, foliar		100
Endosulfan	Thiodan	0.5 - 1.0 lb/100 gal	1 - 10	Foliar		100
Fenbutatin	Vendex	0.25 - 0.5 lb/100 gal	1 - 10	Foliar		100
Fenvalerate	Pydrin	0.33 - 0.67 lb/100 gal	1 - 10	Foliar	350 (206%)	35
Fonofos	Dyfonate 10G	0.7 - 5.0 lbs	1 - 10	Soil		300
Malathion		0.5 - 1.5 lbs/100 gal	1 - 10	Foliar		400
Metaldehyde		2.0 - 6.0 lbs	1 - 10	Bait		600
Methiocarb	Mesuroil		1 - 10	Foliar		100
Oil		1.0 - 3.0 gal/100 gal	1 - 10	Foliar		3500
Oxydemeton methyl	Metasystox R	- 0.375 lb/100 gal	1 - 10	Foliar		100
Propargite	Omite	1.5 - 3.0 lbs	1 - 10	Foliar		10
Pyrethrum		0.1 - 0.2 oz/100 gal	1 - 10	Foliar		100

OATS

80750 Acres

Counties Reporting 22 out of 29
Percent Acres Reported 97%

Fungicides						
Benomyl	Benlate	0.5 - 1.0 lb	1	Foliar	93 (<1%)	70
Thiabendazole	Mertect 340-F	0.25 - 0.7 lb	1	Foliar	270 (<1%)	80
Thiophanate	Topsin M	0.5 - 1.0 lb	1	Foliar	150 (<1%)	110
Thiram	Vitavax 200	0.035 - 0.05 lb/100 lbs	1	Seed		330
Herbicides						
2,4-D		0.5 - 1.0 lb	1	Foliar	14000 (17%)	8600
Bromoxynil	Buctril	0.25 - 0.375 lb	1	Soil	4500 (6%)	1200
Chlorsulfuron	Glean	0.1875 - 0.25 oz	1	Soil	2200 (3%)	64
Dicamba	Banvel	1.0 - 3.0 oz	1	Soil	36000 (45%)	3400
Diuron	Karmex	- 1.6 lbs	1	Soil	19000 (24%)	27000
Glyphosate	Roundup	0.28 - 0.38 lbs	1	Foliar	580 (1%)	360
MCPA		0.5 - 1.0 lb	1	Foliar	46000 (57%)	26000
Insecticides						
Carboxin	Vitavax, Vitavax 200	1.5 - 2.25 oz/100 lbs	1	Seed		8100
Dimethoate	Cygon	- 0.375 lb	1	Foliar	800 (1%)	300
Disulfoton	Disyston	0.25 - 1.0 lb	1	Foliar	2300 (3%)	1200
Malathion		1.0 - 1.25 lbs	1	Foliar	2800 (3%)	2800
Parathion		4.0 - 6.0 oz	1	Foliar	1900 (2%)	590

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
PEACHES		Counties Reporting 14 out of 18				
1450 Acres		Percent Acres Reported 91%				
Fungicides						
Benomyl	Benlate	0.375 - 0.75 lb	1	Foliar	480 (33%)	250
Calcium polysulfide	Lime Sulfur	- 18 lbs/100 gal	1 - 3	Foliar	660 (45%)	34000
Captan		- 2.0 lbs	1 - 3	Foliar	940 (65%)	2900
Chlorothalonil	Bravo	2.3 - 4.2 lbs	1 - 2	Foliar	1000 (71%)	2900
Copper	COCS, Kocide 606	4.5 - 9.0 lbs	1 - 2	Foliar	1500 (107%)*	17000
Dichlone	Phygon, Kolo 100	1.0 - 2.0 lbs	1 - 3	Foliar	130 (9%)	59
Dodine	Cyprex	1.0 - 1.6 lbs	1 - 4	Foliar	540 (37%)	800
Iprodione	Rovral	0.5 - 1.0 lb	1 - 3	Foliar	290 (20%)	290
Maneb		1.2 - 1.6 lbs	1	Foliar	10 (1%)	20
Sodium polysulfide		-	1	Foliar	25 (2%)	180
Sulfur	Kolo 100	1.0 - 3.0 lbs	1 - 2	Foliar	930 (64%)	12000
Triforine	Funginex	- 0.6 lb	1	Foliar	210 (14%)	160
Zineb		1.0 - 1.5 lb/100 gal	1	Foliar	45 (3%)	270
Ziram		4.5 - 6.0 lbs	1 - 2	Foliar	140 (9%)	690
Herbicides						
2,4-D		1.0 - 2.0 lbs	1	Foliar	180 (12%)	280
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	160 (11%)	750
Diuron	Karmex	1.6 - 3.2 lbs	1	Soil	90 (6%)	270
Glyphosate	Roundup	1.0 - 5.0 lbs	1 - 2	Foliar	680 (47%)	1400
Napropamide	Devrinol	- 4.0 lbs	1	Soil	210 (14%)	850
Oryzalin	Surflan	- 4.0 lbs	1	Soil	150 (10%)	580
Paraquat	Gramoxone	0.5 - 4.0 lbs	1	Foliar	130 (9%)	130
Simazine	Princep	1.6 - 3.2 lbs	1	Soil	240 (17%)	720
Terbacil	Sinbar	1.6 - 3.2 lbs	1	Soil	50 (3%)	130
Insecticides						
Azinphos methyl	Guthion	0.75 - 2.0 lbs	1 - 3	Foliar	420 (29%)	980
Carbaryl	Sevin	2.0 - 4.0 lbs	1 - 3	Foliar	550 (38%)	1500
Chlorpyrifos	Lorsban, Lorsban 4E	1.0 - 2.0 lbs	1	Foliar	260 (18%)	440
Diazinon		- 1.5 lbs	1 - 3	Foliar	690 (48%)	1200
Endosulfan	Thiodan	- 2.0 lbs	1	Foliar	620 (43%)	1300
Fenvalerate	Pydrin, Pydrin 2.4EC	- 0.3 lb	1	Foliar	180 (12%)	53
Formetanate	Carzol, Carzol 92SP	2.0 - 8.0 oz/100 gal	1	Foliar	120 (8%)	110
Malathion		- 2.0 lbs	1 - 2	Foliar	150 (10%)	280
Oil	Superior oil		1	Foliar	660 (45%)	29000
Phosalone	Zolone		1	Foliar	59 (4%)	200
Phosmet	Imidan	2.0 - 3.0 lbs	1	Foliar	90 (6%)	260
Vertebrate Poison						
Zinc phosphide		0.1 - 0.25 lb	1	Bait	42 (3%)	33

PEARS
16971 Acres

Counties Reporting 11 out of 14
Percent Acres Reported 99%

Bactericides						
Streptomycin	Agri-strep	- 28.0 oz	1 - 3	Foliar	32000 (190%)*	57000
Terramycin		0.375 - 1.0 lb	1	Foliar	21 (<1%)	14

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Fungicides						
Benomyl	Benlate	2.0 - 3.0 oz/100 gal	1	Foliar	130 (1%)	130
Calcium polysulfide	Lime Sulfur		1	Foliar	4200 (25%)	87000
Captan		1.0 - 4.0 lbs	1	Foliar	65 (<1%)	110
Copper	Microcop, COCS	2.5 - 3.0 lbs	1	Foliar	160 (1%)	1600
Dicofol	Kelthane		1	Foliar	10 (<1%)	18
Dinocap	Karathane	- 0.75 lb	1	Foliar	1400 (8%)	1100
Dodine	Cyprex	- 2.0 lbs	1 - 2	Foliar	430 (3%)	770
Ferbam		1.5 - 6.0 lbs	1 - 3	Foliar	100 (1%)	350
Sodium polysulfide		-	1	Foliar	10 (<1%)	210
Sulfur		- 6.0 lbs	1	Foliar	8100 (48%)	50000
Triadimefon	Bayleton	- 3.0 oz	1 - 2	Foliar	9700 (57%)	2300
Ziram		- 6.0 lbs	1 - 2	Foliar	16000 (95%)	98000
Herbicides						
2,4-D		1.0 - 2.0 lbs	1	Foliar	1800 (11%)	3600
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	85 (1%)	530
Diuron	Karmex, Direx	- 1.2 lbs	1	Soil	1800 (11%)	2300
Glyphosate	Roundup	- 2.0 lb	1	Foliar	230 (1%)	480
Napropamide	Devrinol	- 4.0 lbs	1	Soil	95 (1%)	380
Oryzalin	Surflan	2.0 - 4.0 lbs	1	Soil	2800 (17%)	11000
Paraquat	Gramoxone	- 0.75 lb	1	Foliar	2200 (13%)	1700
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	1800 (10%)	5700
Terbacil	Sinbar		1	Soil	610 (4%)	730
Insecticides						
Amitraz	BAAM, Mitac	- 1.5 lbs	1 - 2	Foliar	20000 (119%)*	33000
Azinphos methyl	Guthion	0.5 - 1.25 lbs	1 - 2	Foliar	27000 (157%)*	30000
Carbaryl	Sevin	2.0 - 3.0 lbs	1 - 2	Foliar	200 (1%)	630
Carbophenothion	Trithion	- 2.0 lbs	1	Foliar	5 (<1%)	10
Chlorpyrifos	Lorsban	0.75 - 1.0 lb	1	Foliar	70 (<1%)	110
Cyhexatin	Plictran	0.5 - 1.0 lb	1 - 2	Foliar	21000 (123%)*	16000
Diazinon		2.0 - 3.0 lbs	1 - 2	Foliar	95 (1%)	170
Endosulfan	Thiodan	2.0 - 2.5 lbs	1	Foliar	2700 (16%)	6000
Ethion	Ethion	- 6.0 lbs	1	Foliar	15 (<1%)	15
Fenvalerate	Pydrin	- 1.0 lb	1 - 2	Foliar	27000 (161%)*	27000
Malathion		- 2.0 lbs	1	Foliar	15 (<1%)	60
Methidathion	Supracide	- 1.0 lb	1	Foliar	4 (<1%)	4
Morestan		- 1.25 lbs	1	Foliar	11000 (63%)	13000
Oil	Superior oil		1	Foliar	17000 (99%)	610000
Parathion		- 1.0 lb	1	Foliar	40 (<1%)	40
Permethrin	Pounce, Ambush		1	Foliar	10 (<1%)	3
Phosalone	Zolone	- 1.5 lbs	1	Foliar	130 (1%)	200
Phosmet	Imidan	2.0 - 3.0 lbs	1 - 2	Foliar	15000 (91%)	38000
Vertebrate Poison						
Zinc phosphide		0.1 - 0.25 lb	1	Bait	12 (<1%)	3

POTATOES

58010 Acres

Counties Reporting 14 out of 17
Percent Acres Reported 99%

Dessicant						
Diquat	Diquat	- 0.25 lb	1	Foliar	13000 (22%)	5800
Fumigant						
Chloropicrin	Telone C		1	Soil	100 (<1%)	4300
Dichloropropene	Telone II	- 186 lbs	1	Soil	7800 (13%)	970000
Metam sodium	Vapam	130 - 320 lbs	1	Soil	21000 (36%)	3850000

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Fungicides						
Anilazine	Dyrene 50W	1.0 - 2.5 lbs	1	Foliar	1000 (2%)	1800
Captafol	Difolatan	0.8 - 1.6 lbs	1	Foliar	2300 (4%)	2800
Captan	Captan (5% dust), Capt...	- 0.05 lb/100 lbs	1	Seed		21000
Chlorothalonil	Bravo	1.0 - 2.0 lbs	1	Foliar	8200 (14%)	12000
DCNA	Botran	- 1.5 lbs	1	Foliar	2000 (3%)	8000
Iprodione	Rovral		1	Foliar	4000 (7%)	4000
Mancozeb	Dithane M45, Ridomil MZ58	- 2.0 lb/100 gal	1	Foliar	7700 (13%)	17000
Maneb		1.2 - 1.6 lbs	1 - 3	Foliar	34000 (58%)	49000
Metalaxyl	Ridomil, Ridomil MZ58	- 1.0 lb	1 - 4	Foliar	5000 (9%)	1500
Thiabendazole	Mertect, Mertect 340-F	- 1.25 lb/2000 lbs	1	Seed		540
Thiophanate	Topsin M, Tops 2.5 Dust	- 0.025 lbs/100 lbs	1	Foliar	7100 (12%)	6400
Thiophanate M	Tops 2.5 Dust		1	Seed		500
Zineb	Dithane Z-78	1.125 - 1.5 lbs	1	Seed		150000

Herbicides						
Dinoseb		1.25 - 2.5 lbs	1	Foliar	8000 (14%)	15000
EPTC	Eptam	- 4.0 lbs	1 - 2	Soil	34000 (58%)	130000
Glyphosate	Roundup	0.375 - 1.5 lbs	1	Foliar	850 (1%)	430
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	2000 (3%)	4600
Metribuzin	Lexone, Sencor	0.5 - 1.0 lb	1	Soil	39000 (67%)	24000
Paraquat	Gramoxone	- 0.5 lb	1	Foliar	3000 (5%)	1500
Pendimethalin	Prowl	0.75 - 1.5 lbs	1	Foliar	21000 (36%)	20000
Trifluralin	Treflan	0.5 - 1.0 lb	1	Soil	3500 (6%)	2700

Insecticides						
Aldicarb	Temik	2.0 - 3.0 lbs	1	Soil	18000 (32%)	47000
Azinphos methyl	Guthion	- 0.375 lb	1	Foliar	18 (<1%)	7
Carbaryl	Sevin	-	1	Foliar	5 (<1%)	10
Carbofuran	Furadan	0.5 - 1.0 lb	1	Foliar	3700 (6%)	2600
Diazinon		-	1	Soil	5 (<1%)	10
Disulfoton	Disyston	1.0 - 3.0 lbs	1	Soil, foliar	2800 (5%)	5500
Esfenvalerate	Asana	0.0125 - 0.05 lb	1	Foliar	280 (<1%)	9
Ethoprop	Mocap, Mocap 10G	3.0 - 9.0 lbs	1	Soil	24000 (41%)	140000
Fensulfothion	Dasanit	3.0 - 5.0 lbs	1	Soil	2100 (4%)	8200
Fenvalerate	Pydrin	0.1 - 0.2 lb	1	Foliar	2400 (4%)	340
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	6000 (10%)	14000
Methamidophos	Monitor	0.75 - 1.0 lb	1 - 2	Foliar	57000 (97%)	54000
Permethrin	Ambush, Pounce	0.05 - 0.2 lb	1	Foliar	16000 (28%)	2800
Phorate	Thimet, Thimet 20G, Ph...	2.2 - 3.2 oz/1000 ft	1	Soil	6900 (12%)	16000
Phosmet	Imidan	- 1.0 lb	1	Foliar	1300 (2%)	1300

Plant Growth Regulator						
Chlorpropham	Sprout-Nip	- 3.0 lbs/2880 cwt	1	Protectant		33000
Maleic hydrazide	Sprout-Stop	- 3.0 lbs	1	Foliar	1900 (3%)	4300

PRUNES & PLUMS

3833 Acres

Counties Reporting 10 out of 12
Percent Acres Reported > 99%

Fungicides						
Benomyl	Benlate	0.75 - 1.0 lb	1	Foliar	1800 (47%)	1300
Calcium polysulfide	Lime Sulfur		1	Foliar	960 (25%)	35000
Captan		1.0 - 4.0 lbs	1 - 2	Foliar	690 (18%)	2800
Chlorothalonil	Bravo	2.3 - 4.2 lbs	1 - 2	Foliar	870 (23%)	2600
Copper		1.5 - 3.0 lbs	1	Foliar	59 (2%)	290
Iprodione	Rovral	0.5 - 1.0 lb	1	Foliar	620 (16%)	620
Sodium polysulfide		-	1	Foliar	19 (<1%)	140
Sulfur		1.0 - 3.0 lbs	1 - 2	Foliar	2700 (72%)	52000
Triforine	Funginex	0.45 - 0.6 lb	1	Foliar	15 (<1%)	45
Zinc sulfate	Zinc sulfate (36%)		1	Foliar	350 (9%)	1500

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
2,4-D		1.0 - 2.0 lbs	1	Foliar	540 (14%)	1000
Dicamba	Banvel	0.375 - 0.5 lb	1	Soil	400 (10%)	200
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil	560 (15%)	2700
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar	270 (7%)	170
MCPA		- 2.0 lbs	1	Foliar	100 (3%)	200
Napropamide	Devrinol	- 4.0 lbs	1	Soil	580 (15%)	2300
Oryzalin	Surflan	- 4.0 lbs	1	Soil	470 (12%)	1900
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	680 (18%)	670
Picloram	Tordon	0.5 - 1.0 lb	1	Soil	500 (13%)	500
Simazine	Princep	1.6 - 3.2 lbs	1	Soil	970 (25%)	2900

Insecticides						
Azinphos methyl	Guthion	0.75 - 1.5 lbs	1 - 2	Foliar	1000 (26%)	1200
Carbaryl	Sevin		1	Foliar	18 (<1%)	70
Chlorpyrifos	Lorsban	0.75 - 1.5 lbs	1	Foliar	660 (17%)	750
Demeton	Systox	0.375 - 1.5 lbs	1	Foliar	260 (7%)	240
Diazinon		- 4.0 lbs	1	Foliar	1300 (35%)	5300
Dicofol	Kelthane	5.0 - 6.0 lbs	1	Foliar	20 (1%)	40
Endosulfan	Thiodan	- 4.0 lbs	1	Foliar	750 (20%)	2900
Oil	Superior oil, Supreme oil		1	Foliar	1300 (34%)	51000
Parathion		0.5 - 1.0 lb	1 - 2	Foliar	850 (22%)	640
Phosmet	Imidan	1.5 - 2.25 lbs	1	Foliar	50 (1%)	94
Trichlorfon	Dylox	- 2.0 lbs	1	Foliar	200 (5%)	200

Vertebrate Poison						
Zinc phosphide		0.1 - 0.25 lb	1	Bait	34 (1%)	22

PUMPKINS & SQUASH
2150 Acres

Counties Reporting 9 out of 13
Percent Acres Reported 95%

Fungicides						
Zineb			1	Foliar	62 (3%)	62

Herbicides						
Chloramben	Amiben	1.5 - 4.5 lbs	1	Soil	490 (23%)	1600
Dinoseb		3.0 - 6.0 lbs	1	Soil	1300 (60%)	4700
Napropamide	Devrinol	- 1.0 lb	1	Soil	83 (4%)	83
Propachlor	Ramrod	4.0 - 6.0 lbs	1	Soil	420 (20%)	2100

Insecticides						
Carbaryl	Sevin	- 1.0 lb	1	Foliar	30 (1%)	30
Diazinon		- 0.5 lb	1	Foliar	83 (4%)	62
Endosulfan	Thiodan	-	1	Foliar	20 (1%)	20
Naled	Dibrom	-	1	Foliar	73 (3%)	110

RADISHES
370 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Fungicides						
Captan		- 1.5 lbs	1	Foliar	55 (15%)	83
Zineb		1.125 - 1.5 lbs	1	Foliar	73 (20%)	110

Insecticides						
Chlorpyrifos	Lorsban	- 0.03 lb/1000 ft	1	Soil	56 (15%)	50
Diazinon		0.5 - 2.0 lbs	1	Foliar	56 (15%)	28
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	300 (81%)	590
Parathion		0.25 - 0.5 lb	1	Foliar	36 (10%)	9

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
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RANGELAND & PASTURE
435000 Acres

Counties Reporting 16

Fungicides						
Benomyl	Benlate	- 0.5 lb	1	Foliar		5
Calcium polysulfide	Lime Sulfur		1	Foliar		300
Captan		2.0 - 4.0 lbs	1	Foliar		20
Copper		1.125 - 1.5 lbs	1	Foliar		30
Dichlone Sulfur	Phygon	- 2.0 lbs	1	Foliar		10
		4.5 - 20 lbs	1	Foliar		1400

Herbicides						
2,4,5-T			1	Foliar		210
2,4-D	Weedmaster, 2,4-D, Cro...	0.75 - 3.0 lbs	1	Foliar	11000 (3%)	57000
Atrazine	AAtrax		1	Soil		190
Dicamba	Banvel, Weedmaster	0.25 - 8.0 lbs	1	Soil		15000
Glyphosate	Roundup	0.25 - 5.0 lbs	1	Foliar		5000
MCPA		1.0 - 2.0 lbs	1	Foliar		650
Picloram	Tordon	0.125 - 2.0 lbs	1	Soil		1500
Triclopyr	Garlon, Crossbow	0.75 - 1.5 lbs	1	Foliar		230

Insecticides						
Carbaryl	Sevin	1.0 - 1.5 lb	1	Foliar		79
Diazinon		0.4 - 0.5 lb	1	Foliar		410
Dicofol	Kelthane	- 2.0 lbs	1	Foliar		600
Malathion		- 1.25 lbs	1	Foliar		8900
Oil		- 80 lbs	1	Foliar		48000

RAPE SEED CROP

100 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Herbicides						
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	100 (100%)	140

Insecticides						
Parathion		- 0.5 lb	1	Foliar	52 (52%)	13

RASPBERRIES

4810 Acres

Counties Reporting 11 out of 14
Percent Acres Reported >99%

Fungicides						
Benomyl	Benlate	0.375 - 0.5 lb	1	Foliar	730 (15%)	320
Calcium polysulfide	Lime Sulfur	- 12 lbs/100 gal	1	Foliar	300 (6%)	24000
Captan		1.0 - 2.0 lbs	1 - 2	Foliar	850 (18%)	2100
Copper		1.5 - 3.0 lbs	1 - 2	Foliar	1000 (22%)	6200
DCNA	Botran	- 1.0 lb/100 gal	1	Foliar	80 (2%)	280
Ferbam		- 2.25 lbs	1	Foliar	190 (4%)	420
Metalaxyl Sulfur	Ridomil	- 2.0 lbs	1	Soil, foliar	170 (4%)	200
		0.75 - 1.5 lbs	1	Foliar	90 (2%)	900

