



# VEGETABLE CHEMICAL USE SURVEY RESPONDENT BOOKLET



2013

Dear Producer:

Your operation has been selected to participate in the Vegetable Chemical Use Survey, conducted by USDA's National Agricultural Statistics Service (NASS). By providing the information on chemical usage, you will help ensure that the products you use to maintain a safe and abundant food supply continue to be available.

The U.S. Environmental Protection Agency (EPA) is required to conduct a review of tolerance levels for re-registration of pesticide products. Part of the review includes evaluating USDA's estimates on agriculture chemical use. The need for this reliable chemical use data is ongoing. If data are not available, the EPA will assume maximum label rates are being applied on all vegetable acreage. Since vegetable growers, such as yourself, are the best source for this information, your input is essential in the process. A typical interview lasts about an hour. We recognize your time is valuable, and our interviewers will schedule a time convenient for you. If your chemical use records are available, the survey will take up less of your time.

Information requested in this survey is used to prepare estimates on costs and returns. Under Title 7 of the U.S. Code and CIPSEA (Public Law 107-347), facts about your operation are **kept confidential** and used only for statistical purposes in combination with similar reports from other producers. Response is **voluntary**. You may skip any question(s) you prefer not to answer.

NASS safeguards the privacy of all respondents, ensuring that no individual respondent or operation can be identified. Be assured that your responses to ARMS will be kept **completely confidential**, as required by federal law.

Thank you for investing in the future of U.S. agriculture and ensuring that decisions affecting you, your family, your business and your community are based on the facts, straight from the source.

Sincerely,

Hubert Hamer  
Chair, Agricultural Statistics Board  
U.S. Department of Agriculture  
National Agricultural Statistics Service

# 2013 VEGETABLE CHEMICAL USE SURVEY RESPONDENT BOOKLET CALIFORNIA

## TARGET CROPS

(FM) = Fresh Market

(PR) = Processing

| CALIFORNIA |                  |     |                |
|------------|------------------|-----|----------------|
| 701        | Asparagus        | 725 | Lettuce, Head  |
| 803        | Beans, Snap (FM) | 728 | Lettuce, Other |
| 705        | Broccoli         | 732 | Onions, Bulb   |
| 808        | Cabbage (FM)     | 736 | Peppers, Bell  |
| 709        | Cantaloupe       | 738 | Pumpkins       |
| 812        | Carrots (FM)     | 840 | Spinach (FM)   |
| 912        | Carrots (PR)     | 743 | Squash, Summer |
| 714        | Cauliflower      | 744 | Squash, Winter |
| 715        | Celery           | 748 | Strawberries   |
| 818        | Corn, Sweet (FM) | 850 | Tomatoes (FM)  |
| 820        | Cucumbers (FM)   | 950 | Tomatoes (PR)  |
| 723        | Garlic           | 752 | Watermelons    |
| 730        | Honeydews        |     |                |

## COMMON FERTILIZERS AND THEIR PERCENT ANALYSIS

[Enumerator Note: *If Respondent cannot report the formulation for Section C, column 7, use the formulations below.*]

| Name   | Form | Percent Active Ingredients |                               |                  |        |
|--|------|----------------------------|-------------------------------|------------------|--------|
|  |      | N                          | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | S      |
| Ammonia. . . . .                                 | D/L  | 80                         | ---                           | ---              | ---    |
| Ammoniated superphosphate. . . . .               | D    | 12-17                      | 22-35                         | ---              | ---    |
| Ammonium metaphosphate. . . . .                  | D    | 12                         | 51                            | ---              | ---    |
| Ammonium nitrate. . . . .                        | D    | 32-34                      | ---                           | ---              | ---    |
| Ammonium phosphate. . . . .                      | D    | 11-18                      | 46-48                         | ---              | ---    |
| Ammonium phosphate nitrate. . . . .              | D    | 27-30                      | 10-15                         | ---              | ---    |
| Ammonium phosphate sulfate (APS). . . . .        | D    | 13-16                      | 20                            | ---              | 15     |
| Ammonium polyphosphate (APP). . . . .            | L    | 10-11                      | 34-37                         | ---              | ---    |
| Ammonium polysulfide (Ammonium Sulfate). . . . . | L    | 20-21                      | ---                           | ---              | 24     |
| Ammonium sulfate nitrate. . . . .                | D    | 20-30                      | ---                           | ---              | 5      |
| Ammonium thiosulfate solution. . . . .           | L    | 12                         | ---                           | ---              | 26     |
| Anhydrous ammonia. . . . .                       | L/G  | 82                         | ---                           | ---              | ---    |
| Aqua ammonia (Ammonium Hydroxide). . . . .       | L    | 16-25                      | ---                           | ---              | ---    |
| Bone meal. . . . .                               | D    | 0-2                        | 10-20                         | ---              | ---    |
| Calcium ammonium nitrate. . . . .                | D    | 15-16                      | ---                           | ---              | ---    |
| Diammonium phosphate sulfur. . . . .             | D    | 15-16                      | 39-41                         | ---              | ---    |
| Diammonium phosphate (DAP). . . . .              | D    | 16-21                      | 46-53                         | ---              | ---    |
| Elemental sulfur. . . . .                        | D    | ---                        | ---                           | ---              | 52-100 |

## COMMON FERTILIZERS AND THEIR PERCENT ANALYSIS

[Enumerator Note: *If Respondent cannot report the formulation for Section C, column 7, use the formulations below.*]

| Name  | Form | Percent Active Ingredients |                               |                  |       |
|---|------|----------------------------|-------------------------------|------------------|-------|
|   |      | N                          | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | S     |
| Greensand. . . . .                              | D    | ---                        | 1                             | 6                | ---   |
| Magnesium sulfate. . . . .                      | D    | ---                        | ---                           | ---              | 13    |
| Mixed fertilizer. . . . .                       | D    | 2                          | 6                             | 12               | ---   |
|   |      | 3                          | 9                             | 18               | ---   |
|   |      | 3                          | 10                            | 30               | ---   |
|   |      | 5                          | 10                            | 15               | ---   |
|   |      | 5                          | 10                            | 30               | ---   |
|   |      | 5                          | 15                            | 30               | ---   |
|   |      | 8                          | 24                            | 24               | ---   |
|   |      | 9                          | 18                            | 9                | ---   |
|   |      | 10                         | 34                            | ---              | ---   |
| Monoammonium phosphate (MAP). . . . .           | D    | 11-13                      | 48-62                         | ---              | ---   |
| Natralene. . . . .                              | D/L  | 40                         | ---                           | ---              | ---   |
| Nitrogen solutions. . . . .                     | L    | 7-58                       | ---                           | ---              | ---   |
| Nitric phosphate. . . . .                       | D    | 12-17                      | 22-35                         | ---              | ---   |
| Phosphate rock. . . . .                         | D    | ---                        | 2-35                          | ---              | ---   |
| Phosphoric acid. . . . .                        | L    | ---                        | 2-76                          | ---              | ---   |
| Potassium carbonate. . . . .                    | D    | ---                        | ---                           | 34-48            | ---   |
| Potassium chloride (Muriate of potash). . . . . | D    | ---                        | ---                           | 60-62            | ---   |
| Potassium magnesium sulfate. . . . .            | D    | ---                        | ---                           | 22               | 23    |
| Potassium metaphosphate. . . . .                | D    | ---                        | 55-57                         | 37-38            | ---   |
| Potassium nitrate. . . . .                      | D    | 13                         | ---                           | 44               | ---   |
| Potassium orthophosphate. . . . .               | D    | ---                        | 30-60                         | 30-50            