Herbicides						
Dichlobenil	Casoron	- 4.0 lbs	1	Soil	200 (4%)	790
Dinoseb		1.25 - 2.5 lbs	1 - 2	Soil, foliar	1500 (31%)	3600
Diphenamid	Enide	- 6.0 lbs	1	Soil	560 (12%)	2800
Diuron	Karmex	1.6 - 3.2 lbs	1	Soil	1200 (25%)	2600
Napropamide	Devrinol	- 4.0 lbs	1	Soil	1900 (39%)	7500
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	25 (1%)	19
Pronamide	Kerb	0.5 - 3.0 lbs	1	Soil	11 (<1%)	19
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	1500 (30%)	3100
Terbacil	Sinbar	0.8 - 1.6 lbs	1	Soil	170 (4%)	260

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Azinphos methyl	Guthion	0.25 - 0.5 lb	1 - 2	Foliar	1100 (22%)	580
B.T.	Dipel, Javelin	0.25 - 2.0 lbs	1	Foliar	2700 (55%)	45
Carbaryl	Sevin	- 2.0 lbs	1	Foliar	440 (9%)	880
Carbofuran	Furadan	- 1.0 lb	1	Foliar	850 (18%)	850
Cyhexatin	Plictran	- 1.0 lb	1	Foliar	1200 (24%)	1200
Diazinon		- 1.0 lb	1	Soil, foliar	3700 (76%)	3700
Dicofol	Kelthane	0.7 - 1.2 lbs	1	Foliar	370 (8%)	370
Fenamiphos	Nemacur	- 9.0 lbs	1	Soil	740 (15%)	6600
Malathion		1.75 - 2.0 lbs	1	Foliar	480 (10%)	870
Oil		-	1	Foliar	390 (8%)	3100
Oxydemeton methyl	Metasystox R	0.25 - 0.375 lb	1	Foliar	370 (8%)	140

RECREATIONAL AREAS

Counties Reporting 5

Herbicides						
2,4-D	Weedmaster, 2,4-D	2.0 - 3.0 lbs	1	Foliar		500
Atrazine	AAtrex	4.0 - 12.0 lbs	1	Soil		4
Dicamba	Weedmaster, Banvel	0.1 - 0.75 lb	1	Soil		110
Glyphosate	Roundup	1.0 - 5.0 lbs	1	Foliar		69
Triclopyr	Garlon	1.0 - 8.0 lbs	1	Foliar		77
Insecticides						
Chlorpyrifos	Lorsban	- 1.5 lbs	1	Foliar		75
Malathion		7.2 - 9.6 oz	1	Foliar		81
Phosmet	Imidan	- 1.0 lb	1	Foliar		25

RHUBARB

300 Acres

Counties Reporting 2 out of 6
Percent Acres Reported 57%

Herbicides						
Dichlobenil	Casoron	- 4.0 lbs	1	Soil	3 (1%)	12
Napropamide	Devrinol	- 4.0 lbs	1	Soil	140 (45%)	530
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	140 (47%)	140
Simazine	Princep	2.0 - 4.0 lbs	1	Soil	8 (3%)	15
Insecticides						
Metaldehyde		1.2 - 2.4 lbs	1	Bait	64 (21%)	1300

RIGHTS-OF-WAY (FARM YARD)

Herbicides						
Amitrole	Amitrole T	2.0 - 10.0 lbs	1	Foliar		72
Atrazine	AAtrex	1.0 - 10.0 lbs	1	Soil		300
Bromacil	Krovar I	1.2 - 3.8 lbs	1	Soil		140
Diuron	Krovar I	1.2 - 3.8 lbs	1	Soil		140
Prometon	Pramitol 5PS	- 0.25 lb	1	Soil		41
Simazine	Pramitol 5PS, Princep	3.0 - 15.0 lbs	1	Soil		130
Sodium chlorate	Pramitol 5PS	- 165 lbs	1	Soil		330
Sodium metaborate	Pramitol 5PS	- 200 lbs	1	Soil		410
Sulfometuron	Oust	0.14 - 0.23 lb	1	Soil		7
Tebuthiuron	Spike	3.0 - 15.0 lbs	1	Soil		13

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
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RIGHTS-OF-WAY (POWER)

Herbicides						
2,4-D	Tordon 101	0.25 - 8.0 lbs	1	Foliar		270
Amitrole	Amizol	2.0 - 10.0 lbs	1	Foliar		18
Bromacil	Hyvar X	3.0 - 6.0 lbs	1	Soil		50
Dicamba	Banvel	0.25 - 2.0 lbs	1	Soil		1400
Dichlobenil	Casoron	4.0 - 6.0 lbs	1	Soil		4
Diuron	Karmex	1.0 - 10.0 lbs	1	Soil		50
Fosamine	Krenite	1.0 - 12.0 lbs	1	Foliar		4
Glyphosate	Roundup	0.5 - 12.0 lbs	1	Foliar		200
Imazapyr	Arsenal	- 2.0 lbs	1	Foliar		4
Oil		- 12.0 lbs	1	Foliar		1900
Oryzalin	Surflan	1.0 - 4.0 lbs	1	Soil		7
Picloram	Tordon 101	- 0.5 lb	1	Foliar		32
Tebuthiuron	Spike	3.0 - 15.0 lbs	1	Soil		6
Triclopyr	Garlon	0.3 - 3.2 lbs	1	Foliar		120

RIGHTS-OF-WAY (RAILROAD)

Herbicides						
2,4-D		0.25 - 8.0 lbs	1	Foliar		460
Atrazine	AAtrex	1.0 - 10.0 lbs	1	Soil		560
Chlorsulfuron	Telar	0.02 - 0.14 lb	1	Soil		10
Dicamba	Banvel	0.25 - 2.0 lbs	1	Soil		160
Diuron	Karmex, Direx 4L	1.0 - 10.0 lbs	1	Soil		1100
Glyphosate	Roundup	0.5 - 12.0 lbs	1	Foliar		140
Picloram	Tordon 22K	0.25 - 1.5 lbs	1	Soil		160
Sulfometuron	Oust	0.14 - 0.23 lb	1	Soil		42
Triclopyr	Garlon	0.3 - 3.2 lbs	1	Foliar		35

RIGHTS-OF-WAY (STATE ROADS)

Counties Reporting 36 out of 36

Herbicides						
2,4-D	Weedone 170, Trimec, ,...	0.25 - 8.0 lbs	1	Foliar		7600
2,4-DP	Weedone 170	1.0 - 12.0 lbs	1	Foliar		4100
Amitrole	Amizol	2.0 - 10.0 lbs	1	Foliar		19000
Atrazine	AAtrex, Atratol	1.0 - 10.0 lbs	1	Soil		31000
Bromacil	Krovar I	1.2 - 3.8 lbs	1	Soil		9200
Chlorsulfuron	Telar	0.02 - 0.14 lb	1	Soil		77
Dalapon	Dowpon	7.5 - 16.0 lbs	1	Soil		790
Dicamba	Trimec, Banvel, Banvel...	0.11 - 0.18 lb	1	Soil		310
Dichlobenil	Casoron, Casoron 4G	4.0 - 6.0 lbs	1	Soil		3500
Diuron	Krovar I, Karmex	1.2 - 3.8 lbs	1	Soil		13000
Fosamine	Krenite	1.0 - 12.0 lbs	1	Foliar		11000
Glyphosate	Roundup, Rodeo	0.5 - 12.0 lbs	1	Foliar		7800
Mecoprop	Trimec	0.4 - 0.65 lb	1	Foliar		270
Oryzalin	Surflan	1.0 - 4.0 lbs	1	Soil		50
Oxadiazon	Ronstar	- 15 lbs	1	Foliar		870
Picloram	Tordon 10K, Tordon 22K	0.25 - 1.5 lbs	1	Soil		260
Prometon	Pramitol 5PS	- 0.25 lb	1	Soil		40
Pronamide	Kerb	2.0 - 4.0 lbs	1	Soil		320
Simazine	Princep 80W, Princep 4...	3.0 - 15.0 lbs	1	Soil		5200
Sodium TCA	Sodium TCA	- 150 lbs	1	Soil		450
Sodium chlorate	Pramitol 5PS	- 165 lbs	1	Soil		320
Sodium metaborate	Pramitol 5PS	- 200 lbs	1	Soil		400
Sulfometuron	Oust	0.14 - 0.23 lb	1	Soil		1200
Triclopyr	Garlon 3A, Garlon 4, T...	0.3 - 3.2 lbs	1	Foliar		6700

Insecticides						
Diazinon	Diazinon 14G	- 6.0 lbs	1	Soil		57

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Plant Growth Regulator						
Mefluidide	Embark	0.25 - 0.65 lb	1 - 2	Foliar		84

RIGHTS-OF-WAY (UTILITY)

Counties Reporting 8

Herbicides						
2,4-D	Weedmaster	0.25 - 8.0 lbs	1	Foliar		1400
Atrazine	AAtrex, Atratol	1.0 - 10.0 lbs	1	Soil		800
Bromacil	Hyvar X	3.0 - 6.0 lbs	1	Soil		3100
Chlorsulfuron	Glean	0.02 - 0.14 lb	1	Soil		1
Dicamba	Banvel, Weedmaster	0.25 - 2.0 lbs	1	Soil		380
Diuron	Karmex	1.0 - 10.0 lbs	1	Soil		100
Glyphosate	Roundup, Rodeo	0.5 - 12.0 lbs	1	Foliar		7600
Oryzalin	Surflan	1.0 - 4.0 lbs	1	Soil		4
Picloram	Tordon	0.25 - 1.5 lbs	1	Soil		380
Simazine	Princep	3.0 - 15.0 lbs	1	Soil		140
Sulfometuron	Oust	0.14 - 0.23 lb	1	Soil		190
Tebuthiuron	Spike	3.0 - 15.0 lbs	1	Soil		48
Triclopyr	Garlon	0.3 - 3.2 lbs	1	Foliar		200

RUTABAGAS

400 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Herbicides						
Glyphosate	Roundup	1.0 - 1.5 lbs	1	Foliar	320 (80%)	960
Insecticides						
Chlorpyrifos	Lorsban	0.05 - 1.0 lb/1000 ft	1	Soil	240 (60%)	24
Diazinon		- 0.5 lb	1	Foliar	160 (40%)	80
Fensulfothion	Dasanit	0.06 - 0.125 lb/1000 ft	1	Soil	80 (20%)	8
Mevinphos	Phosdrin	- 0.25 lb	1	Foliar	40 (10%)	10

RYE

3590 Acres

Counties Reporting 2 out of 9
Percent Acres Reported 30%

Herbicides						
2,4-D		0.5 - 1.0 lb	1	Foliar	990 (28%)	740
MCPA		- 0.75 lb	1	Foliar	51 (1%)	38
Insecticides						
Carboxin	Vitavax	1.5 - 2.25 oz/100 lb	1	Seed		70
Parathion		4.0 - 6.0 oz	1	Foliar	610 (17%)	190

SILAGE CORN

29020 Acres

Counties Reporting 16 out of 19
Percent Acres Reported 94%

Fungicides						
Captan	Captan (11.8% dust)	- 0.058 lb/100 lbs	1	Seed		130

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
2,4-D		0.5 - 0.75 lb	1	Foliar	5300 (18%)	3400
Alachlor	Lasso	2.0 - 4.0 lbs	1	Soil	9500 (33%)	29000
Atrazine	AAtrex	1.5 - 3.0 lbs	1 - 2	Soil	24000 (84%)	50000
Bentazon	Basagran	0.75 - 1.0 lb	1	Soil	27 (<1%)	27
Butylate	Sutan	3.0 - 6.0 lbs	1	Soil	1300 (5%)	5900
Cyanazine	Bladex	0.6 - 4.8 lbs	1	Soil	1300 (4%)	3900
Dinoseb		1.5 - 4.5 lbs	1	Soil	1500 (5%)	4600
EPTC	Eptam	3.0 - 6.0 lbs	1	Soil	2000 (7%)	8700
Glyphosate	Roundup	- 2% solution	1	Foliar	1300 (5%)	850
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	4000 (14%)	9400
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	400 (1%)	300
Vernolate	Vernam, Surpass	3.0 - 6.0 lbs	1	Soil	1900 (6%)	6800

Insecticides						
Carbaryl	Sevin	- 1.5 lbs	1 - 3	Foliar	27 (<1%)	40
Chlorpyrifos	Lorsban	0.5 - 1.0 lb	1	Foliar	4900 (17%)	3600
Fensulfothion	Dasanit	- 3.0 lbs	1	Soil	130 (<1%)	400
Fenvalerate	Pydrin	0.1 - 0.2 lb	1 - 2	Foliar	950 (3%)	190
Fonofos	Dyfonate	0.75 - 1.0 lb	1	Soil	9400 (32%)	9400
Methomyl	Lannate	0.45 - 0.9 lbs	1	Foliar	640 (2%)	430
Methyl parathion		- 1.0 lb	1 - 2	Foliar	540 (2%)	540
Parathion		- 0.5 lb	1 - 2	Foliar	1400 (5%)	1300
Phorate	Thimet	- 1.2 oz/1000 ft	1	Soil	480 (2%)	520

SNAP BEANS 22680 Acres

Fungicides						
Benomyl	Benlate	0.75 - 1.0 lb	1	Foliar	2800 (12%)	2500
Captan			1	Foliar	1400 (6%)	2100
Maneb		- 1.2 lbs	1	Foliar	17 (<1%)	20
Vinclozolin	Ronilan	1.0 - 2.0 lbs	1	Foliar	19000 (83%)	26000

Herbicides						
Dinoseb		3.0 - 6.0 lbs	1	Soil	8200 (36%)	37000
EPTC	Eptam	3.0 - 4.0 lbs	1	Soil	14000 (61%)	49000
Glyphosate	Roundup	- 33% solution	1	Foliar	9700 (43%)	9700
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	250 (1%)	760
Pendimethalin	Prowl	1.5 - 2.0 lbs	1	Soil	740 (3%)	1300
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	17000 (73%)	13000

Insecticides						
Carbaryl	Sevin	0.5 - 1.5 lbs	1	Foliar	17000 (75%)	17000
Chlorpyrifos	Lorsban	- 0.125 lb	1	Seed		2
Diazinon		0.5 - 0.75 lb	1	Foliar	2400 (11%)	1800
Dimethoate	Cygon	0.25 - 0.5 lb	1	Foliar	640 (3%)	240
Fonofos	Dyfonate	2.0 - 4.0 lbs	1	Soil	7900 (35%)	24000

SPINACH 145 Acres

Counties Reporting 2 out of 2
Percent Acres Reported 100%

Fungicides						
Maneb		- 1.5 lbs	1	Foliar	150 (103%)	220
Metalaxyl	Ridomil	0.5 - 1.0 lb	1	Foliar	65 (45%)	13

Herbicides						
Cycloate	Roneet	- 3.0 lbs	1	Soil	51 (35%)	150
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	44 (30%)	44
Propham	Chemhoe	- 4.5 lbs	1	Soil	36 (25%)	180

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Dimethoate	Cygon	- 0.25 lb	1	Foliar	12 (8%)	2
Endosulfan	Thiodan	- 1.0 lb	1	Foliar	87 (60%)	87
Permethrin	Ambush	0.1 - 0.2 lb	1	Foliar	20 (14%)	2

STRAWBERRIES

7695 Acres

Counties Reporting 11 out of 17
Percent Acres Reported 97%

Fumigant						
Dichloropropene	Telone II	223 - 335 lbs	1	Soil	370 (5%)	69000
Methyl bromide		- 300 lbs	1	Soil	72 (1%)	22000

Fungicides						
Benomyl	Benlate	- 0.5 lb	1 - 3	Foliar	4200 (54%)	2100
Captan		2.0 - 3.0 lbs	1 - 3	Foliar	6900 (89%)	14000
Copper		- 2.0 lbs	1	Foliar	1600 (20%)	3100
Dodine	Cyprex	- 1.3 lb	1	Foliar	560 (7%)	730
Sulfur		- 1.5 lbs	1	Foliar	200 (3%)	890
Thiram		- 2.5 lbs	1	Foliar	160 (2%)	400
Vinclozolin	Ronilan	1.5 - 2.0 lbs	1	Foliar	6200 (81%)	9500

Herbicides						
2,4-D		1.0 - 1.4 lbs	1	Foliar	280 (4%)	280
Chloroxuron	Tenoran	2.0 - 4.0 lbs	1	Soil	1800 (24%)	7300
Diphenamid	Enide	4.0 - 6.0 lbs	1	Soil	2200 (28%)	11000
Napropamide	Devrinol	- 4.0 lbs	1	Soil	6500 (85%)	26000
Paraquat	Gramoxone	- 0.5 lb	1	Foliar	290 (4%)	140
Simazine	Princep	- 1.0 lb	1	Soil	6700 (86%)	6800
Terbacil	Sinbar	0.45 - 1.12 lbs	1	Soil	280 (4%)	260

Insecticides						
Azinphos methyl	Guthion	- 0.5 lb	1	Foliar	1400 (18%)	690
Carbaryl	Sevin	1.0 - 2.0 lbs	1	Foliar	4500 (59%)	6900
Carbofuran	Furadan	1.0 - 2.0 lbs	1	Soil, foliar	3200 (41%)	6300
Carbophenothion	Trithion	- 0.5 lb	1	Soil	1600 (20%)	3100
Chlorpyrifos	Lorsban	- 1.0 lb	1	Foliar	1100 (14%)	1100
Cyhexatin	Plictran	0.5 - 1.0 lb	1 - 2	Foliar	8500 (110%)*	4300
Demeton	Systox	- 0.375 lb	1	Foliar	370 (5%)	140
Diazinon		- 0.5 lb	1	Foliar	1100 (14%)	600
Dicofol	Kelthane	0.7 - 1.0 lb	1 - 10	Foliar	2500 (32%)	1900
Disulfoton	Disyston	2.0 - 4.0 lbs	1	Foliar	180 (2%)	520
Endosulfan	Thiodan	0.5 - 1.0 lb	1	Foliar	5900 (77%)	4600
Fenbutatin	Vendex	1.0 - 1.5 lbs	1	Foliar	350 (5%)	390
Fenvalerate	Pydrin		1	Foliar	64 (1%)	32
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	1400 (18%)	2900
Malathion		2.0 - 3.0 lbs	1	Foliar	430 (6%)	850
Metaldehyde		0.8 - 1.6 lbs	1	Bait	1900 (24%)	1900
Naled	Dibrom	- 1.0 lb	1	Foliar	610 (8%)	610
Oil		7.0 - 2.50 lbs	1	Foliar	440 (6%)	4000
Oxydemeton methyl	Metasystox R	0.5 - 0.75 lb	1	Foliar	5500 (71%)	4100

SUGARBEET SEED CROP

4985 Acres

Counties Reporting 7 out of 9
Percent Acres Reported 97%

Fungicides						
Chlorothalonil	Bravo	1.0 - 2.0 lbs	1	Foliar	1100 (22%)	1800
Sulfur		3.0 - 12.0 lbs	1	Foliar	1600 (32%)	4800

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Herbicides						
Chlorpropham	Furloe	4.0 - 6.0 lbs	1	Soil	170 (3%)	440
Cycloate	Roneet	3.0 - 4.0 lbs	1	Soil	2500 (50%)	9400
Desmedipham	Betanex	0.37 - 0.6 lb	1	Foliar	270 (5%)	110
Endothall	Herbicide 273	0.75 - 1.5 lbs	1	Foliar	4800 (96%)	4900
Phenmedipham	Betanal	0.37 - 0.6 lb	1	Soil	2600 (52%)	1200
Pronamide	Kerb	0.5 - 1.0 lb	1	Soil	2500 (50%)	1900
Sethoxydim	Poast	0.09 - .50 lbs	1	Foliar	110 (2%)	31
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	300 (6%)	250

Insecticides						
Carbaryl	Sevin	1.0 - 1.5 lbs	1	Foliar	32 (1%)	47
Chlorpyrifos	Lorsban	0.75 - 2.0 lb	1 - 2	Foliar	1400 (27%)	1400
Fonofos	Dyfonate	1.0 - 1.5 lbs	1	Soil	690 (14%)	1300
Malathion	Malathion 57 EC	0.9 - 1.25 lbs	1	Foliar	22 (<1%)	22
Oxydemeton methyl	Metasystox R	0.375 - 0.75 lb	1	Foliar	260 (5%)	140

SUGARBEETS

13250 Acres

Counties Reporting 1 out of 1
Percent Acres Reported 100%

Fungicides						
Sulfur		3.0 - 12.0 lbs	1	Foliar	4300 (32%)	39000
Triadimefon	Bayleton	0.25 - 0.5 lb	1	Foliar	8400 (63%)	3200

Herbicides						
Cycloate	Roneet	3.0 - 4.0 lbs	1	Soil	10000 (75%)	36000
Desmedipham	Betanex	0.37 - 0.6 lb	1	Soil	6600 (50%)	3300
Endothall	Herbicide 273	0.75 - 1.5 lbs	1	Foliar	1500 (11%)	1500
Ethofumesate	Nortron	1.13 - 3.75 lbs	1	Soil	3200 (24%)	6300
Phenmedipham	Betanal	0.37 - 0.6 lb	1	Soil	4600 (35%)	2300
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	12000 (91%)	6000

Insecticides						
Fonofos	Dyfonate	1.0 - 1.5 lbs	1	Soil	1300 (10%)	1600
Phorate	Thimet	- 0.9 oz/1000 ft	1	Soil	4600 (35%)	5800
Terbufos	Counter	0.6 - 1.2 oz/1000 ft	1	Soil	6500 (49%)	4900

SWEET CORN

39310 Acres

Counties Reporting 13 out of 14
Percent Acres Reported 91%

Herbicides						
2,4-D		0.5 - 0.75 lb	1	Foliar	93 (<1%)	64
Alachlor	Lasso	2.0 - 4.0 lbs	1	Soil	15000 (39%)	47000
Atrazine	AAtrex	1.5 - 3.0 lbs	1 - 2	Soil	41000 (103%)*	84000
Bentazon	Basagran	0.75 - 1.0 lb	1	Soil	44 (<1%)	44
Butylate	Sutan	3.0 - 6.0 lbs	1	Soil	1700 (4%)	7200
Dinoseb		1.5 - 4.5 lbs	1	Soil	9600 (24%)	23000
EPTC	Eptam	3.0 - 6.0 lbs	1	Soil	4400 (11%)	15000
Glyphosate	Roundup	- 2% solution	1	Foliar	1100 (3%)	1100
Metolachlor	Dual	1.5 - 3.0 lbs	1	Soil	11000 (29%)	28000
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	920 (2%)	690
Propachlor	Ramrod	4.0 - 6.0 lbs	1	Soil	150 (<1%)	770
Vernolate	Surpass, Vernam	3.0 - 6.0 lbs	1	Soil	1500 (4%)	4900

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Carbaryl	Sevin	- 1.5 lbs	1 - 2	Foliar	1400 (3%)	2100
Chlorpyrifos	Lorsban	0.5 - 1.0 lb	1	Soil	9500 (24%)	7100
Fensulfothion	Dasanit	- 3.0 lbs	1	Foliar	170 (<1%)	500
Fenvalerate	Pydrin	0.1 - 0.2 lb	1 - 2	Foliar	1800 (4%)	320
Fonofos	Dyfonate	0.75 - 1.0 lb	1	Soil	20000 (51%)	21000
Methomyl	Lannate	0.45 - 0.9 lbs	1	Foliar	160 (<1%)	110
Methyl parathion		- 1.0 lb	1	Foliar	660 (2%)	660
Parathion		- 0.5 lb	1 - 2	Foliar	1900 (5%)	1900
Permethrin	Ambush	0.1 - 0.2 lbs	1 - 2	Foliar	180 (<1%)	18
Phorate	Thimet	- 1.2 oz/1000 ft	1	Soil	3 (<1%)	3

TABLE BEETS

1425 Acres

Counties Reporting 6 out of 8
Percent Acres Reported 96%

Fungicides						
Copper	COCS		1	Foliar	60 (4%)	120
Zineb			1	Foliar	130 (9%)	300

Herbicides						
Cycloate	Roneet	3.0 - 4.0 lbs	1	Soil	780 (55%)	2500
EPTC	Eptam	- 2.0 lbs	1	Soil	560 (39%)	1100
Glyphosate	Roundup	1.0 - 1.5 lbs	1	Foliar	10 (1%)	40
Pyrazon	Pyramin	- 4.0 lbs	1	Soil	1400 (95%)	5000

Insecticides						
B.T.	Dipel, Javelin	0.5 - 2.0 lbs	1	Foliar	25 (2%)	1
Carbaryl	Sevin	1.0 - 2.0 lbs	1	Foliar	1400 (96%)	2600
Diazinon		- 0.5 lb	1	Foliar	68 (5%)	34
Fonofos	Dyfonate	- 2.0 lbs	1	Soil	13 (1%)	25
Pyrethrum		- 0.1 lb	1	Foliar	10 (1%)	1

TOMATOES

390 Acres

Counties Reporting 5 out of 13
Percent Acres Reported 51%

Fungicides						
Captan		- 1.5 lbs	1	Foliar	48 (12%)	72
Chlorothalonil	Bravo	1.0 - 2.0 lbs	1	Foliar	36 (9%)	50
Copper			1	Foliar	40 (10%)	40
Maneb		- 1.5 lbs	1	Foliar	36 (9%)	55
Metalaxyl	Ridomil	- 0.2 lb	1	Foliar	25 (6%)	5
Sulfur			1	Foliar	40 (10%)	40
Zineb			1	Foliar	40 (10%)	40

Herbicides						
EPTC	Eptam		1	Soil	20 (5%)	60
Napropamide	Devrinol	1.0 - 2.0 lbs	1	Soil	48 (12%)	48
Trifluralin	Treflan	0.5 - 1.0 lb	1	Soil	75 (19%)	66

Insecticides						
B.T.	Dipel, Javelin	2.0 - 4.0 lbs	1	Foliar	79 (20%)	2
Carbaryl	Sevin		1	Foliar	40 (10%)	40
Diazinon			1 - 2	Foliar	80 (21%)	20
Dimethoate	Cygon	0.25 - 0.5 lb	1	Foliar	42 (11%)	7
Naled	Dibrom		1	Foliar	40 (10%)	40

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
VECTOR CONTROL						
Herbicides						
2,4-D			1	Foliar		8
Fluridone	Sonar 5P	- 1.5 lb	1	Foliar		6
Glyphosate	Roundup, Rodeo		1	Foliar		690
Oryzalin	Surflan		1	Soil		1
Sulfometuron	Oust		1	Soil		10
Insecticides						
Arosurf	Arosurf MSF	- 3.8 lb	1	Other		91
B.T.	Bactimos, Altosid, Tek...		1	Other		120
Chlorpyrifos			1	Other		78
Diazinon	Knox Out 2FM		1	Bait		2
Fenthion			1	Other		190
Malathion	Malathion ULV		1	Other		1500
Methoprene	Altosid	0.027 - 0.41 lb	1	Other		1
Methoxychlor			1	Other		300
Oil	Golden Bear Oil		1	Other		18000
Piperonyl butoxide		- 0.01 lb	1	Other		18
Pyrethrum	Pyrenone		1	Other		67
Resmethrin	Scourge	- 0.25 lb	1	Other		6
Temephos	Abate	- 0.1 lb	1	Other		1
Vertebrate Poison						
Brodifacoum	Talon, Talon Weatherblock	-	1	Bait		2
Cholecalciferol	Quick Mouse Seed	-	1	Bait		1
Diphacinone		-	1	Bait		2
Warfarin		-	1	Bait		1

VEGETABLE & FLOWER SEED CROP
8275 Acres

Counties Reporting 6 out of 13
Percent Acres Reported 34%

Fungicides						
Metalaxyl	Ridomil	0.5 - 1.0 lb	1	Foliar	250 (3%)	250
Sulfur		- 1.0 lb	1 - 5	Foliar	2300 (27%)	2300
Herbicides						
Dinoseb			1	Soil	750 (9%)	1500
Endothall	Herbicide 273	- 1.0 lb	1	Foliar	80 (1%)	80
Linuron	Lorox	0.75 - 1.5 lbs	1	Soil	960 (12%)	1200
Pronamide	Kerb	1.0 - 2.0 lbs	1	Soil	25 (<1%)	25
Trifluralin	Treflan	0.5 - 0.75 lb	1	Soil	1600 (19%)	1200
Insecticides						
Chlorpyrifos	Lorsban	1.0 - 2.25 lbs	1 - 2	Soil	94 (1%)	170
Diazinon		0.5 - 1.5 lb	1 - 2	Foliar	66 (1%)	66
Endosulfan	Thiodan		1	Foliar	56 (1%)	56
Fenvalerate	Pydrin	- 0.2 lb	1	Foliar	30 (<1%)	6
Fluvalinate	Spur	- 0.1 lb	1	Foliar	810 (10%)	81
Malathion		- 1.0 lb	1	Foliar	30 (<1%)	45
Metaldehyde		1.2 - 2.4 lbs	1	Bait	390 (5%)	750
Methamidophos	Monitor	- 1.0 lb	1	Foliar	800 (10%)	800
Oxydemeton methyl	Metasystox R	- 0.5 lb	1	Foliar	340 (4%)	340
Parathion		- 0.5 lb	1	Foliar	36 (<1%)	18
Trichlorfon	Dylox	1.0 - 1.5 lbs	1	Foliar	200 (2%)	300

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
WALNUTS		Counties Reporting 9 out of 10				
1818 Acres		Percent Acres Reported 98%				
Fungicides						
Copper		6.0 - 15 lbs	1 - 2	Foliar	1600 (88%)	23000
Herbicides						
2,4-D		1.0 - 2.0 lbs	1	Foliar	8 (<1%)	8
Glyphosate	Roundup	1.0 - 5.0 lbs	1 - 2	Foliar	1100 (58%)	2100
Napropamide	Devrinol	- 4.0 lbs	1	Soil	5 (<1%)	20
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	110 (6%)	55
Simazine	Princep	1.6 - 4.0 lbs	1	Soil	79 (4%)	230
Insecticides						
Diazinon		- 1.0 lb	1	Foliar	600 (33%)	600
Fenvalerate	Pydrin	- 0.6 lb	1 - 2	Foliar	310 (17%)	780
Malathion		1.0 - 1.5 lbs	1 - 2	Foliar	1700 (95%)	3100
Methiocarb	Mesurof	- 2.0 lbs	1 - 3	Foliar	60 (3%)	120
Phosalone	Zolone	0.75 - 1.5 lbs	1 - 2	Foliar	560 (31%)	1200
Vertebrate Poison						
Zinc phosphide		0.1 - 0.25 lb	1	Bait	24 (1%)	6

WHEAT		Counties Reporting 30 out of 30				
909900 Acres		Percent Acres Reported 100%				
Fungicides						
Benomyl	Benlate	0.5 - 1.0 lb	1 - 2	Foliar	100000 (11%)	61000
Captan	Captan 400		1	Seed		970
Mancozeb		- 1.6 lbs	1	Foliar	12000 (1%)	19000
Maneb		- 1.6 lbs	1	Foliar	12000 (1%)	19000
PCNB	Terrachlor, Terrazole,...	0.5 - 0.75 oz/bu	1	Seed		1900
Thiabendazole	Mertect, Mertect 340-F	0.25 - 0.7 lb	1	Foliar	9500 (1%)	5200
Thiophanate	Topsin M	0.5 - 1.0 lb	1	Foliar	5700 (1%)	3400
Thiram	Vitavax 200	0.035 - 0.05 lb/100 lbs	1	Seed		15000
Tilt	Tilt	- 0.25 lb	1	Foliar	200 (<1%)	50
Triadimefon	Bayleton	0.125 - 0.25 lb	1 - 1	Foliar	4700 (1%)	1800
Herbicides						
2,4-D	2,4-D, Curtail	0.5 - 1.0 lb	1	Foliar	320000 (36%)	240000
Assert	Assert	- 0.75 lb	1	Soil		210
Atrazine	AAtrax	- 0.8 lb	1	Soil		160
Bromoxynil	Buctril, Bronate	0.25 - 0.38 lb	1	Soil	97000 (11%)	29000
Chlorsulfuron	Glean, Finesse	0.1875 - 0.25 oz	1	Soil	190000 (21%)	6400
Clopyralid	Curtail	- 0.375 lb	1	Foliar	760 (<1%)	370
Dicamba	Banvel	1.0 - 3.0 oz	1	Soil	270000 (30%)	26000
Diclofop	Hoelon	0.75 - 1.25 lbs	1	Soil, foliar	120000 (13%)	120000
Difenzoquat	Avenge	0.63 - 1.0 lb	1	Soil	4900 (1%)	4200
Dinoseb		1.125 - 1.5 lbs	1	Foliar	500 (<1%)	750
Diuron	Karmex	- 1.6 lbs	1	Soil	140000 (16%)	220000
Glyphosate	Roundup	0.28 - 0.38 lbs	1	Foliar	51000 (6%)	27000
MCPA	Bronate, MCPA	0.5 - 1.0 lb	1	Foliar	200000 (22%)	120000
Metribuzin	Lexone, Sencor	0.25 - 0.5 lb	1	Soil	50000 (6%)	14000
Metsulfuron	Ally, Finesse	0.04 - 0.38 lb	1	Soil	29000 (3%)	99
Paraquat	Gramoxone	0.5 - 1.0 lb	1	Foliar	4100 (<1%)	1000
Picloram	Tordon, Tordon 22K	0.125 - 0.25 lb	1	Soil	670 (<1%)	160
Simazine	Princep	- 1.0 lb	1	Soil		190
Terbutryn	Igran	- 0.5 lb	1	Soil	6800 (1%)	4500
Triallate	Fargo	1.0 - 1.25 lbs	1	Soil	4100 (<1%)	4600

Common Name	Trade Name	Rate of Application (a.i.)	Times Applied	Type Treatment	--Treated-- Acres (%)	Pounds Used
Insecticides						
Carbaryl	Sevin	- 5% Bait	1	Foliar		28
Carboxin	Vitavax, Vitavax 200	1.5 - 2.25 oz/100 lbs	1	Seed		42000
Dimethoate	Cygon	- 0.375 lb	1	Foliar	8900 (1%)	3300
Disulfoton	Disyston	0.25 - 1.0 lb	1	Soil, foliar	19000 (2%)	17000
Lindane	Lindane 30C, Lindane 75%	0.01 - 0.025 lb	1	Seed		4800
Malathion		0.75 - 1.0 lb	1	Foliar	2700 (<1%)	2500
Metalaxyl	Apron	- 1.6 oz	1	Seed		8
Metaldehyde		1.2 - 4.0 lbs	1 - 2	Bait	12000 (1%)	41000
Parathion		4.0 - 6.0 oz	1 - 2	Foliar	2800 (<1%)	990

IV SUMMARY

A total of 199 active ingredients were tabulated in the 1987 pesticide survey. Pesticide use by class is tabulated in Table 2 and Figure 1. Fumigants are the largest single contributor to the estimates with about 35% of the use. This is followed by herbicides, insecticides, and fungicides.

The top ten pesticides used has changed since the 1981 survey. We have excluded wood preservatives (penta, creosote, CCA, ACA, ACC) and combined copper active ingredients (copper hydroxide, Bordeaux, tribasic copper) that were surveyed separately in the 1981 survey. Table 3 compares the 1981 survey with the 1987 survey. The 1987 top ten are listed in order of rank (left-hand column) while that of 1981 in the righthand column. Some of the 1981 top ten fell and they are listed under the dotted line.

Table 2 Pesticides Used in Oregon by Class, 1987

Pesticide Class	Lbs (a.i.)*	Percent of Total
Fumigants	5,590,000	34.8%
Herbicides	4,650,000	29.0%
Insecticides	3,220,000	20.0%
Fungicides	2,470,000	15.4%
Bactericides	57,000	<1%
Plant Growth Regulators	53,000	<1%
Desiccants	10,000	<1%
Vertebrate poisons	500	<1%
Total Survey Use	16,050,000	100%

* active ingredient

Table 3 Comparison of the Top Ten Pesticides Used, 1987

1987 Survey Top Ten			1981 Survey Top Ten	
Rank	Common Name	Lbs (a.i.)*	Rank	Lbs (a.i.)
#1	Metam sodium	3,850,000	#5	440,000
#2	Dichloropropene	1,630,000	#1	2,940,000
#3	Oil	1,410,000	#3	1,130,000
#4	2,4-D	830,000	#2	1,180,000
#5	Diuron	580,000	#4	530,000
#6	Atrazine	520,000	#12	290,000
#7	Calcium polysulfide	510,000	#47	45,000
#8	Sulfur	420,000	#8	360,000
#9	Copper	350,000	#14	220,000
#10	Glyphosate	340,000	#21	140,000
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#18	Dinoseb	140,000	#6	420,000
#12	EPTC	280,000	#7	400,000
#32	Captan	77,000	#9	320,000
#47	Bromoxynil	48,000	#10	310,000

* active ingredient

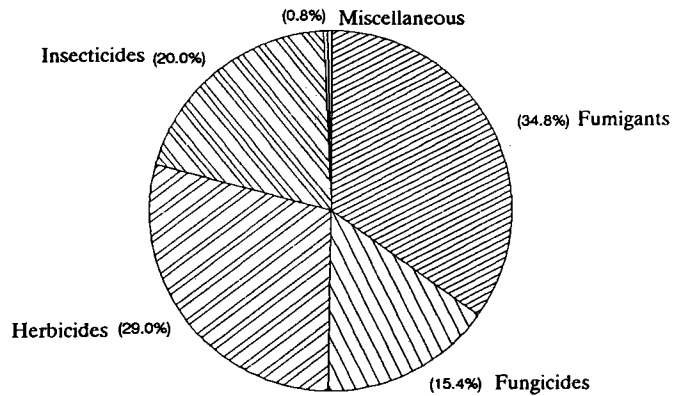


Figure 1 Pesticides Used in Oregon by Class, 1987

THE TOP TEN PESTICIDES

#1 Metam-sodium

Metam sodium (Vapam) use has risen 3,410,000 pounds since 1981. It is applied by sprinkler irrigation and controls a broad spectrum of weeds, insects, and diseases and is described as a soil fungicide, nematocide, and herbicide with fumigant action. It is used specifically to control nematodes and verticillium wilt. Rhone-Poulenc (Stauffer), the basic manufacturer, designated it as a fumigant and thereby it is called a fumigant in this report. Metam sodium is applied from about 140 to 190 lbs/acre on potato land several weeks (at least three) before planting. It is extensively used in the Columbia basin, but not in the Klamath basin in part because center pivot sprinkler irrigation is not used in the Klamath area.

#2 Dichloropropene

Dichloropropene use has declined 1,310,000 pounds since 1981. In Malheur county onion and potato land are treated with dichloropropene (Telone II). One treatment for pink root on onions for the 1987 growing year will also suffice for verticillium wilt in the same field for potatoes grown in 1988. This is because the diseases affecting potatoes and not the same as those affecting onions. Because of this, no treatment for the 1987 potato crop was needed. A small number of growers use Telone C17, a combination of dichloropropene and chloropicrin which is more efficacious on these diseases. Use on strawberries remained relatively stable at 69,000 pounds. Klamath county is the largest user of dichloropropene. Potatoes received about 970,000 pounds of it in 1987. In 1981 a mixture of dichloropropene and dichloropropane was sold by Shell as DD. DD and Telone II shared the market with Vapam until DD's registration was pulled. Metam sodium has not displaced dichloropropene in the Klamath basin because it is inconsistent, giving good control and poor control in fields in close proximity. This only underscores

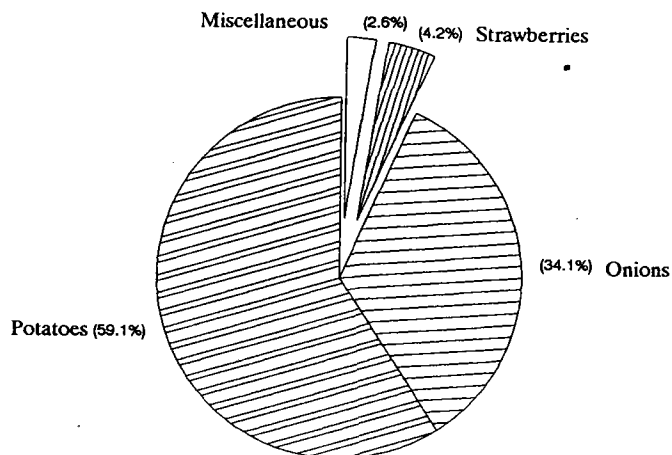


Figure 2 Use of Dichloropropene (Telone) in 1987

the reason alternative pesticides are necessary in agriculture. Mocap, a nematocide that in some cases can substitute for dichloropropene, is becoming more popular in this region.

#3 Oil

Oil is primarily dormant oil used on tree fruit for controlling scale and mites, but it can also be a mosquito ovacide. Oil which is used in formulating emulsifiable concentrates and other products is not counted in the survey. Use on tree fruits account for 87% which is up substantially from 1981.

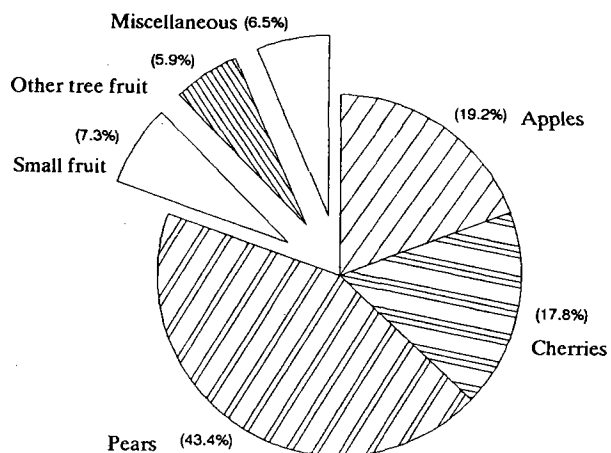


Figure 3 Use of Oil in 1987

Table 4 Top Ten Herbicides

Common Name	Pounds Used*	Ranking
2,4-D	830,000	#4
Diuron	580,000	#5
Atrazine	520,000	#6
Glyphosate	340,000	#10
EPTC	280,000	#12
Simazine	230,000	#13
MCPA	200,000	#14
Dinoseb	140,000	#18
Diclofop methyl	130,000	#24
Dicamba	110,000	#25

* active ingredient

Table 5 Top Ten Insecticides

Common Name	Pounds Used*	Ranking
Oil	1,400,000	#3
Chlorpyrifos	160,000	#16
Malathion	160,000	#17
Carbaryl	140,000	#19
Ethoprop	140,000	#21
Diazinon	130,000	#22
Fonofos	130,000	#23
Azinphos methyl	88,000	#28
Metaldehyde	79,000	#30
Phosmet	65,000	#36

* active ingredient

Table 6 Top Ten Fungicides

Common Name	Pounds Used*	Ranking
Calcium polysulfide	510,000	#7
Sulfur	420,000	#8
Copper	350,000	#9
Maneb	340,000	#11
Zineb	160,000	#15
Chlorothalonil	140,000	#20
Ziram	110,000	#26
Benomyl	79,000	#31
Captan	77,000	#32
Mancozeb	49,000	#44

* active ingredient

#4 2,4-D

In 1945, a few years after development, 2,4-D became available to a limited number of researchers in Oregon through the county agents. In July 1946, chemical dealers began selling larger quantities, formulated as dusts and emulsifiable concentrates, to the general public. It appears that in 1946 between 10,000 and 15,000 pounds were used on a trial basis for small grains, grass, and rights-of-way. By 1948, the second year of its commercial

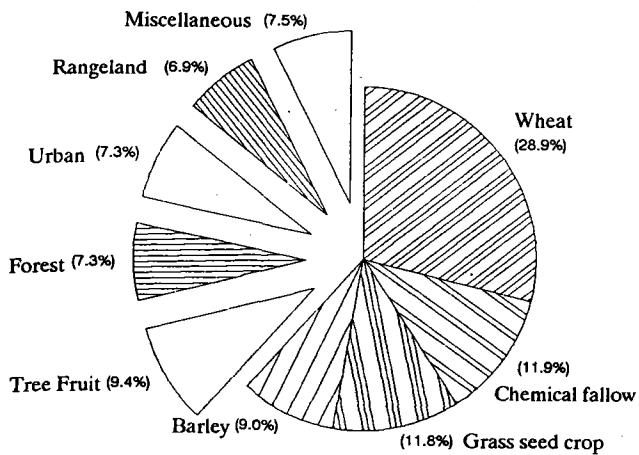


Figure 4 Use of 2,4-D in 1987

use, 400,000 acres were treated at about 1.0 lb/acre. Typically the earlier formulations of 2,4-D required higher rates. The soil sterilant, sodium chlorate, was displaced immediately. Previously it had been used extensively, 1,350,000 pounds in 1945 alone. Weeds at that time cost Oregon an estimated \$20,000,000 annually and control prior to 2,4-D often cost more than the land's value. With 2,4-D in conjunction with fertilizers, wheat yields increased an average of 30 to 50%. By the late 1950s over 1,300,000 pounds of 2,4-D were used annually.

2,4-D use statewide was 240,000 pounds less than use in 1981. This is partly a result of the shift in use caused by the introduction of the new sulfonylurea herbicides such as chlorsulfuron, metsulfuron, and sulfometuron. Low dosage sulfonylurea herbicides are relatively new to the

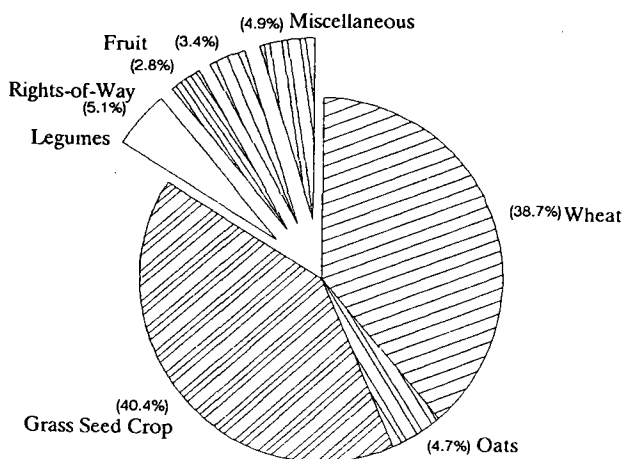


Figure 5 Use of Diuron in 1987

market. These herbicides are effective at less than one ounce per acre, and have displaced phenoxy herbicides to some extent as well as dicamba. They did not displace phenoxyes in the Willamette Valley because of their long soil residual, nor did they replace 2,4-D in the western portion of Umatilla County where peas are often alternated with wheat in crop rotation. As in the former case, pesticide carry over was a problem. Economically 2,4-D costs only about a \$1.00 an acre while the sulfonylureas cost over \$5.00 an acre. Chlorsulfuron (Glean) has reduced the use of 2,4-D on small grains in the dry land region. Use on small grains in 1981 was 720,000 lbs, but had dropped by 396,000 pounds to 324,000 pounds by 1987. Sulfometuron (Oust) on rights-of-way contributed to a decline in 2,4-D use from 67,000 pounds in 1981 to 9700 pounds in 1987. Whether this trend continues on rights-of-way will depend upon problems caused by Sulfometuron drift onto crop land.

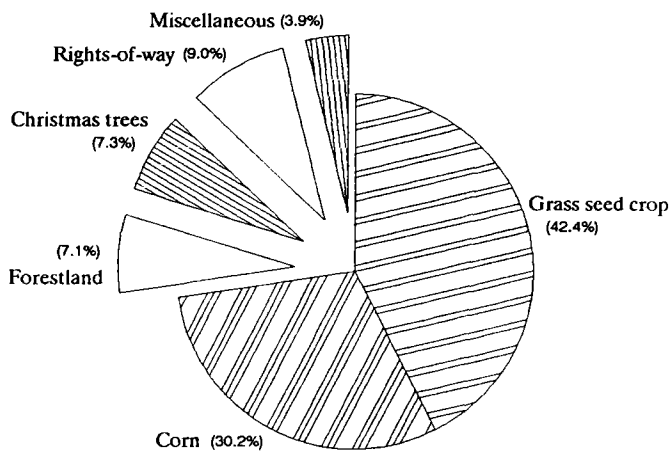


Figure 6 Use of Atrazine in 1987

#5 Diuron

Diuron (Karmex) controls a number of broadleaf weeds when applied before or after wheat emerges. In the Willamette Valley it may be applied during the winter, but in eastern Oregon because of the low rainfall, it is used infrequently. Diuron is a soil active herbicide and needs moisture to move it into the soil. Its use did not change appreciably statewide, but the proportion between grass seed crops and small grains changed. Diuron was applied to 75% of the wheat and 7% of the grass seed crop in 1981, but to 43% of small grains and 40% to grass seed crop in 1987.

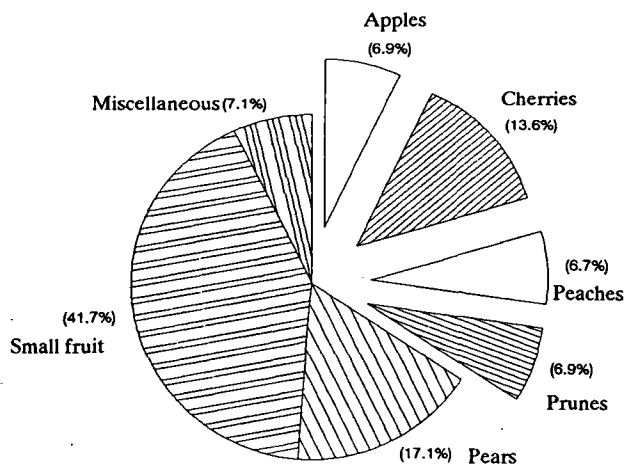


Figure 7 Use of Calcium polysulfide (lime sulfur) in 1987

#8 Sulfur

Sulfur use did not change appreciably statewide since 1981. The use on crops remained generally the same except use on cherries which was higher and on caneberries which was lower. Sulfur can be used as an insecticide for mites, but is primarily used as a fungicide for fruit brown rot.

#9 Copper

Copper is a fungicide used on a wide variety of ornamental plants as well as on stone fruit trees. Its use was tabulated differently in 1981. Then tribasic copper, copper hydroxide, and Bordeaux were separated, but in the 1987 survey they were combined. Use was up in 1987 with 78% used on tree fruits and nuts.

#10 Glyphosate

(Roundup) was used on 43 crops and sites. The largest uses were for chemical fallow land and Conservation Reserve Program lands, urban applications and small grains.

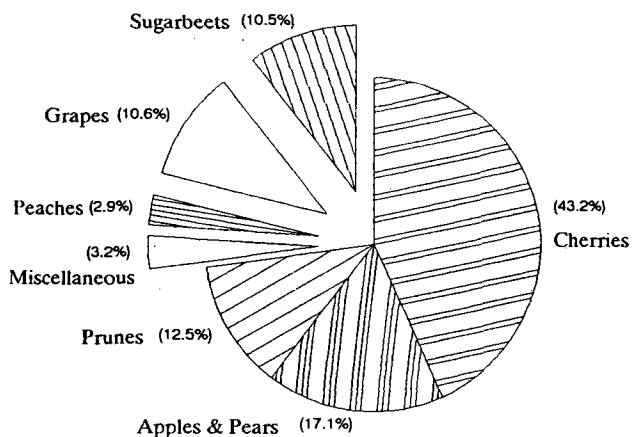


Figure 8 Use of Sulfur in 1987

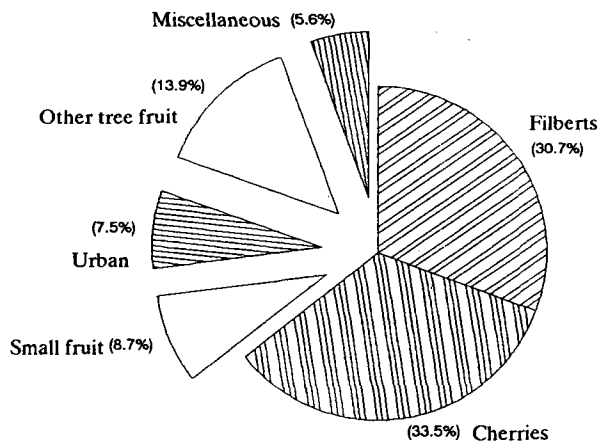


Figure 9 Use of Copper in 1987

#6 Atrazine

Atrazine (AAtrex) use was up 230,000 pounds from 1981. A total of 125,000 pounds more on grass seed crops were used in 1987 than in 1981. Use on corn also increased, but all other sites remained relatively the same. Others, like Christmas trees, were not included in the 1981.

#7 Calcium polysulfide

Calcium polysulfide (lime sulfur) is used in the spring almost entirely on fruits to control diseases like scab that effect the leaves and flowers. The 1981 survey did not include calcium polysulfide in all its fruit estimates due to an oversight. Blackberries received 35% of calcium polysulfide in 1987.

OTHER SELECTED PESTICIDES

The top ten pesticides perhaps are of greater interest, but other pesticides have had significant changes since 1981.

Captan (ranked #28) use has fallen which is probably due largely to the use of vinclozolin and metalaxyl.

The gypsy moth program has used B.T. (ranked #134) since 1984 with a large increase in 1985 and 1986. Dipel 8L formulation of *Bacillus thuringiensis* was used. This eight pounds per gallon is misleading because a gallon of active ingredient (spores) does not weigh 8 pounds. What is measured are billion international units (biu) and Dipel 8L contains 64 biu per gallon or 64 biu. This

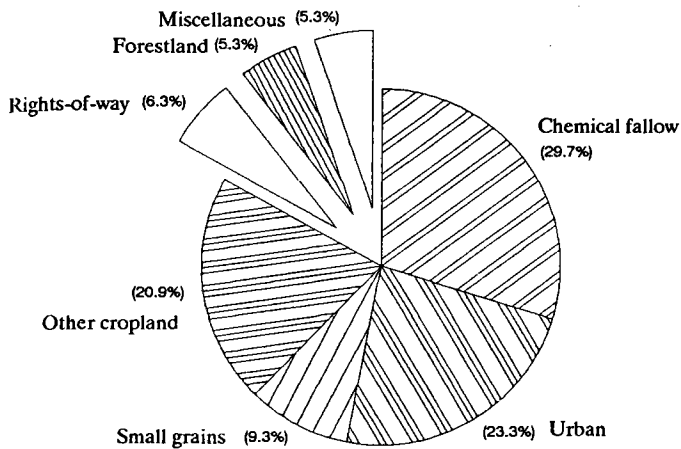


Figure 10 Use of Glyphosate in 1987

amounts to about 3.5% active ingredient and 96.5 inert ingredients per gallon. Another formulation used contained 48 biu per gallon. In 1987 the gypsy moth program applied 9000 gallons of B.T. which converted to pounds of active ingredient is 2520 pounds (9000 gal X 8 lbs/gal X 3.5%).

Aldicarb use declined from 140,000 to 44,000 pounds a response to its appearance in groundwater.

Nickel sulfate controlled stripe rust on grass, but was displaced by Tilt, a new fungicide. The amount of nickel sulfate used dropped from 100,000 to 3500 pounds. Tilt's use is 36,000 pounds, applied at a rate lower than nickel sulfate.

Benomyl controlled many diseases including white mold (sclerotinia) on snap beans. Vinclozolin (Ronilan) has displaced benomyl. In about 1981 vinclozolin came on the market, and by 1987, 83% of the snap beans were treated with it. In 1981, 45% of the snap beans were treated with benomyl, but only 12% in 1987. Because of its many crop registrations, overall benomyl use has remained relatively constant.

Bromoxynil use has dropped from 310,000 pounds in 1981 to 84,000 pounds in 1987. Perhaps the biggest reason for this decline is that it is being pulled from the market. We do not expect bromoxynil will be used in 1989.

Many dinoseb uses were cancelled do to its acute toxicity. Because of its usefulness as a premerge weed killer for many vegetable crops and as a desiccant for potato vines, 175,000 pounds were used in 1987. The 1981 usage was 423,000 pounds. None will be used in 1989.

Lindane, used as a wheat seed treatment, killed geese along the Columbia River. It is used now as a bark treatment for wood boring beetles. Its use dropped from 59,000 to 1460 pounds.

DCPA (Dacthal) is a herbicide used on onions at about 6 lbs/acre in Malheur county. Use has not changed since 1981 (50,000 lbs in 1981 and 48,000 lbs in 1987).

Several of pesticides were cancelled on part or all of their registered uses. Chlordane dropped to zero from 8,000 pounds, carbon tetrachloride dropped to zero from 150,000 pounds, carbon disulfide dropped to zero from 30,000 pounds, and toxaphene dropped to zero from 29,000 pounds. Carbon tetrachloride and carbon disulfide were the active ingredients in grain fumigants (Vertifume).

APPENDIX A

PESTICIDE USE ESTIMATES

Statewide Survey for 1987
Ranking by Common Name in Alphabetical Order

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
2,4,5-T	Esteron 99	470	DCPA	Dacthal	48000
2,4-D	Envy, Weedone 170, Kro...	830000	DNOC	Elgetol	3800
2,4-DB		5700	Dalapon	Dowpon, Dowpon M	30000
2,4-DP	Weedone 170, Diclorprop	4900	Daminozide	Alar	3100
Acephate	Orthene	32000	Demeton	Systox	10000
Alachlor	Lasso	93000	Desmedipham	Betanex	3400
Aldicarb	Temik	47000	Diazinon	Diazinon 14G, Knox Out...	130000
Aluminum phosphide	Gastoxin, Phostoxin	28000	Dicamba	Banvel, Trimec, Weedma...	110000
Amitraz	BAAM, Mitac	33000	Dichlobenil	Casoron, Casoron 4G	49000
Amitrole	Amizol, Cytrol, Amitro...	28000	Dichlone	Phygon, Kolo 100	560
Anilazine	Dyrene 50W	1800	Dichloropropene	Telone II	1630000
Arosurf	Arosurf MSF	91	Dichlorvos	DDVP	29
Assert	Assert	240	Diclofop	Hoelon	130000
Asulam	Asulox	20	Dicofol	Kelthane	8000
Atrazine	AAtrex, Atratol	520000	Difenzoquat	Avenge	5100
Azinphos methyl	Guthion, Guthion 50W	88000	Dimethoate	Cygon, Cygon 2.67 EC	25000
B.T.	Dipel, Javelin, Bactim...	2700	Dinocap	Karathane	1700
Barban	Carbyne	8	Dinoseb		140000
Bendiocarb	Ficam, Turcam	40	Diphacinone		2
Benefin	Balan	5300	Diphenamid	Enide	16000
Benomyl	Benlate	79000	Diquat	Diquat	24000
Bensulide	Betasan, Prefar	31000	Disulfoton	Disyston, Disyston 2G	47000
Bentazon	Basagran	2600	Diuron	Krovar I, Karmex, Dir...	580000
Bifenox	Modown	600	Dodine	Cyprex	38000
Brodifacoum	Talon, Talon Weatherblock	2	EPTC	Eptam, Eradicane	280000
Bromacil	Krovar I, Hyvar X	15000	Endosulfan	Thiodan	56000
Bromoxynil	Buctril, Bronate, Brom...	48000	Endothall	Herbicide 273	6400
Butylate	Sutan	30000	Esfenvalerate	Asana	42
Calcium polysulfide	Lime Sulfur	510000	Ethalfuralin	Sonalan	790
Captafol	Difolatan	3300	Ethephon	Ethrel, Cerone	1100
Captan	Captan (5% dust), Capt...	77000	Ethion	Ethion	12000
Carbaryl	Sevin	140000	Ethofumesate	Nortron	75000
Carbofuran	Furadan	28000	Ethoprop	Mocap, Mocap 10G	140000
Carbophenothion	Trithion	3100	Fenamiphos	Nemacur	7500
Carboxin	Vitavax, Vitavax 200	64000	Fenarimol	Rubigan	2
Chloramben	Amiben, Amiben G	5000	Fenbutatin	Vendex	2500
Chloropicrin	Telone C	4500	Fensulfothion	Dasanit	9100
Chlorothalonil	Bravo	140000	Fenthion		190
Chloroxuron	Tenoran	7500	Fenvalerate	Pydrin, Pydrin 2.4EC	33000
Chlorpropham	Furloe, Sprout-Nip	38000	Ferbam		2100
Chlorpyrifos	Lorsban, Lorsban 4E, R...	160000	Fluazifop	Fusilade	1900
Chlorsulfuron	Telar, Glean, Finesse	7100	Fluridone	Sonar 5P	6
Cholecalciferol	Quick Mouse Seed	1	Fluvalinate	Spur	84
Clopyralid	Curtail	380	Folpet		140
Copper	Citrine, Bordeaux, COC...	350000	Fonofos	Dyfonate, Dyfonate 10G	130000
Cyanazine	Bladex	10000	Formetanate	Carzol, Carzol 92SP	160
Cycloate	Roneet	48000	Fosamine	Krenite	11000
Cyhexatin	Plictran	25000	Gibberellic acid	Pro-Gibb 4%	80
Cypermethrin	Demon	29	Glyphosate	Roundup, Rodeo, Klecnu...	340000
DCNA	Botran	9500	Hexazinone	Velpar	54000

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Hydramethylnon	Maxforce	5	Phosalone	Zolone	24000
Hydroprene	Gencor	5	Phosmet	Imidan	65000
Imazapyr	Arsenal	160	Picloram	Tordon 22K, Tordon 10K...	7600
Iprodione	Chipco, Rovral	14000	Piperonyl butoxide		18
Lindane	Lindane 30C, Lindane 2...	7000	Prometon	Pramitol 25E, Pramitol...	560
Linuron	Lorox	2400	Pronamide	Kerb, Kerb 50W	52000
MCPA	Bronate, MCPA	200000	Propachlor	Ramrod	2800
MCPB	MCPB Sodium Salt	2200	Propargite	Comite, Omite	40000
MSMA	Bueno	5400	Propetamphos	Safrotin	66
Malathion	Malathion ULV, Cythion...	160000	Propham	Chemhoe	4700
Maleic hydrazide	Sprout-Stop	11000	Propoxur	Baygon	29
Mancozeb	Dithane M45, Fore, Man...	49000	Pyrazon	Pyramin	5000
Maneb	Dithane, Maneb Flowable	2340000	Pyrethrum	Pyrenone	2500
Mecoprop	Trimec	350	Resmethrin	Scourge	6
Mefluidide	Embark	84	Rotenone		120
Metalaxyl	Ridomil, Ridomil MZ58,...	6000	Sethoxydim	Poast	1600
Metaldehyde		79000	Simazine	Princep, Princep 80W, ...	230000
Metam sodium	Vapam	3850000	Sodium TCA	Sodium TCA	450
Methamidophos	Monitor	56000	Sodium chlorate	Pramitol 5PS, Monobor ...	1200
Methidathion	Supracide 2E	5100	Sodium metaborate	Monobor Chlorate, Pram...	2200
Methiocarb	Mesuroil	2900	Sodium polysulfide		2000
Methomyl	Lannate, Nudrin	5400	Streptomycin	Agri-strep	56000
Methoprene	Altosid	1	Strychnine	Orco Gopher Bait	360
Methoxychlor	Marlate	8900	Sulfometuron	Oust	2000
Methyl bromide		73000	Sulfur	That Big 8, Kolo 100	420000
Methyl parathion	Penncap M	8400	Tebuthiuron	Spike	170
Metolachlor	Dual	50000	Temephos	Abate	1
Metribuzin	Lexone, Sencor	68000	Terbacil	Sinbar	34000
Metsulfuron	Escort, Ally, Finesse	100	Terbufos	Counter	4900
Mevinphos	Phosdrin, Phosdrin 4EC	5100	Terbutryn	Igran	4400
Morestan		14000	Terramycin		110
NAA	NAA-200	600	Thiabendazole	Mertect, Mertect 340-F	6500
Naled	Dibrom	3600	Thiophanate	Topsin M, Tops 2.5 Dust	10500
Napropamide	Devrinol	83000	Thiram	Vitavax 200	26000
Naptalam		250	Tilt	Tilt	37000
Nickel sulfate		3500	Triadimefon	Bayleton	15000
Norflurazon	Solicam	600	Triallate	Fargo	11000
Oil	Golden Bear Oil, Super...	1400000	Trichlorfon	Dylox	1600
Oryzalin	Surflan	45000	Triclopyr	Garlon, Garlon 3A, Gar...	42000
Oxadiazon	Ronstar	870	Trifluralin	Treflan	49000
Oxamyl	Vydate, Vydate L	7400	Triforine	Funginex	2600
Oxydemeton methyl	Metasystox R	16000	Vernolate	Vernam, Surpass	12000
Oxyfluorfen	Goal	16000	Vinclozolin	Ronilan	36000
PCNB	Terrachlor, Terrazole,...	18000	Warfarin		1
Paraquat	Gramoxone	47000	Xylene	Cyclo Sol 31 Herbicide	37000
Parathion		32000	Zinc phosphide		130
Pendimethalin	Prowl	23000	Zinc sulfate	Zinc sulfate (36%)	7900
Permethrin	Ambush, Pounce	5300	Zineb	Dithane Z-78	160000
Phenmedipham	Betanal	3500	Ziram		110000
Phorate	Thimet, Thimet 20G, Ph...	24000			

APPENDIX B

PESTICIDE USE ESTIMATES

Statewide Survey for 1987
Ranking by Pounds Used in Descending Order

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
1 Metam sodium	Vapam	3850000	51 Paraquat	Gramoxone	47000
2 Dichloropropene	Telone II	1630000	52 Disulfoton	Disyston, Disyston 2G	47000
3 Oil	Golden Bear Oil, Sup...	1400000	53 Oryzalin	Surflan	45000
4 2,4-D	Envy, Weedone 170, K...	830000	54 Triclopyr	Garlon, Garlon 3A, Gar...	42000
5 Diron	Krovlar I, Karmex, Di...	580000	55 Propargite	Comite, Omite	40000
6 Atrazine	AAtrex, Atratol	520000	56 Chlorpropham	Furloc, Sprout-Nip	38000
7 Calcium polysulfide	Lime Sulfur	510000	57 Dodine	Cyprex	38000
8 Sulfur	That Big 8, Kolo 100	420000	58 Xylene	Cyclo Sol 31 Herbicide	37000
9 Copper	Citrine, Bordeaux, C...	350000	59 Tilt	Tilt	37000
10 Glyphosate	Roundup, Rodeo, Klee...	340000	60 Vinclozolin	Ronilan	36000
11 Maneb	Dithane, Maneb Flowa...	340000	61 Terbacil	Sinbar	34000
12 EPTC	Eptam, Eradicane	280000	62 Amitraz	BAAM, Mitac	33000
13 Simazine	Princep, Princep 80W...	230000	63 Fenvalerate	Pydrin, Pydrin 2.4EC	33000
14 MCPA	Bronate, MCPA	200000	64 Parathion		32000
15 Zineb	Dithane Z-78	160000	65 Acephate	Orthene	32000
16 Malathion	Malathion ULV, Cythi...	160000	66 Bensulide	Betasan, Prefar	31000
17 Chlorpyrifos	Lorsban, Lorsban 4E,...	160000	67 Dalapon	Dowpon, Dowpon M	30000
18 Dinoseb		140000	68 Butylate	Sutan	30000
19 Carbaryl	Sevin	140000	69 Carbofuran	Furadan	28000
20 Chlorothalonil	Bravo	140000	70 Amitrole	Amizol, Cytrol, Amitro...	28000
21 Ethoprop	Mocap, Mocap 10G	140000	71 Aluminum phosphide	Gastoxin, Phostoxin	28000
22 Diazinon	Diazinon 14G, Knox O...	130000	72 Thiram	Vitavax 200	26000
23 Fonofos	Dyfonate, Dyfonate 10G	130000	73 Cyhexatin	Plictran	25000
24 Diclofop	Hoelon	130000	74 Dimethoate	Cygon, Cygon 2.67 EC	25000
25 Dicamba	Banvel, Trimec, Weed...	110000	75 Phosalone	Zolone	24000
26 Ziram		110000	76 Diquat	Diquat	24000
27 Alachlor	Lasso	93000	77 Phorate	Thimet, Thimet 20G, Ph...	24000
28 Azinphos methyl	Guthion, Guthion 50W	88000	78 Pendimethalin	Prowl	23000
29 Napropamide	Devrinol	83000	79 PCNB	Terrachlor, Terrazole,...	18000
30 Metaldehyde		79000	80 Oxydemeton methyl	Metasystox R	16000
31 Benomyl	Benlate	79000	81 Diphenamid	Enide	16000
32 Captan	Captan (5% dust), Capt...	77000	82 Oxyfluorfen	Goal	16000
33 Ethofumesate	Nortron	75000	83 Triadimefon	Bayleton	15000
34 Methyl bromide		73000	84 Bromacil	Krovlar I, Hyvar X	15000
35 Metribuzin	Lexone, Sencor	68000	85 Morestan		14000
36 Phosmet	Imidan	65000	86 Iprodione	Chipco, Rovral	14000
37 Carboxin	Vitavax, Vitavax 200	64000	87 Vernolate	Vernam, Surpass	12000
38 Streptomycin	Agri-strep	56000	88 Ethion	Ethion	12000
39 Endosulfan	Thiodan	56000	89 Fosamine	Krenite	11000
40 Methamidophos	Monitor	56000	90 Maleic hydrazide	Sprout-Stop	11000
41 Hexazinone	Velpar	54000	91 Triallate	Fargo	11000
42 Pronamide	Kerb, Kerb 50W	52000	92 Thiophanate	Topsin M, Tops 2.5 Dust	10500
43 Metolachlor	Dual	50000	93 Demeton	Systox	10000
44 Mancozeb	Dithane M45, Fore, Man...	49000	94 Cyanazine	Bladex	10000
45 Dichlobenil	Casoron, Casoron 4G	49000	95 DCNA	Botran	9500
46 Trifluralin	Treflan	49000	96 Fensulfthion	Dasanit	9100
47 Bromoxynil	Buctril, Bronate, Brom...	48000	97 Methoxychlor	Marlate	8900
48 Cycloate	Roneet	48000	98 Methyl parathion	Penncap M	8400
49 DCPA	Dacthal	48000	99 Dicofol	Kelthane	8000
50 Aldicarb	Temik	47000	100 Zinc sulfate	Zinc sulfate (36%)	7900

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
101 Picloram	Tordon 22K, Tordon 10K...	7600	151 Sodium chlorate	Pramitol 5PS, Monobor ...	1200
102 Chloroxuron	Tenoran	7500	152 Ethephon	Ethrel, Cerone	1100
103 Fenamiphos	Nemacur	7500	153 Oxadiazon	Ronstar	870
104 Oxamyl	Vydate, Vydate L	7400	154 Ethalfuralin	Sonalan	790
105 Chlorsulfuron	Telar, Glean, Finesse	7100	155 Bifenox	Modown	600
106 Lindane	Lindane 30C, Lindane 2...	7000	156 NAA	NAA-200	600
107 Thiabendazole	Mertect, Mertect 340-F	6500	157 Norflurazon	Solicam	600
108 Endothall	Herbicide 273	6400	158 Prometon	Pramitol 25E, Pramitol...	560
109 Metalaxyl	Ridomil, Ridomil MZ58,...	6000	159 Dichlone	Phygon, Kolo 100	560
110 2,4-DB		5700	160 2,4,5-T	Esteron 99	470
111 MSMA	Bueno	5400	161 Sodium TCA	Sodium TCA	450
112 Methomyl	Lannate, Nudrin	5400	162 Clopyralid	Curtail	380
113 Benefin	Balan	5300	163 Strychnine	Orco Gopher Bait	360
114 Permethrin	Ambush, Pounce	5300	164 Mecoprop	Trimec	350
115 Difenzoquat	Avenge	5100	165 Naptalam		250
116 Methidathion	Supracide 2E	5100	166 Assert	Assert	240
117 Mevinphos	Phosdrin, Phosdrin 4EC	5100	167 Fenthion		190
118 Pyrazon	Pyramin	5000	168 Tebuthiuron	Spike	170
119 Chloramben	Amiben, Amiben G	5000	169 Imazapyr	Arsenal	160
120 2,4-DP	Weedone 170, Diclorprop	4900	170 Formetanate	Carzol, Carzol 92SP	160
121 Terbufos	Counter	4900	171 Folpet		140
122 Propham	Chemhox	4700	172 Zinc phosphide		130
123 Chloropicrin	Telone C	4500	173 Rotenone		120
124 Terbutryn	Igran	4400	174 Terramycin		110
125 DNOC	Elgetol	3800	175 Metsulfuron	Escort, Ally, Finesse	100
126 Naled	Dibrom	3600	176 Arosurf	Arosurf MSF	91
127 Nickel sulfate		3500	177 Mefluidide	Embark	84
128 Phenmedipham	Betanal	3500	178 Fluvalinate	Spur	84
129 Desmedipham	Betanex	3400	179 Gibberellic acid	Pro-Gibb 4%	80
130 Captafol	Difolatan	3300	180 Propetamphos	Safrotin	66
131 Daminozide	Alar	3100	181 Esfenvalerate	Asana	42
132 Carbophenothion	Trithion	3100	182 Bendiocarb	Ficam, Turcam	40
133 Methiocarb	Mesurof	2900	183 Dichlorvos	DDVP	29
134 Propachlor	Ramrod	2800	184 Cypermethrin	Demon	29
135 B.T.	Dipel, Javelin, Bactim...	2700	185 Propoxur	Baygon	29
136 Bentazon	Basagran	2600	186 Asulam	Asulox	20
137 Triforine	Funginex	2600	187 Piperonyl butoxide		18
138 Fenbutatin	Vendex	2500	188 Barban	Carbyne	8
139 Pyrethrum	Pyrenone	2500	189 Resmethrin	Scourge	6
140 Linuron	Lorox	2400	190 Fluridone	Sonar 5P	6
141 MCPB	MCPB Sodium Salt	2200	191 Hydroprene	Gencor	5
142 Sodium metaborate	Monobor Chlorate, Pram...	2200	192 Hydramethylnon	Maxforce	5
143 Ferbam		2100	193 Diphacinone		2
144 Sulfometuron	Oust	2000	194 Fenarimol	Rubigan	2
145 Sodium polysulfide		2000	195 Brodifacoum	Talon, Talon Weatherblock	2
146 Fluazifop	Fusilade	1900	196 Warfarin		1
147 Anilazine	Dyrene 50W	1800	197 Temephos	Abate	1
148 Dinocap	Karathane	1700	198 Methoprene	Altosid	1
149 Sethoxydim	Poast	1600	199 Cholecalciferol	Quick Mouse Seed	1
150 Trichlorfon	Dylox	1600			

APPENDIX C

PESTICIDE USE ESTIMATES

Countywide Survey for 1987
Ranking by County by Common Name in Alphabetical Order

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
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BAKER COUNTY

2,4-D		5600	EPTC	Eptam	2500
Alachlor	Lasso	240	Endosulfan	Thiodan	50
Aldicarb	Temik	330	Fosamine	Krenite	72
Amitrole	Amizol	22	Glyphosate	Roundup, Rodeo	610
Atrazine	AAtrex, Atratol	460	MCPA		2100
Barban	Carbyne	8	Mefluidide	Embark	2
Benomyl	Benlate	660	Methamidophos	Monitor	690
Bromacil	Krovar I	870	Metolachlor	Dual	60
Bromoxynil	Buctril	520	Metribuzin	Lexone, Sencor	1400
Captan	Captan (5% dust)	330	Naled	Dibrom	50
Carbaryl	Sevin	9600	Oxydemeton methyl	Metasystox R	60
Carbofuran	Furadan	100	Parathion		2200
Carboxin	Vitavax	990	Pendimethalin	Prowl	300
Chlorpropham	Furloe	50	Phosmet	Imidan	8400
Chlorsulfuron	Telar	3	Picloram	Tordon 22K	76
Demeton	Systox	120	Pronamide	Kerb	3200
Dicamba	Banvel	390	Propargite	Comite	110
Dichlobenil	Casoron	32	Simazine	Princep, Princep 80W	10000
Dimethoate	Cygon	50	Sulfometuron	Oust	13
Dinoseb		600	Triallate	Fargo	52
Diquat	Diquat	90	Trichlorfon	Dylox	20
Disulfoton	Disyston	340	Triclopyr	Garlon, Garlon 3A	320
Diuron	Krovar I	870	Trifluralin	Treflan	20

BENTON COUNTY

2,4-D	Envy, Weedone 170	19000	Cycloate	Roneet	4300
2,4-DP	Weedone 170	12	Cyhexatin	Plictran	5
Acephate	Orthene	150	DCPA	Dacthal	45
Alachlor	Lasso	7300	DNOC	Elgetol	30
Amitrole	Amizol	670	Demeton	Systox	96
Atrazine	AAtrex, Atratol	35000	Diazinon		2000
Azinphos methyl	Guthion	760	Dicamba	Banvel	4000
Benomyl	Benlate	2500	Dichlobenil	Casoron	580
Bensulide	Betasan	100	Diclofop	Hoelon	13000
Bromacil	Krovar I	160	Difenzoquat	Avenge	320
Butylate	Sutan	1400	Dimethoate	Cygon	840
Calcium polysulfide	Lime Sulfur	1800	Dinoseb		15000
Captan		960	Disulfoton	Disyston	100
Carbaryl	Sevin	3500	Diuron	Karmex, Krovar I	44000
Carboxin	Vitavax 200	3000	Dodine	Cyprex	490
Chloramben	Amiben	200	EPTC	Eptam	14000
Chlorothalonil	Bravo	25000	Endosulfan	Thiodan	630
Chlorpyrifos	Lorsban	8100	Endothall	Herbicide 273	1100
Chlorsulfuron	Telar, Glean	29	Ethofumesate	Nortron	7500
Copper		3800	Fenvalerate	Pydrin	10

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Fonofos	Dyfonate	3600	Phosmet	Imidan	1900
Fosamine	Krenite	28	Pronamide	Kerb	1300
Glyphosate	Roundup, Rodeo	4700	Propargite	Omite	570
Hexazinone	Velpar	5700	Pyrazon	Pyramin	600
MCPA		12000	Sethoxydim	Poast	24
Malathion		360	Simazine	Princep	7700
Mancozeb	Dithane M45	3300	Sodium polysulfide		220
Maneb		32000	Sulfometuron	Oust	12
Metaldehyde		400	Sulfur		4000
Methamidophos	Monitor	10	Terbacil	Sinbar	2100
Methiocarb	Mesuroil	90	Thiram	Vitavax 200	60
Methoxychlor	Marlate	100	Tilt	Tilt	4000
Metolachlor	Dual	12000	Triadimefon	Bayleton	570
Naled	Dibrom	73	Triallate	Fargo	250
Napropamide	Devrinol	890	Triclopyr	Garlon	2800
Nickel sulfate		1000	Trifluralin	Treflan	2800
Oil		1300	Triforine	Funginex	23
Oxydemeton methyl	Metasystox R	200	Vernolate	Vernam, Surpass	790
Oxyfluorfen	Goal	80	Vinclozolin	Ronilan	1300
Paraquat	Gramoxone	420	Zinc phosphide		20
Parathion		15	Zineb		230
Phosalone	Zolone	250	Ziram		180

CLACKAMAS COUNTY

2,4-D	Envy, Krovar I, Trimec...	5700	Dichlone	Phygon	20
2,4-DB		200	Dichloropropene	Telone II	13000
2,4-DP	Weedone 170	23	Dichlorvos	DDVP	5
Acephate	Orthene	250	Diclofop	Hoelon	580
Alachlor	Lasso	3700	Dicofol	Kelthane	360
Aluminum phosphide	Gastoxin	100	Difenzoquat	Avenge	56
Amitrole	Amizol	880	Dimethoate	Cygon	110
Arosurf	Arosurf MSF	2	Dinocap	Karathane	5
Atrazine	AAtrex, Atratol	12000	Dinoseb		9400
Azinphos methyl	Guthion	770	Diphenamid	Enide	3400
B.T.	Dipel, Javelin, Bactimos	47	Disulfoton	Disyston, Disyston 2G	410
Benomyl	Benlate	1000	Diuron	Karmex, Krovar I	7500
Bromacil	Krovar I	650	Dodine	Cyprex	340
Bromoxynil	Buctril	40	EPTC	Eptam	2400
Butylate	Sutan	520	Endosulfan	Thiodan	4200
Calcium polysulfide	Lime Sulfur	100000	Ethion	Ethion	120
Captan		3400	Ethofumesate	Nortron	200
Carbaryl	Sevin	17000	Fenamiphos	Nemacur	3600
Carbofuran	Furadan	1400	Fenbutatin	Vendex	50
Carbophenothion	Trithion	10	Fensulfothion	Dasanit	8
Carboxin	Vitavax, Vitavax 200	1900	Fenvalerate	Pydrin	150
Chloramben	Amiben	57	Ferbam		340
Chlorothalonil	Bravo	1300	Fluazifop	Fusilade	2
Chloroxuron	Tenoran	800	Folpet		40
Chlorpyrifos	Lorsban	2900	Fonofos	Dyfonate, Dyfonate 10G	6300
Chlorsulfuron	Telar, Glean	10	Fosamine	Krenite	1100
Copper		25000	Glyphosate	Roundup	4700
Cycloate	Roneet	140	Hexazinone	Velpar	1000
Cyhexatin	Plictran	1300	Hydramethylnon	Maxforce	1
Cypermethrin	Demon	5	Hydroprene	Gencor	1
Daminozide	Alar	30	Linuron	Lorox	45
Demeton	Systox	15	MCPA		2500
Diazinon		4900	Malathion		2100
Dicamba	Banvel, Trimec	530	Mancozeb		1200
Dichlobenil	Casoron	3000	Maneb	Dithane	1400

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Mecoprop	Trimec	16	Pronamide	Kerb	2800
Mefluidide	Embark	16	Propachlor	Ramrod	2000
Metalaxyl	Ridomil	540	Propargite	Omite	5
Metaldehyde		2900	Propetamphos	Safrotin	12
Methiocarb	Mesuroil	450	Propham	Chemhoe	130
Methomyl	Lannate	72	Propoxur	Baygon	5
Methoxychlor	Marlate	1100	Pyrazon	Pyramin	30
Methyl bromide		4500	Pyrethrum		56
Metolachlor	Dual	1400	Sethoxydim	Poast	50
Metribuzin	Lexone, Sencor	610	Simazine	Princep	5400
Mevinphos	Phosdrin	140	Sodium polysulfide		1600
Morestan		45	Sulfometuron	Oust	89
Naled	Dibrom	75	Sulfur		1700
Napropamide	Devrinol	12000	Terbacil	Sinbar	160
Oil	Golden Bear Oil	23000	Terramycin		54
Oryzalin	Surflan	510	Thiophanate	Topsin M	40
Oxadiazon	Ronstar	220	Thiram	Vitavax 200	60
Oxamyl	Vydate	54	Tilt	Tilt	250
Oxydemeton methyl	Metasystox R	700	Triadimefon	Bayleton	160
Oxyfluorfen	Goal	110	Triclopyr	Garlon	1200
PCNB	Terrachlor	4000	Trifluralin	Treflan	280
Paraquat	Gramoxone	1900	Triforine	Funginex	280
Parathion		230	Vernolate	Surpass, Vernam	790
Permethrin	Ambush, Pounce	27	Vinclozolin	Ronilan	1400
Phosalone	Zolone	9500	Zineb		230
Phosmet	Imidan	550	Ziram		360
Picloram	Tordon 10K	16			

CLATSOP COUNTY

2,4-D	Weedmaster, 2,4-D, Wee...	13000	Glyphosate	Roundup, Rodeo	1800
2,4-DP	Weedone 170	150	Hexazinone	Velpar	40
Amitrole	Amizol	800	Iprodione	Chipco	1000
Atrazine	AAtrex	80	Malathion		100
Bromacil	Krovar I	350	Maneb		60
Chlorothalonil	Bravo	45	Napropamide	Devrinol	90
Chlorpyrifos	Lorsban	80	Parathion		11
Chlorsulfuron	Telar	13	Picloram	Tordon 10K	22
Dalapon	Dowpon	44	Simazine	Princep	260
Dicamba	Weedmaster, Banvel	370	Sulfometuron	Oust	45
Dichlobenil	Casoron	82	Tebuthiuron	Spike	40
Diuron	Karmex, Krovar I	700	Thiram		1700
Endothall	Herbicide 273	6	Triadimefon	Bayleton	750
Fosamine	Krenite	510	Triclopyr	Garlon, Garlon 3A, Gar...	2000

COLUMBIA COUNTY

2,4-D	Weedone 170, 2,4-D	4500	Chlorothalonil	Bravo	400
2,4-DP	Weedone 170	110	Chlorpyrifos		78
Amitrole	Amizol	1100	Chlorsulfuron	Telar	1
Atrazine	AAtrex, Atratol	4500	Copper		630
Azinphos methyl	Guthion	42	Cyhexatin	Plictran	20
Benomyl	Benlate	170	Dalapon	Dowpon	440
Bromacil	Krovar I	93	Diazinon		530
Calcium polysulfide	Lime Sulfur	40	Dicamba	Banvel, Weedmaster	740
Captan		200	Dichlobenil	Casoron	220
Carbaryl	Sevin	240	Dichloropropene	Telone II	24000
Carbofuran	Furadan	46	Diclofop	Hoelon	600
Carboxin	Vitavax 200	170	Dicofol	Kelthane	20

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Difenzoquat	Avenge	50	Oxydemeton methyl	Metasystox R	200
Dinoseb		70	Picloram	Tordon	10
Diquat	Diquat	150	Pronamide	Kerb	300
Diuron	Karmex, Krovar I	1200	Pyrethrum		60
Dodine	Cyprex	14	Simazine	Princep	720
EPTC	Eptam	1100	Sodium chlorate	Monobor Chlorate	600
Endosulfan	Thiodan	550	Sodium metaborate	Monobor Chlorate	1400
Fenthion		190	Sulfometuron	Oust	8
Glyphosate	Roundup, Kleenup	8100	Sulfur		180
Hexazinone	Velpar	160	Terbacil	Sinbar	110
MCPA		900	Thiram	Vitavax 200	140
Malathion		400	Triclopyr	Garlon, Garlon 3A, Gar...	2200
Metalaxyl	Ridomil	20	Triforine	Funginex	30
Methiocarb	Mesurool	15	Vernolate	Vernam, Surpass	680
Napropamide	Devrinol	880	Vinclozolin	Ronilan	30
Oil		1100			

COOS COUNTY

2,4-D	Weedone 170	1600	Fosamine	Krenite	1000
2,4-DP	Weedone 170	24	Glyphosate	Roundup	910
Alachlor	Lasso	70	Malathion		780
Amitrole	Amizol	710	Maneb		2400
Atrazine	AAtrex, Atratul	1700	Metolachlor	Dual	70
Bromacil	Krovar I	180	Napropamide	Devrinol	3500
Chlorothalonil	Bravo	1800	Parathion		430
Chlorsulfuron	Telar	4	Picloram	Tordon 10K	2
Dichlobenil	Casoron	1600	Simazine	Princep	1200
Diphacinone		1	Sulfometuron	Oust	30
Diuron	Karmex, Krovar I	180	Triclopyr	Garlon	260
Fonofos	Dyfonate	40	Vernolate	Vernam, Surpass	200

CROOK COUNTY

2,4-D		5200	Dinoseb		1100
2,4-DB		220	Diquat	Diquat	35
Acephate	Orthene	1800	Diuron	Dirax 4L, Krovar I	1200
Aldicarb	Temik	1800	EPTC	Eptam	11000
Amitrole	Amizol	130	Ethoprop	Mocap	1700
Anilazine	Dyrene 50W	1800	Fosamine	Krenite	38
Atrazine	AAtrex, Atratul	1800	Glyphosate	Roundup, Rodeo	1900
Azinphos methyl	Guthion	5	Hexazinone	Velpar	6900
Benefin	Balan	160	MCPA		400
Bentazon	Basagran	140	Malathion		1000
Bromacil	Krovar I	680	Maneb		98
Bromoxynil	Buctril	570	Metam sodium	Vapam	12000
Captan		880	Methamidophos	Monitor	740
Carbofuran	Furadan	1800	Methomyl	Lannate, Nudrin	590
Carboxin	Vitavax 200	390	Metribuzin	Lexone, Sencor	1900
Chlorothalonil	Bravo	42	Napropamide	Devrinol	52
Chlorpyrifos	Lorsban	6600	Oxamyl	Vydate	1200
Chlorsulfuron	Telar, Glean	3	Oxydemeton methyl	Metasystox R	98
Copper	Cutrine	3000	Oxyfluorfen	Goal	570
Dalapon	Dowpon	50	PCNB	Terrachlor	41
Dicamba	Banvel	140	Paraquat	Gramoxone	630
Dichloropropene	Telone II	65000	Pendimethalin	Prowl	47
Diclofop	Hoelon	160	Permethrin	Ambush, Pounce	35
Dicofol	Kelthane	190	Propargite	Omite	4400
Dimethoate	Cygon	200	Simazine	Princep	1300

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Sodium TCA	Sodium TCA	350	Thiabendazole	Mertect	3
Strychnine		200	Thiram	Vitavax 200	640
Sulfometuron	Oust	22	Trifluralin	Treflan	16
Sulfur	That Big 8	100	Xylene	Cyclo Sol 31 Herbicide	37000
Terbacil	Sinbar	2400			

CURRY COUNTY

2,4-D		1000	Fosamine	Krenite	350
2,4-DP		200	Glyphosate	Roundup, Rodeo	1000
Acephate	Orthene	63	Hexazinone	Velpar	60
Amitrole	Cytrol, Amizol	730	Malathion		200
Atrazine	AAtrex, Atratol	1100	Maneb		600
Benomyl	Benlate	690	Napropamide	Devrinol	900
Bromacil	Krovar I, Hyvar X	520	Oil		1900
Carbofuran	Furadan	380	Oryzalin	Surflan	15
Chlorothalonil	Bravo	450	PCNB	Terrachlor	940
Copper	Bordeaux	11000	Paraquat	Gramoxone	60
Dicamba	Banvel	390	Parathion		110
Dichlobenil	Casoron	400	Picloram	Tordon, Tordon 10K	66
Dichloropropene	Telone II	22000	Simazine	Princep	720
Diuron	Karmex, Krovar I	830	Sulfometuron	Oust	29
Fenamiphos	Nemacur	880	Tebuthiuron	Spike	30
Ferbam		940	Tricopyr	Garlon	850

DESCHUTES COUNTY

2,4-D	Weedmaster	1200	EPTC	Eptam	3300
Acephate	Orthene	230	Ethoprop	Mocap	190
Aldicarb	Temik	700	Glyphosate	Roundup	1200
Atrazine	AAtrex, Atratol	870	Hexazinone	Velpar	3500
Azinphos methyl	Guthion	2	MCPA		210
Benefin	Balan	210	Malathion		180
Bentazon	Basagran	8	Maneb		11
Bromacil	Krovar I	230	Metam sodium	Vapam	1400
Bromoxynil	Buctril	130	Methamidophos	Monitor	280
Captafol	Difolatan	240	Methomyl	Lannate	8
Captan		250	Metolachlor	Dual	39
Carbofuran	Furadan	1000	Metribuzin	Sencor, Lexone	1100
Carboxin	Vitavax 200	140	Oxamyl	Vydate	130
Chlorothalonil	Bravo	6	PCNB	Terrazole	9
Chlorpyrifos	Lorsban	1000	Paraquat	Gramoxone	92
Dicamba	Banvel, Weedmaster	180	Picloram	Tordon	10
Dichlobenil	Casoron 4G	20	Pronamide	Kerb	240
Dichloropropene	Telone II	11000	Propargite	Omite	720
Diclofop	Hoelon	29	Sodium TCA	Sodium TCA	100
Dicofol	Kelthane	11	Strychnine		100
Dimethoate	Cygon	6	Terbacil	Sinbar	410
Dinoseb		150	Thiophanate	Topsin M	45
Diquat	Diquat	10	Thiram	Vitavax 200	230
Diuron	Krovar I	230			

DOUGLAS COUNTY

2,4-D	Esteron, Weedone 170, ...	13000	Alachlor	Lasso	60
2,4-DB		100	Amitraz	BAAM	140
2,4-DP	Diclorprop, Weedone 170	1100	Amitrole	Amizol	2100
Acephate	Orthene	28	Atrazine	AAtrex, Atratol	36000

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Azinphos methyl	Guthion	700	Glyphosate	Roundup	8900
Benomyl	Benlate	1400	Hexazinone	Velpar	4300
Bifenox	Modown	600	Imazapyr	Arsenal	140
Bromacil	Krovar I	710	MCPA		570
Calcium polysulfide	Lime Sulfur	20000	Malathion		870
Captan		1800	Mecoprop	Trimec	33
Carbaryl	Sevin	1600	Metalaxyl	Ridomil	270
Carboxin	Vitavax	220	Metam sodium	Vapam	320
Chlorothalonil	Bravo	1600	Methyl bromide		21000
Chloroxuron	Tenoran	80	Metribuzin	Lexone, Sencor	50
Chlorpyrifos	Lorsban	180	Napropamide	Devrinol	500
Chlorsulfuron	Telar, Glean	41	Oil		72000
Copper	COCS, Microcop	1500	Oxyfluorfen	Goal	140
Cyhexatin	Plictran	150	Paraquat	Gramoxone	190
DCNA	Botran	260	Phosalone	Zolone	50
Dalapon	Dowpon	25000	Phosmet	Imidan	310
Diazinon		1300	Picloram	Tordon	500
Dicamba	Banvel, Trimec	230	Pronamide	Kerb	350
Dichlobenil	Casoron	260	Propargite	Omite	60
Dichlone	Kolo 100	24	Simazine	Princep	7500
Diclofop	Hoelon	500	Sulfometuron	Oust	150
Dicofol	Kelthane	600	Sulfur	Kolo 100	8500
Dimethoate	Cygon	40	Tebuthiuron	Spike	80
Diphenamid	Enide	400	Terbacil	Sinbar	75
Diuron	Karmex, Krovar I	4600	Thiabendazole	Mertect	100
Dodine	Cyprex	1200	Thiram	Vitavax	30
EPTC	Eptam	300	Triadimefon	Bayleton	40
Endosulfan	Thiodan	64	Trichlorfon	Dylox	200
Fenvalerate	Pydrin	140	Triclopyr	Garlon, Garlon 3A, Gar...	11000
Ferbam		90	Trifluralin	Treflan	130
Fonofos	Dyfonate	50	Vinclozolin	Ronilan	50
Fosamine	Krenite	830	Ziram		90

GILLIAM COUNTY

2,4-D	Landmaster, 2,4-D, Wee...	110000	Glyphosate	Landmaster, Roundup	34000
2,4-DB		110	Hexazinone	Velpar	1200
Amitrole	Amizol	36	Lindane	Lindane 30C	75
Atrazine	AAtrex, Atratol	800	Malathion		200
Azinphos methyl	Guthion 50W	130	Methidathion	Supracide 2E	150
Bromacil	Krovar I	610	Metribuzin	Lexone, Sencor	1500
Carbaryl	Sevin	6	Mevinphos	Phosdrin 4EC	600
Carboxin	Vitavax 200	680	Oil	Superior oil	1900
Chlorpyrifos	Lorsban 4E, Reldane	500	Oxamyl	Vydate L	20
Chlorsulfuron	Glean	650	PCNB	Terrachlor	9500
DNOC	Elgetol	16	Paraquat	Gramoxone	750
Dicamba	Banvel, Weedmaster	6500	Parathion		13
Dichlobenil	Casoron 4G	26	Phosmet	Imidan	100
Diclofop	Hoelon	310	Picloram	Tordon	2000
Dinoseb		400	Pronamide	Kerb 50W	23
Diquat	Diquat	170	Sulfometuron	Oust	49
Diuron	Diuron 4L, Karmex, Kro...	710	Thiram	Vitavax 200	680
Endosulfan	Thiodan	80	Triadimefon	Bayleton	11
Fluvalinate	Spur	3	Trifluralin	Treflan	430
Formetanate	Carzol	12			

GRANT COUNTY

2,4,5-T	Esteron 99	470	2,4-D	Weedone 170	2700
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Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
2,4-DB		280	Fosamine	Krenite	32
2,4-DP	Weedone 170	51	Glyphosate	Roundup	250
Amitrole	Amizol	29	Hexazinone	Velpar	130
Atrazine	AAtrex, Atratul	1400	MCPA		110
Bromacil	Krovar I	230	Malathion		1200
Bromoxynil	Buctril	110	Metribuzin	Lexone, Sencor	15
Carbaryl	Sevin	200	PCNB	Terra-coat	50
Carboxin	Vitavax 200	200	Paraquat	Gramoxone	680
Chlorothalonil	Bravo	200	Picloram	Tordon	57
Chlorpyrifos	Lorsban	200	Simazine	Princep	200
Chlorsulfuron	Telar	1	Strychnine		6
Dicamba	Banvel	430	Tebuthiuron	Spike	10
Diclofop	Hoelon	60	Terbacil	Sinbar	450
Dimethoate	Cygon	20	Thiram	Vitavax 200	300
Diuron	Karmex, Krovar I	270	Triclopyr	Garlon 3A	23
EPTC	Eptam	60			

HARNEY COUNTY

2,4-D	Weedone 170	11000	Hexazinone	Velpar	1200
2,4-DP	Weedone 170	350	MCPA		70
Atrazine	AAtrex, Atratul	2700	Malathion		11000
Bromacil	Krovar I	240	Metribuzin	Sencor, Lexone	1000
Bromoxynil	Buctril	70	PCNB	Terra-coat	30
Carboxin	Vitavax, Vitavax 200	380	Picloram	Tordon 22K	29
Chlorsulfuron	Telar	1	Prometon	Pramitol 25E	480
Dicamba	Banvel	50	Pronamide	Kerb	21
Diclofop	Hoelon	40	Simazine	Princep	1600
Dimethoate	Cygon	17	Sulfometuron	Oust	17
Diuron	Krovar I	240	Thiram	Vitavax 200	140
Glyphosate	Roundup	540			

HOOD RIVER COUNTY

2,4-D	Weedone 170, 2,4-D	5100	Glyphosate	Roundup	2300
2,4-DP	Weedone 170	96	Malathion		1100
Amitraz	Mitac	16000	Methodathion	Supracide	1800
Amitrole	Amizol	930	Methyl parathion	Penncap M	40
Atrazine	AAtrex, Atratul	850	Morestan		11000
Azinphos methyl	Guthion	23000	NAA	NAA-200	420
Carbaryl	Sevin	6300	Oil		430000
Chlorpyrifos	Lorsban	1500	Oryzalin	Surflan	6200
Copper	Kocide 101	2300	Oxamyl	Vydate	1400
Cyhexatin	Plictran	13000	Paraquat	Gramoxone	2300
DNOC	Elgetol	3700	Parathion		2000
Dalapon	Dowpon	270	Phosalone	Zolone	1600
Diazinon		1500	Phosmet	Imidan	9200
Dicamba	Banvel	13	Simazine	Princep	7700
Dichlobenil	Casoron	170	Streptomycin	Agri-strep	16000
Dinocap	Karathane	1500	Sulfometuron	Oust	19
Diuron	Karmex, Direx	3300	Sulfur		56000
Dodine	Cyprex	8700	Terbacil	Sinbar	1000
Endosulfan	Thiodan	7200	Triadimefon	Bayleton	2700
Ethion		1100	Triclopyr	Garlon 4	420
Fenvalerate	Pydrin	12000	Ziram		57000
Fosamine	Krenite	460			

JACKSON COUNTY

2,4-D	Weedone 170, 2,4-D	3300	Fenvalerate	Pydrin	15000
2,4-DB		360	Fosamine	Krenite	240
2,4-DP	Weedone 170	230	Glyphosate	Roundup, Rodeo	670
Alachlor	Lasso	2500	MCPA		620
Amitraz	Mitac, BAAM	17000	Mecoprop		82
Amitrole	Amitrol T, Amizol	4200	Mefluidide	Embark	2
Atrazine	AAtrex, Atratol	2300	Methomyl	Lannate	330
Azinphos methyl	Guthion	13000	Metribuzin	Lexone, Sencor	920
Bromacil	Krovar I	120	Metsulfuron	Escort	2
Bromoxynil	Buctril	280	Morestan		2400
Calcium polysulfide	Lime Sulfur	84000	NAA	NAA-200	37
Captan		520	Oil		290000
Chlorpyrifos	Lorsban	190	Oryzalin	Surflan	6400
Chlorsulfuron	Telar	17	Oxamyl	Vydate	380
Copper	Kocide 606	1800	Parathion		80
Cycloate	Roneet	270	Phosalone	Zolone	380
Cyhexatin	Plictran	6000	Phosmet	Imidan	30000
Dalapon	Dowpon	73	Simazine	Princep	6400
Diazinon		760	Streptomycin	Agri-strep	40000
Dicamba	Banvel	100	Sulfometuron	Oust	59
Dichlobenil	Casoron	70	Sulfur		480
Dinoseb		410	Tilt		4
Diuron	Karmex, Krovar I	590	Triadimefon	Bayleton	140
Dodine	Cyprex	810	Trichlorfon	Dylox	80
EPTC	Eptam	8000	Triclopyr	Garlon, Garlon 3A, Gar...	860
Endosulfan	Thiodan	2300	Vernolate	Vernam, Surpass	440
Endothall	Herbicide 273	50	Ziram		49000
Ethofumesate	Nortron	110			

JEFFERSON COUNTY

2,4-D		18000	Diuron	Krovar I	180
2,4-DB		100	EPTC	Eptam	6400
Acephate	Orthene	6300	Ethoprop	Mocap 10G	3500
Aldicarb	Temik	5100	Fluazifop	Fusilade	300
Atrazine	AAtrex, Atratol	19	Fluvalinate	Spur	80
Bentazon	Basagran	540	Glyphosate	Roundup	10000
Bromacil	Krovar I	180	Hexazinone	Velpar	7000
Bromoxynil	Buctril	3300	Iprodione	Rovral	1500
Captafol	Difolatan	1800	Linuron	Lorox	1200
Captan	Captan (11.8% dust), C...	1700	MCPA		1800
Carbofuran	Furadan	3700	Malathion		1100
Carboxin	Vitavax 200	1300	Maneb		160
Chlorothalonil	Bravo	900	Metam sodium	Vapam	72000
Chlorpyrifos	Lorsban	1500	Methamidophos	Monitor	1900
Chlorsulfuron	Glean	70	Methidathion	Supracide	80
Cyanazine	Bladex	300	Methomyl	Lannate, Nudrin	1800
DCNA	Botran	1000	Methyl bromide		26000
Dicamba	Banvel	8800	Metribuzin	Lexone, Sencor	1400
Dichloropropene	Telone II	50000	Napropamide	Devrinol	480
Diclofop	Hoelon	620	Oxamyl	Vydate	2400
Dicofol	Kelthane	650	Oxydemeton methyl	Metasystox R	330
Dimethoate	Cygon	430	Oxyfluorfen	Goal	1100
Dinoseb		1800	PCNB	Terra-coat	430
Diquat	Diquat	380	Paraquat	Gramoxone	1600
Disulfoton	Disyston	230	Parathion		50

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Pendimethalin	Prowl	130	Thiophanate	Topsin M	590
Permethrin	Ambush, Pounce	590	Thiram	Vitavax 200	2500
Pronamide	Kerb	550	Tilt	Tilt	360
Propargite	Comite, Omite	16000	Triadimefon	Bayleton	180
Strychnine		2	Trichlorfon	Dylox	300
Sulfometuron	Oust	11	Trifluralin	Treflan	1100
Terbacil	Sinbar	8100			

JOSEPHINE COUNTY

2,4-D	Weedone 170, 2,4-D	1400	Fenvalerate	Pydrin	270
2,4-DP	Weedone 170	420	Fosamine	Krenite	260
Alachlor	Lasso	1600	Glyphosate	Roundup, Rodeo	830
Amitraz	Mitac, BAAM	300	Imazapyr	Arsenal	2
Amitrole	Amitrol T, Amizol	1200	MCPA		90
Asulam	Asulox	20	Mefluidide	Embark	8
Atrazine	AAtrex, Atratol	1400	Methomyl	Lannate	210
Azinphos methyl	Guthion	230	Metribuzin	Lexone, Sencor	210
Bromacil	Hyvar X, Krovar I	580	Morestan		40
Bromoxynil	Buctril	50	NAA	NAA-200	3
Calcium polysulfide	Lime Sulfur	1600	Oil		9600
Chlorpyrifos	Lorsban	20	Oryzalin	Surflan	130
Chlorsulfuron	Telar	2	Oxamyl	Vydate	30
Cyhexatin	Plictran	120	Parathion		6
Dalapon	Dowpon	230	Phosalone	Zolone	30
Diazinon		40	Phosmet	Imidan	580
Dicamba	Banvel	160	Simazine	Princep, Princep 4G	4700
Dichlobenil	Casoron	230	Streptomycin	Agri-strep	710
Diuron	Karmex, Krovar I	1200	Sulfometuron	Oust	54
Dodine	Cyprex	70	Triclopyr	Garlon, Garlon 3A, Gar...	650
EPTC	Eptam	1800	Vernolate	Vernam, Surpass	270
Endosulfan	Thiodan	34	Ziram		1000

KLAMATH COUNTY

2,4-D	Trimec, Weedone 170,	27000	Ethoprop	Mocap	11000
2,4-DP	Weedone 170	130	Fosamine	Krenite	68
Aldicarb	Temik	3900	Glyphosate	Roundup, Rodeo	940
Amitrole	Amitrol T, Amizol	3700	MCPA		1000
Atrazine	AAtrex, Atratol	1200	Malathion		8500
Bromacil	Krovar I	2200	Mancozeb	Dithane M45	11000
Bromoxynil	Buctril	450	Maneb		14000
Captan	Captan (5% dust)	5100	Mecoprop	Trimec	10
Carbofuran	Furadan	2200	Methamidophos	Monitor	8900
Carboxin	Vitavax 200	4500	Metribuzin	Lexone, Sencor	10000
Chlorothalonil	Bravo	5500	Parathion		3100
Chlorpyrifos	Lorsban	6400	Phosmet	Imidan	1500
Chlorsulfuron	Telar	6	Picloram	Tordon 22K, Tordon 10K	450
Dicamba	Banvel, Trimec	1300	Pronamide	Kerb	6500
Dichlobenil	Casoron 4G	60	Simazine	Princep	10000
Dichloropropene	Telone II	780000	Sulfometuron	Oust	78
Dimethoate	Cygon	3600	Thiabendazole	Mertect 340-F	100
Disulfoton	Disyston	2900	Thiophanate M	Tops 2.5 Dust	500
Diuron	Krovar I	590	Thiram	Vitavax 200	2500
EPTC	Eptam	21000	Triclopyr	Garlon, Garlon 3A, Gar...	130

LAKE COUNTY

2,4-D	Weedone 170	2900	Fosamine	Krenite	40
2,4-DP	Weedone 170	4	Glyphosate	Roundup	280
Amitrole	Amizol	30	Hexazinone	Velpar	1000
Atrazine	AAtrex, Atratol	810	Malathion		9300
Bromacil	Krovar I	350	Metribuzin	Lexone, Sencor	63
Carbaryl	Sevin	130	Picloram	Tordon, Tordon 10K	590
Chlorsulfuron	Telar	2	Propargite	Comite	220
Dicamba	Banvel D	50	Simazine	Princep	1000
Diclofop	Hoelon	380	Sulfometuron	Oust	53
Diuron	Krovar I	350	Terbacil	Sinbar	500

LANE COUNTY

2,4-D	Envy, Trimec, Banvel 720,	47000	Diquat	Diquat	1400
2,4-DP	Weedone 170	20	Disulfoton	Disyston 2G	1200
Acephate	Orthene	5600	Diuron	Karmex, Krovar I	36000
Alachlor	Lasso	3900	Dodine	Cyprex	2300
Amitrole	Amizol	1000	EPTC	Eptam	8000
Atrazine	AAtrex, Atratol	34000	Endosulfan	Thiodan	250
Azinphos methyl	Guthion	3000	Endothall	Herbicide 273	710
B.T.	Dipel, Javelin	2	Ethephon	Ethrel	63
Bendiocarb		40	Ethofumesate	Nortron	6000
Benomyl	Benlate	2900	Fenbutatin	Vendex	290
Bensulide	Prefar	250	Fenvalerate	Pydrin	170
Bentazon	Basagran	470	Ferbam		470
Bromacil	Krovar I	510	Fonofos	Dyfonate, Dyfonate 10G	20000
Bromoxynil	Buctril	350	Glyphosate	Roundup	19000
Butylate	Sutan	1200	Hexazinone	Velpar	530
Calcium polysulfide	Lime Sulfur	23000	Hydramethylnon	Maxforce	1
Captan		12000	Hydroprene	Gencor	1
Carbaryl	Sevin	18000	Iprodione	Rovral	120
Carbofuran	Furadan	1200	Linuron	Lorox	510
Carboxin	Vitavax	1900	MCPA		12000
Chloramben	Amiben	60	Malathion		350
Chlorothalonil	Bravo	6400	Mancozeb		3200
Chloroxuron	Tenoran	190	Maneb	Dithane	41000
Chlorpyrifos	Lorsban	13000	Mecoprop	Trimec	30
Chlorsulfuron	Telar, Glean	10	Metaldehyde		3900
Copper	COCS	5300	Methiocarb	Mesuroil	60
Cycloate	Roneet	2700	Methomyl	Lannate, Nudrin	170
Cyhexatin	Plictran	220	Methoxychlor	Marlate	100
Cypermethrin	Demon	5	Methyl bromide		570
DCNA	Botran	210	Metolachlor	Dual	2600
Dalapon	Dowpon	50	Mevinphos	Phosdrin	86
Daminozide	Alar	15	Morestan		20
Diazinon		15000	Napropamide	Devrinol	3000
Dicamba	Banvel, Trimec, Banvel...	5500	Nickel sulfate		500
Dichlobenil	Casoron	3500	Oil	Superior oil	40000
Dichlone	Kolo 100	190	Oryzalin	Surflan	1200
Dichlorvos	DDVP	5	Oxamyl	Vydate	530
Diclofop	Hoelon	9000	Oxydemeton methyl	Metasystox R	340
Dicofol	Kelthane	360	Oxyfluorfen	Goal	15
Difenzoquat	Avenge	400	Paraquat	Gramoxone	6700
Dimethoate	Cygon	1300	Parathion		30
Dinocap	Karathane	30	Permethrin	Pounce, Ambush	3
Dinoseb		9400	Phenmedipham	Betanal	230

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Phosmet	Imidan	630	Sulfur	Kolo 100	12000
Picloram	Tordon	25	Terbacil	Sinbar	6000
Pronamide	Kerb	970	Tilt	Tilt	4100
Propargite	Omite, Comite	2500	Triadimefon	Bayleton	610
Propetamphos	Safrotin	12	Triallate	Fargo	130
Propoxur	Baygon	5	Triclopyr	Garlon	2400
Pyrazon	Pyramin	2200	Trifluralin	Treflan	2300
Pyrethrum		290	Vinclozolin	Ronilan	1600
Simazine	Princep	18000	Zineb		110
Sulfometuron	Oust	78	Ziram		510

LINCOLN COUNTY

2,4-D	Trimec	13000	Iprodione	Chipco	1
Amitrole	Amizol	920	Mancozeb	Fore	15
Atrazine	AAtrex, Atratul	4500	Mecoprop	Trimec	30
Chlorsulfuron	Telar, Glean	2	PCNB	Quintozene	160
Dicamba	Banvel, Trimec	250	Picloram	Tordon, Tordon 10K	47
Dichlobenil	Casoron	170	Sulfometuron	Oust	25
Diuron	Karmex	210	Sulfur		80
Fenarimol	Rubigan	2	Thiophanate	Topsin M	22
Fosamine	Krenite	120	Thiram		10
Glyphosate	Roundup	1900	Triadimefon	Bayleton	15
Hexazinone	Velpar	500	Triclopyr	Garlon	1400

LINN COUNTY

2,4-D	Envy, Trimec, Weedone 170	79000	Dimethoate	Cygon	4700
2,4-DP	Weedone 170	18	Dinoseb		16000
Alachlor	Lasso	8300	Disulfoton	Disyston	90
Amitrole	Amizol	1100	Diuron	Karmex, Krovar I	160000
Atrazine	AAtrex, Atratul	140000	Dodine	Cyprex	610
Azinphos methyl	Guthion	1400	EPTC	Eptam	17000
B.T.	Dipel, Javelin	1	Endosulfan	Thiodan	46
Benomyl	Benlate	4500	Endothall	Herbicide 273	550
Bensulide	Betasan	700	Ethofumesate	Nortron	45000
Bromacil	Krovar I	290	Fenvalerate	Pydrin	22
Bromoxynil	Buctril	1100	Fonofos	Dyfonate	11000
Butylate	Sutan	2000	Fosamine	Krenite	60
Calcium polysulfide	Lime Sulfur	2100	Glyphosate	Roundup	17000
Captan		1700	Hexazinone	Velpar	1400
Carbaryl	Sevin	4500	MCPA		19000
Carboxin	Vitavax	4100	Malathion		370
Chloramben	Amiben	240	Mancozeb	Dithane M45	8100
Chlorothalonil	Bravo	21000	Maneb		80000
Chlorpyrifos	Lorsban	25000	Mecoprop	Trimec	26
Chlorsulfuron	Telar, Glean	38	Mefluidide	Embark	4
Copper		7200	Metalddehyde		340
Cycloate	Roneet	2200	Methamidophos	Monitor	130
Cyhexatin	Plictran	6	Methiocarb	Mesuroil	140
DCPA	Dacthal	320	Methomyl	Lannate, Nudrin	20
DNOC	Elgetol	33	Methoxychlor	Marlate	200
Dalapon	Dowpon	74	Metolachlor	Dual	9500
Demeton	Systox	9	Mevinphos	Phosdrin	30
Diazinon		5500	Naled	Dibrom	77
Dicamba	Banvel, Trimec	21000	Napropamide	Devrinol	1600
Dichlobenil	Casoron	1600	Nickel sulfate		1500
Diclofop	Hoelon	16000	Oil		1500
Difenzoquat	Avenge	400	Oryzalin	Surflan	30

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Oxydemeton methyl	Metasystox R	990	Terbacil	Sinbar	6000
Paraquat	Gramoxone	2900	Tilt	Tilt	25000
Parathion		30	Triadimefon	Bayleton	1600
Phosalone	Zolone	370	Triallate	Fargo	380
Phosmet	Imidan	490	Triclopyr	Garlon	3400
Picloram	Tordon, Tordon 10K	320	Trifluralin	Treflan	2300
Pronamide	Kerb	2100	Triforine	Funginex	42
Propargite	Omite	78	Vernolate	Vernam, Surpass	2400
Pyrazon	Pyramin	450	Vinclozolin	Ronilan	1600
Simazine	Princep	40000	Zinc phosphide		28
Sodium polysulfide		250	Zineb		250
Sulfometuron	Oust	71	Ziram		260
Sulfur		5000			

MALHEUR COUNTY

2,4-D	Trimec, Weedone 170,	21000	Ethofumesate	Nortron	6300
2,4-DB		1800	Ethoprop	Mocap 10G	9300
2,4-DP	Weedone 170	12	Fensulfothion	Dasanit	8200
Alachlor	Lasso	9800	Fonofos	Dyfonate	1600
Aldicarb	Temik	12000	Glyphosate	Roundup	200
Amitrole	Amizol	43	Hexazinone	Velpar	1800
Atrazine	AAtrex, Atratol	4600	MCPA	Bronate, MCPA	11000
Azinphos methyl	Guthion	8100	Malathion		24000
Benefin	Balan	4900	Mancozeb	Dithane M45, Manzate 200	16000
Bensulide	Prefar	28000	Maneb		1500
Bentazon	Basagran	34	Mecoprop	Trimec	29
Bromacil	Krovlar I	660	Metalaxyl	Ridomil	960
Bromoxynil	Bronate, Buctril, Brom...	4000	Methamidophos	Monitor	2100
Butylate	Sutan	1600	Methidathion	Supracide	490
Captan	Captan 5% Dust, Captan...	2600	Methyl parathion		6400
Carbofuran	Furadan	6500	Metolachlor	Dual	6400
Chloropicrin	Telone C	4300	Metribuzin	Sencor, Lexone	4900
Chlorothalonil	Bravo	9000	Mevinphos	Phosdrin	650
Chlorpropham	Furloe	2600	Naled	Dibrom	2600
Chlorpyrifos	Lorsban	1000	Oxydemeton methyl	Metasystox R	2400
Chlorsulfuron	Telar	2	Oxyfluorfen	Goal	5500
Cycloate	Roneet	36000	Paraquat	Gramoxone	200
DCPA	Dacthal	40000	Parathion		5000
Demeton	Systox	8300	Pendimethalin	Prowl	4200
Desmedipham	Betanex	3300	Phenmedipham	Betanal	2300
Diazinon	Diazinon 14G	57	Phorate	Thimet	11000
Dicamba	Banvel, Trimec	320	Pronamide	Kerb	260
Dichlobenil	Casoron 4G	10	Propargite	Comite	6000
Dichloropropene	Telone II	560000	Simazine	Princep	1300
Diclofop	Hoelon	1600	Sulfometuron	Oust	27
Dicofol	Kelthane	120	Sulfur		39000
Dimethoate	Cygon	3000	Terbacil	Sinbar	550
Diquat	Diquat	4600	Terbufos	Counter	4900
Disulfoton	Disyston	650	Thiabendazole	Mertect 340-F	400
Diuron	Krovlar I	660	Thiophanate	Tops 2.5 Dust	1100
EPTC	Eptam	20000	Triadimefon	Bayleton	3200
Endosulfan	Thiodan	2500	Trichlorfon	Dylox	980
Endothall	Herbicide 273	1500	Triclopyr	Garlon 3A	47
Ethion	Ethion	11000	Trifluralin	Treflan	16000

MARION COUNTY

2,4-D	Envy, Trimec, Weedone ...	57000	Fluazifop	Fusilade	380
2,4-DB		300	Fonofos	Dyfonate	56000
2,4-DP	Weedone 170	160	Formetanate	Carzol	55
Acephate	Orthene	6300	Fosamine	Krenite	1400
Alachlor	Lasso	30000	Glyphosate	Roundup, Rodeo	27000
Amitrole	Amizol	590	Hexazinone	Velpar	570
Atrazine	AAtrex, Atratol	110000	Hydramethylnon	Maxforce	1
Azinphos methyl	Guthion	9600	Hydroprene	Gencor	1
B.T.	Dipel, Javelin	18	Iprodione	Rovral	830
Benomyl	Benlate	9500	Lindane		110
Bensulide	Prefar	200	Linuron	Lorox	450
Bentazon	Basagran	230	MCPA		24000
Brodifacoum	Talon	1	Malathion	Malathion ULV	5600
Bromacil	Krovar I	130	Maleic hydrazide		6300
Bromoxynil	Buctril	1300	Maneb	Dithane	100000
Butylate	Sutan	4500	Mecoprop	Trimec	49
Calcium polysulfide	Lime Sulfur	53000	Metalaxyl	Ridomil	1400
Captan		9000	Metaldehyde		27000
Carbaryl	Sevin	26000	Methamidophos	Monitor	910
Carbofuran	Furadan	760	Methiocarb	Mesurool	410
Carbophenothion	Trithion	3000	Methomyl	Lannate, Nudrin	1700
Carboxin	Vitavax 200	5000	Methoxychlor	Marlate	1200
Chloramben	Amiben	600	Methyl bromide		450
Chlorothalonil	Bravo	26000	Metolachlor	Dual	12000
Chloroxuron	Tenoran	2400	Metribuzin	Lexone, Sencor	710
Chlorpropham	Furloe	1000	Mevinphos	Phosdrin	1400
Chlorpyrifos	Lorsban	28000	Naled	Dibrom	200
Chlorsulfuron	Glean	19	Napropamide	Devrinol	16000
Copper	Kocide 606	90000	Norflurazon	Solicam	400
Cycloate	Roneet	250	Oil	Golden Bear Oil	120000
Cyhexatin	Plictran	1000	Oryzalin	Surflan	3600
Cypermethrin	Demon	4	Oxamyl	Vydate	370
Demeton	Systox	150	Oxydemeton methyl	Metasystox R	3900
Diazinon		23000	Oxyfluorfen	Goal	3700
Dicamba	Banvel, Trimec	16000	Paraquat	Gramoxone	9800
Dichlobenil	Casoron	7500	Parathion		2200
Dichloropropene	Telone II	2500	Permethrin	Ambush	350
Dichlorvos	DDVP	4	Phenmedipham	Betanal	920
Diclofop	Hoelon	13000	Phosalone	Zolone	4000
Dicofol	Kelthane	4100	Phosmet	Imidan	1800
Difenzoquat	Avenge	75	Pronamide	Kerb	6300
Dimethoate	Cygon	2300	Propargite	Omite	3500
Dinocap	Karathane	68	Propetamphos	Safrotin	10
Dinoseb		40000	Propham	Chemhoe	600
Diphacinone		1	Propoxur	Baygon	4
Diphenamid	Enide	5000	Pyrazon	Pyramin	280
Diquat	Diquat	1300	Pyrethrum		230
Disulfoton	Disyston	4300	Sethoxydim	Poast	1000
Diuron	Karmex, Krovar I	82000	Simazine	Princep	42000
Dodine	Cyprex	2400	Sulfometuron	Oust	81
EPTC	Eptam	25000	Sulfur		61000
Endosulfan	Thiodan	9100	Terbacil	Sinbar	3700
Endothall	Herbicide 273	2100	Thiram	Vitavax 200	400
Ethephon	Ethrel	34	Tilt	Tilt	1800
Ethofumesate	Nortron	7500	Triadimefon	Bayleton	1100
Fenbutatin	Vendex	440	Triallate	Fargo	380
Fenvalerate	Pydrin	1300	Triclopyr	Garlon, Garlon 3A, Gar...	1100

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Trifluralin	Treflan	13000	Zineb		7500
Triforine	Funginex	950	Ziram		1400
Vinclozolin	Ronilan	21000			

MORROW COUNTY

2,4-D	Pennamine D, Landmaste...	84000	Iprodione	Rovral	4000
2,4-DB		500	Lindane	Lindane 30C	230
Acephate	Orthene	200	Linuron		5
Alachlor	Lasso	3200	MCPA		10000
Aluminum phosphide	Phostoxin, Gastoxin	1400	Malathion	Cythion	2200
Amitrole	Amizol	180	Maleic hydrazide	Sprout-Stop	4300
Atrazine	AAtrex	5300	Mancozeb	Dithane M45, Ridomil MZ58	2200
Azinphos methyl	Guthion 50W	2500	Maneb		23000
B.T.	Altosid, Teknar	100	Metalaxyl	Ridomil MZ58	140
Benomyl	Benlate	4600	Metam sodium	Vapam	2510000
Bentazon	Basagran	1000	Methamidophos	Monitor	28000
Bromacil	Krovar I, Hyvar X	3200	Methidathion	Supracide	160
Bromoxynil	Buctril	7700	Methomyl	Lannate	56
Butylate	Sutan	6500	Metribuzin	Lexone, Sencor	14000
Calcium polysulfide	Lime Sulfur	810	Metsulfuron	Ally, Finesse	35
Captan	Captan 5% Dust	4400	Mevinphos	Phosdrin	730
Carbaryl	Sevin	720	NAA	NAA-200	34
Carboxin	Vitavax 200	2600	Napropamide	Devrinol	350
Chloropicrin		200	Oil	Supreme oil, Golden Be...	25000
Chlorpropham	Sprout-Nip	33000	Oryzalin	Surflan	2300
Chlorpyrifos	Lorsban, Reldane	8300	Oxamyl	Vydate	230
Chlorsulfuron	Glean, Finesse	590	Oxyfluorfen	Goal	790
Clopyralid	Curtail	60	PCNB	Terra-coat	690
DCNA	Botran	5200	Paraquat	Gramoxone	3800
Demeton	Systox	290	Parathion		1900
Diazinon		84	Pendimethalin	Prowl	7100
Dicamba	Banvel	4200	Permethrin	Ambush	3500
Dichlone		78	Phorate	Thimet 20G, Phorate 15G	6400
Dichloropropene	Telone II	59000	Phosmet	Imidan	680
Diclofop	Hoelon	690	Picloram	Tordon, Tordon 22K	1600
Dicofol	Kelthane	19	Pronamide	Kerb	18000
Dimethoate	Cygon	1700	Propargite	Omite	810
Dinoseb		380	Propham	Chemhoe	3000
Diquat	Diquat	4800	Resmethrin	Scourge	3
Disulfoton	Disyston	13000	Simazine	Princep	1000
Diuron	Karmex, Krovar I	970	Strychnine		20
Dodine	Cyprex	3700	Sulfometuron	Oust	230
EPTC	Eptam	56000	Sulfur		4000
Endosulfan	Thiodan	1600	Terbacil	Sinbar	250
Esfenvalerate	Asana	7	Thiram	Vitavax 200	2600
Ethephon	Ethrel, Cerone	120	Triadimefon	Bayleton	1400
Ethion	Ethion	47	Triallate	Fargo	250
Ethoprop	Mocap	81000	Triclopyr	Garlon 3A, Turflon D	200
Fonofos	Dyfonate	4000	Trifluralin	Treflan	130
Gibberellic acid	Pro-Gibb 4%	4	Zinc sulfate	Zinc sulfate (36%)	1300
Glyphosate	Roundup, Landmaster, R...	35000	Zineb	Dithane Z-78	150000
Hexazinone	Velpar	1900			

MULTNOMAH COUNTY

2,4-D	Trimec, Weedone 170,	45000	Alachlor	Lasso	440
2,4-DP	Weedone 170	83	Aluminum phosphide	Gastoxin, Phostoxin	25000
Acephate	Orthene	7500	Amitrole	Amizol	900

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Arosurf	Arosurf MSF	22	Linuron	Lorox	80
Atrazine	AAtrex, Atratol	17000	MCPA		1400
Azinphos methyl	Guthion	1500	Malathion		50000
B.T.	Dipel, Javelin, Bactimos	27	Maneb	Dithane	5000
Benomyl	Benlate	3000	Mecoprop	Trimec	21
Bensulide	Prefar	1500	Mefluidide	Embark	14
Bentazon	Basagran	11	Metalaxyl	Ridomil	590
Brodifacoum	Talon Weatherblock	1	Metaldehyde		20000
Bromacil	Krovar I	17	Methiocarb	Mesuroil	90
Bromoxynil	Buctril	510	Methomyl	Lannate	45
Calcium polysulfide	Lime Sulfur	60000	Methoprene	Altosid	1
Captan		9000	Methoxychlor	Marlate	200
Carbaryl	Sevin	20000	Methyl bromide		5000
Carbofuran	Furadan	1300	Metolachlor	Dual	350
Carboxin	Vitavax	230	Metribuzin	Lexone, Sencor	300
Chloramben	Amiben	330	Mevinphos	Phosdrin	600
Chlorothalonil	Bravo	8300	Naled	Dibrom	180
Chloroxuron	Tenoran	500	Napropamide	Devrinol	15000
Chlorpyrifos	Lorsban	30000	Naptalam		100
Chlorsulfuron	Telar	3	Oil	Golden Bear Oil	27000
Cholecalciferol	Quick Mouse Seed	1	Oryzalin	Surflan	6500
Copper		23000	Oxadiazon	Ronstar	20
Cycloate	Roneet	42	Oxamyl	Vydate	96
Cyhexatin	Plictran	300	Oxydemeton methyl	Metasystox R	1800
Cypermethrin	Demon	10	PCNB	Terrachlor	2200
Diazinon	Knox Out 2FM	46000	Paraquat	Gramoxone	2500
Dicamba	Banvel, Trimec	2500	Parathion		45
Dichlobenil	Casoron	17000	Phosmet	Imidan	2000
Dichloropropene	Telone II	11000	Picloram	Tordon 10K	20
Dichlorvos	DDVP	10	Piperonyl butoxide		18
Diclofop	Hoelon	1800	Pronamide	Kerb	1100
Dicofol	Kelthane	100	Propachlor	Ramrod	880
Dimethoate	Cygon	520	Propargite	Omite	3000
Dinoseb		4000	Propetamphos	Safrotin	20
Diphenamid	Enide	1300	Propham	Chemhoe	50
Diquat	Diquat	7400	Propoxur	Baygon	10
Disulfoton	Disyston	6100	Pyrethrum	Pyrenone	1500
Diuron	Karmex, Krovar I	18000	Resmethrin	Scourge	3
Dodine	Cyprex	600	Simazine	Princep	23000
EPTC	Eptam	1600	Sulfometuron	Oust	36
Endosulfan	Thiodan	2000	Sulfur		3500
Fenamiphos	Nemacur	1400	Temephos	Abate	1
Fenbutatin	Vendex	1500	Terbacil	Sinbar	160
Fenvalerate	Pydrin	240	Thiram		17
Ferbam		90	Tilt	Tilt	500
Fluridone	Sonar 5P	6	Triadimefon	Bayleton	300
Fonofos	Dyfonate	2600	Triclopyr	Garlon	6400
Fosamine	Krenite	1200	Trifluralin	Treflan	350
Glyphosate	Roundup, Rodeo	61000	Triforine	Funginex	27
Hexazinone	Velpar	2800	Vernolate	Surpass, Vernam	980
Hydramethylnon	Maxforce	1	Vinclozolin	Ronilan	670
Hydroprene	Gencor	1	Warfarin		1
Iprodione	Rovral	220			

POLK COUNTY

2,4-D	Envy, Trimec, Weedone ...	28000	Alachlor	Lasso	3000
2,4-DB		750	Amitrole	Amitrol T, Amizol	1000
2,4-DP	Weedone 170	14	Atrazine	AAtrex, Atratol	39000
Acephate	Orthene	2500	Azinphos methyl	Guthion	3200

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
B.T.	Dipel, Javelin	5	Lindane	Lindane 20EC	230
Benomyl	Benlate	2200	Linuron	Lorox	30
Bentazon	Basagran	60	MCPA		30000
Bromacil	Krovar I	150	Malathion		2600
Bromoxynil	Buctril	200	Maleic hydrazide		130
Butylate	Sutan	450	Mancozeb		3500
Calcium polysulfide	Lime Sulfur	52000	Maneb		4000
Captan		5400	Mecoprop	Trimec	4
Carbaryl	Sevin	6800	Mefluidide	Embark	10
Carbofuran	Furadan	180	Metalaxyl	Ridomil	290
Carbophenothion	Trithion	100	Metaldehyde		4000
Carboxin	Vitavax	5800	Methamidophos	Monitor	11
Chloramben	Amiben	210	Methiocarb	Mesurool	530
Chlorothalonil	Bravo	14000	Methomyl	Lannate, Nudrin	270
Chloroxuron	Tenorán	400	Methoxychlor	Marlate	2900
Chlorpropham	Furloe	750	Methyl parathion		1200
Chlorpyrifos	Lorsban	4300	Metolachlor	Dual	1200
Chlorsulfuron	Glean, Telar	940	Metribuzin	Lexone, Sencor	370
Copper	Kocide 606	56000	Mevinphos	Phosdrin	28
Cycloate	Roneet	540	Napropamide	Devrinol	5800
Cyhexatin	Plictran	110	Nickel sulfate		500
Desmedipham	Betanex	64	Norflurazon	Solicam	150
Diazinon		12000	Oil		16000
Dicamba	Banvel, Trimec	16000	Oryzalin	Surflan	5100
Dichlobenil	Casoron	6000	Oxamyl	Vydate	90
Diclofop	Hoclon	19000	Oxydemeton methyl	Metasystox R	1200
Dicofol	Kelthane	910	Oxyfluorfen	Goal	760
Difenzoquat	Avenge	280	Paraquat	Gramoxone	3000
Dimethoate	Cygon	2400	Parathion		31
Dinocap	Karathane	19	Permethrin	Ambush, Pounce	6
Dinoseb		4600	Phenmedipham	Betanal	74
Diphenamid	Enide	500	Phosalone	Zolone	2000
Disulfoton	Disyston	45	Phosmet	Imidan	180
Diuron	Karmex, Krovar I	100000	Picloram	Tordon	2
Dodine	Cyprex	1200	Pronamide	Kerb	3700
EPTC	Eptam	1800	Propargite	Omite	750
Endosulfan	Thiodan	5000	Propham	Chemhoe	390
Endothall	Herbicide 273	280	Sethoxydim	Poast	180
Ethephon	Ethrel	380	Simazine	Princep	15000
Ethofumesate	Nortron	2600	Sulfometuron	Oust	22
Fenbutatin	Vendex	53	Sulfur		96000
Fensulfothion	Dasanit	900	Terbacil	Sinbar	750
Fenvalerate	Pydrin	320	Tilt	Tilt	440
Fluazifop	Fusilade	300	Triadimefon	Bayleton	650
Fluvalinate	Spur	1	Triallate	Fargo	250
Fonofos	Dyfonate	6200	Triclopyr	Garlon	240
Formetanate	Carzol 92SP	18	Trifluralin	Treflan	590
Fosamine	Krenite	480	Triforine	Funginex	640
Glyphosate	Roundup, Rodeo	7500	Vinclozolin	Ronilan	1200
Hexazinone	Velpar	4000	Zineb		1700
Imazapyr	Arsenal	10	Ziram		450
Iprodione	Rovral	3000			

SHERMAN COUNTY

2,4-D	Landmaster	45000	Bromacil	Krovar, Hyvar X	12
Aluminum phosphide	Phostoxin, Gastoxin	510	Bromoxynil	Buctril, Bronate	620
Amitrole	Cytrol, Amizol	48	Carboxin	Vitavax 200	2700
Atrazine	AAtrex	160	Chlorpyrifos	Reldane	1400
Benomyl	Benlate	45	Chlorsulfuron	Glean, Finesse	660

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Clopyralid	Curtail	10	Metribuzin	Lexone, Sencor	4700
Dicamba	Banvel	1100	Metsulfuron	Finesse	27
Dichlobenil	Casoron 4G	26	PCNB	Terra-coat	18
Diuron	Krovar I	5	Paraquat	Gramoxone	480
Glyphosate	Landmaster, Roundup	20000	Picloram	Tordon, Tordon 22K	560
Lindane	Lindane 30C	370	Simazine	Princep	240
MCPA	Bronate, MCPA	630	Sulfometuron	Oust	120
Malathion	Cythion	3000	Thiram	Vitavax 200	2700
Methoxychlor	Marlate	20	Triadimefon	Bayleton	15

TILLAMOOK COUNTY

2,4-D	Crossbow, 2,4-D, Trime...	3500	Fosamine	Krenite	490
2,4-DP	Weedone 170	1200	Glyphosate	Roundup	890
Amitrole	Amizol	1600	Imazapyr	Arsenal	4
Atrazine	AAtrex, Atratul	96	Mecoprop	Trimec	4
Bromacil	Krovar I	32	Picloram	Tordon 10K	12
Chlorsulfuron	Telar	4	Simazine	Princep	1400
Dicamba	Banvel, Trimec, Banvel...	500	Sulfometuron	Oust	71
Dichlobenil	Casoron	34	Triclopyr	Garlon, Crossbow	360
Diuron	Krovar I	32			

UMATILLA COUNTY

2,4-D	Pennamine D, Landmaste...	42000	Diclofop	Hoelon	3100
2,4-DB		200	Dicofol	Kelthane	60
2,4-DP	Weedone 170	130	Difenzoquat	Avenge	130
Alachlor	Lasso	11000	Dimethoate	Cygon	1100
Aldicarb	Temik	22000	Dinoseb		19000
Amitrole	Amizol	1000	Disulfoton	Disyston	15000
Assert	Assert	240	Diuron	Karmex, Krovar I	4300
Atrazine	AAtrex, Atratul	21000	Dodine	Cyprex	12000
Azinphos methyl	Guthion 50W	9000	EPTC	Eptam, Eradicane	71000
Benomyl	Benlate	32000	Endosulfan	Thiodan	7800
Bromacil	Krovar I	520	Enfenvaterate	Asana	33
Bromoxynil	Buctril, Bronate	10000	Esfenvaterate	Asana	2
Butylate	Sutan	12000	Ethalfuralin	Sonalan	790
Calcium polysulfide	Lime Sulfur	2600	Ethephon	Ethrel	160
Captafol	Difolatan	1300	Ethion	Ethion	150
Captan	Captan (11.8% dust), C...	7300	Ethoprop	Mocap 10G	36000
Carbaryl	Sevin	2300	Fenbutatin	Vendex	20
Carbofuran	Furadan	1200	Fenvalerate	Pydrin	280
Carboxin	Vitavax 200	5100	Fonofos	Dyfonate	9600
Chloramben	Amiben G	2500	Formetanate	Carzol	40
Chlorothalonil	Bravo	3800	Fosamine	Krenite	8
Chlorpyrifos	Lorsban 4E	7800	Glyphosate	Roundup, Landmaster, R...	27000
Chlorsulfuron	Glean, Telar, Finesse	3000	Hexazinone	Velpar	340
Clopyralid	Curtail	240	Iprodione	Rovral	0
Copper	Kocide 101	390	Lindane	Lindane 30, Lindane 75%	5500
Cyanazine	Bladex	6400	MCPA	MCPA, Bronate	12000
DCNA	Botran	2800	MCPB	MCPB Sodium Salt	2200
DCPA	Dacthal	7500	MSMA	Bueno	90
Dalapon	Dowpon M	4400	Malathion		700
Daminozide	Alar	3100	Mancozeb	Dithane M45, Manzate 200	770
Demeton	Systox	1200	Maneb		9100
Diazinon		620	Mecoprop	Trimec	16
Dicamba	Banvel, Trimec	5900	Mefluidide	Embark	5
Dichlobenil	Casoron 4G	60	Metalaxyl	Ridomil, Apron	640
Dichlone		250	Metam sodium	Vapam	1260000

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Methamidophos	Monitor	10000	Prometon	Pramitol 5PS	20
Methidathion	Supracide	760	Pronamide	Kerb	520
Methiocarb	Mesurool	5	Propargite	Omite	1000
Methomyl	Lannate, Nudrin	30	Sethoxydim	Poast	8
Methyl parathion		750	Simazine	Princep, Pramitol 5PS	920
Metolachlor	Dual	1600	Sodium chlorate	Pramitol 5PS	160
Metribuzin	Lexone, Sencor	18000	Sodium metaborate	Pramitol 5PS	200
Mevinphos	Phosdrin	420	Strychnine	Orco Gopher Bait	22
NAA	NAA-200	110	Sulfometuron	Oust	310
Napropamide	Devrinol	1400	Sulfur		470
Oil	Supreme oil	99000	Terbacil	Sinbar	320
Oryzalin	Surflan	1400	Terbutryn	Igran	2800
Oxamyl	Vydate	500	Thiabendazole	Mertect 340-F	1800
Oxyfluorfen	Goal	1200	Thiophanate	Topsin M	8100
Paraquat	Gramoxone	990	Thiram	Vitavax 200	5100
Parathion		4900	Triadimefon	Bayleton	240
Pendimethalin	Prowl	11000	Triallate	Fargo	5000
Permethrin	Pounce, Ambush	740	Tricopyr	Garlon 3A, Turflon D	5
Phorate	Thimet 20G	6400	Trifluralin	Treflan	7500
Phosmet	Imidan	3700	Zinc sulfate	Zinc sulfate (36%)	6600
Picloram	Tordon 22K	670			

UNION COUNTY

2,4-D	Landmaster, Curtail, W...	21000	Malathion	Cythion	3900
2,4-DP	Weedone 170	10	Maneb		990
Acephate	Orthene	140	Mefluidide	Embark	4
Alachlor	Lasso	320	Metalaxyl	Apron	32
Amitrole	Amitrole T, Amizol	120	Methamidophos	Monitor	1900
Atrazine	AAtrax	770	Methoxychlor	Marlate	820
Benefin	Balan	94	Metribuzin	Lexone, Sencor	1100
Benomyl	Benlate	190	Metsulfuron	Finesse	22
Bromacil	Krovar I	290	Oil		560
Bromoxynil	Buctril	10000	Paraquat	Gramoxone	170
Captan		120	Parathion		880
Carbaryl	Sevin	480	Pendimethalin	Prowl	300
Carboxin	Vitavax 200	930	Phosmet	Imidan	350
Chlorpyrifos	Lorsban	2900	Picloram	Tordon 22K	270
Chlorsulfuron	Telar, Glean, Finesse	170	Prometon	Pramitol 5PS	61
Clopyralid	Curtail	71	Pronamide	Kerb	38
Copper		290	Sethoxydim	Poast	250
Diazinon		330	Simazine	Princep, Pramitol 5PS	2400
Dicamba	Banvel	2500	Sodium chlorate	Pramitol 5PS	490
Dichlobenil	Casoron, Casoron 4G	34	Sodium metaborate	Pramitol 5PS	610
Diclofop	Hoelon	2000	Sulfometuron	Oust	90
Difenzoquat	Avenge	2400	Sulfur		2700
Dimethoate	Cygon	640	Tebuthiuron	Spike	13
Dinoseb		3500	Terbacil	Sinbar	600
Diquat	Diquat	190	Terbutryn	Igran	170
Disulfoton	Disyston	720	Thiabendazole	Mertect	3400
Diuron	Karmex, Krovar I	2800	Thiophanate	Topsin M	110
Fluazifop	Fusilade	910	Thiram	Vitavax 200	720
Fosamine	Krenite	290	Tilt	Tilt	200
Glyphosate	Roundup, Landmaster, R...	14000	Triadimefon	Bayleton	79
Hexazinone	Velpar	10	Triallate	Fargo	3000
Lindane	Lindane 30C	380	Tricopyr	Garlon, Garlon 3A	180
MCPA		20000	Trifluralin	Treflan	900
MSMA		5300			

WALLOWA COUNTY

2,4-D		8100	EPTC	Eptam	1000
2,4-DB		500	Fosamine	Krenite	250
Aldicarb	Temik	1100	MCPA		3400
Atrazine	AAtrex, Atratul	1100	Maneb		300
Benomyl	Benlate	1900	Methamidophos	Monitor	440
Bromoxynil	Buctril	2200	Metribuzin	Lexone, Sencor	1400
Captan	Captan 5% Dust	230	Pendimethalin	Prowl	230
Carboxin	Vitavax 200	3500	Phorate	Thimet	180
Chlorsulfuron	Glean, Telar	140	Pronamide	Kerb	600
Dicamba	Banvel	2400	Simazine	Princep	63
Diclofop	Hoelon	1100	Thiabendazole	Mertect 340-F	720
Difenzoquat	Avenge	760	Thiram	Vitavax 200	4600

WASCO COUNTY

2,4-D	Tordon 101, Trimec, We...	32000	Hexazinone	Velpar	1700
2,4-DB		84	MCPA		1200
2,4-DP	Weedone 170	10	Malathion	Malathion ULV	22000
Aluminum phosphide	Phostoxin, Gastoxin	250	Maneb	Maneb Flowable 2	1900
Amitrole	Amizol	110	Mecoprop	Trimec	3
Arosurf	Arosurf MSF	67	Methidathion	Supracide	1700
Atrazine	AAtrex, Atratul	7900	Methiocarb	Mesurool	230
Azinphos methyl	Guthion	1300	Metribuzin	Lexone, Sencor	1100
B.T.	Teknar, Vectobac	2	Metsulfuron	Escort	1
Bromacil	Hyvar X	4	Oil		150000
Bromoxynil	Buctril	2500	Oryzalin	Surflan	7300
Carbaryl	Sevin	1100	Oxyfluorfen	Goal	1800
Carbofuran	Furadan	60	Paraquat	Gramoxone	1000
Carboxin	Vitavax	7200	Parathion		6600
Chlorpyrifos	Reldane	1800	Phosmet	Imidan	2200
Chlorsulfuron	Glean, Telar	660	Picloram	Tordon 22K, Tordon 101	160
Copper	Kocide	16000	Simazine	Princep	1400
Dicamba	Banvel, Trimec	1800	Strychnine		14
Dichlobenil	Casoron, Casoron 4G	250	Sulfometuron	Oust	68
Diclofop	Hoelon	5000	Sulfur		65000
Dimethoate	Cygon	190	Terbacil	Sinbar	58
Diuron	Karmex	460	Terbutryn	Igran	1500
Dodine	Cyprex	1600	Triadimefon	Bayleton	180
EPTC	Eptam	720	Triallate	Fargo	570
Endosulfan	Thiodan	970	Triclopyr	Garlon, Garlon 4	35
Gibberellic acid	Pro-Gibb 4%	76	Zinc phosphide		59
Glyphosate	Roundup	8200			

WASHINGTON COUNTY

2,4-D	Weedone 170, 2,4-D	13000	Bensulide	Prefar	250
2,4-DP	Weedone 170	300	Bentazon	Basagran	60
Acephate	Orthene	280	Bromacil	Krovar I	62
Alachlor	Lasso	2400	Bromoxynil	Buctril	230
Aluminum phosphide	Phostoxin, Gastoxin	350	Calcium polysulfide	Lime Sulfur	72000
Amitrole	Amizol	2000	Captan		6200
Atrazine	AAtrex, Atratul	6400	Carbaryl	Sevin	6700
Azinphos methyl	Guthion	480	Carbofuran	Furadan	5400
B.T.	Dipel, Javelin	10	Carboxin	Vitavax	2000
Benomyl	Benlate	1500	Chloramben	Amiben	480

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Chlorothalonil	Bravo	4500	Metalaxyl	Ridomil	870
Chloroxuron	Tenorán	2500	Metaldehyde		1600
Chlorpyrifos	Lorsban	610	Methiocarb	Mesuroil	500
Chlorsulfuron	Telar, Glean	5	Methoxychlor	Marlate	1700
Copper		13000	Methyl bromide		15000
Cyanazine	Bladex	3600	Metolachlor	Dual	1900
Cyhexatin	Plictran	2300	Metribuzin	Lexone, Sencor	580
Cypermethrin	Demon	5	Metsulfuron	Ally	15
Demeton	Systox	47	Mevinphos	Phosdrin	300
Diazinon		2000	Naled	Dibrom	250
Dicamba	Banvel	1800	Napropamide	Devrinol	14000
Dichlobenil	Casoron	2300	Naptalam		150
Dichloropropene	Telone II	29000	Norflurazon	Solicam	50
Dichlorvos	DDVP	5	Oil		17000
Diclofop	Hoelon	15000	Oryzalin	Surflan	660
Dicofol	Kelthane	370	Oxadiazon	Ronstar	630
Difenzoquat	Avenge	75	Oxydemeton methyl	Metasystox R	2600
Dimethoate	Cygon	450	Oxyfluorfen	Goal	180
Dinoseb		1900	PCNB	Terrachlor	130
Diphenamid	Enide	4300	Paraquat	Gramoxone	3000
Diquat	Diquat	2700	Permethrin	Ambush	24
Disulfoton	Disyston	680	Phosalone	Zolone	420
Diuron	Karmex, Krovar I	47000	Phosmet	Imidan	540
Dodine	Cyprex	950	Picloram	Tordon	50
EPTC	Eptam	4300	Pronamide	Kerb	1400
Endosulfan	Thiodan	4400	Propargite	Omite	17
Ethion	Ethion	5	Propetamphos	Safrotil	12
Ethofumesate	Nortron	50	Propoxur	Baygon	5
Fenamiphos	Nemacur	1600	Pyrethrum		330
Fenbutatin	Vendex	130	Sethoxydim	Poast	63
Fenvalerate	Pydrin	1600	Simazine	Princep	11000
Ferbam		150	Sulfometuron	Oust	41
Folpet		100	Sulfur		8200
Fonofos	Dyfonate	2100	Terbacil	Sinbar	300
Fosamine	Krenite	950	Terramycin		60
Glyphosate	Roundup	8900	Thiram		130
Hexazinone	Velpar	1400	Tilt	Tilt	200
Hydramethylnon	Maxforce	1	Triadimefon	Bayleton	900
Hydroprene	Gencor	1	Triclopyr	Garlon	3300
Iprodione	Rovral	890	Trifluralin	Treflan	690
MCPA		13000	Triforine	Funginex	200
Malathion		3400	Vernolate	Surpass, Vernam	5400
Maneb	Dithane	9000	Vinclozolin	Ronilan	4000
Mefluidide	Embark	19	Zinc phosphide		24

WHEELER COUNTY

2,4-D		2300	Dicamba	Banvel	120
Amitrole	Amitrol T	66	Diuron	Krovar I	440
Atrazine	AAtrax, Atratol	400	Glyphosate	Roundup	300
Bromacil	Krovar I	440	Hexazinone	Velpar	3100
Carboxin	Vitavax	80	Sulfometuron	Oust	6
Chlorsulfuron	Telar	1	Triclopyr	Garlon 3A	15
Clopyralid	Curtail	1			

YAMHILL COUNTY

2,4-D	Envy, Crossbow, Weedon...	37000	2,4-DP	Weedone 170	46
2,4-DB		260	Acephate	Orthene	100

Common Name	Trade Name	Pounds Used (a.i.)	Common Name	Trade Name	Pounds Used (a.i.)
Alachlor	Lasso	4500	Glyphosate	Roundup, Rodeo	8500
Amitrole	Amitrol T, Amizol	310	Hexazinone	Velpar	1600
Atrazine	AAtrex, Atratol	16000	Iprodione	Rovral	2800
Azinphos methyl	Guthion	9800	Lindane	Lindane 20EC	75
B.T.	Dipel, Javelin	13	Linuron	Lorox	30
Benomyl	Benlate	10000	MCPA		20000
Bromacil	Krovar I	22	Malathion	Malathion 57 EC	6900
Bromoxynil	Buctril	1200	Maleic hydrazide		630
Calcium polysulfide	Lime Sulfur	38000	Maneb		6800
Captan		4300	Metalaxyl	Ridomil	240
Carbaryl	Sevin	17000	Metaldehyde		20000
Carbofuran	Furadan	500	Methamidophos	Monitor	68
Carboxin	Vitavax 200	9200	Methiocarb	Mesurool	380
Chloramben	Amiben	300	Methomyl	Lannate, Nudrin	130
Chlorothalonil	Bravo	5500	Methoxychlor	Marlate	630
Chloroxuron	Tenoran	600	Metolachlor	Dual	1500
Chlorpropham	Furloe	1200	Metribuzin	Lexone, Sencor	1000
Chlorpyrifos	Lorsban, Lorsban 4E	8800	Mevinphos	Phosdrin	160
Chlorsulfuron	Glean, Telar	13	Naled	Dibrom	50
Copper		93000	Napropamide	Devrinol	6500
Cycloate	Roneet	1700	Oil		74000
Cyhexatin	Plictran	350	Oryzalin	Surflan	3100
Desmedipham	Betanex	41	Oxydemeton methyl	Metasystox R	1000
Diazinon		12000	Oxyfluorfen	Goal	50
Dicamba	Banvel	4900	Paraquat	Gramoxone	3600
Dichlobenil	Casoron	4600	Parathion		2000
Diclofop	Hoelon	21000	Permethrin	Ambush	38
Dicofol	Kelthane	90	Phosalone	Zolone	5300
Difenzoquat	Avenge	180	Phosmet	Imidan	150
Dimethoate	Cygon 2.67 EC	1800	Picloram	Tordon 10K	2
Dinocap	Karathane	11	Pronamide	Kerb	2100
Dinoseb		8500	Propham	Chemhoe	520
Diphenamid	Enide	750	Pyrazon	Pyramin	1400
Diquat	Diquat	800	Rotenone		120
Disulfoton	Disyston	1800	Sethoxydim	Poast	44
Diuron	Karmex, Krovar I	58000	Simazine	Princep	4500
Dodine	Cyprex	1000	Sulfometuron	Oust	24
EPTC	Eptam	4500	Sulfur		49000
Endosulfan	Thiodan	6800	Thiram	Vitavax 200	400
Endothall	Herbicide 273	170	Tilt	Tilt	560
Ethephon	Ethrel	310	Triadimefon	Bayleton	13
Ethofumesate	Nortron	190	Triallate	Fargo	600
Fenbutatin	Vendex	50	Tricopyr	Crossbow, Garlon 3A	140
Fenvalerate	Pydrin, Pydrin 2.4EC	1200	Trifluralin	Treflan	1100
Fonofos	Dyfonate	6300	Triforine	Funginex	440
Formetanate	Carzol 92SP	36	Vinclozolin	Ronilan	2800
Fosamine	Krenite	420	Ziram		390



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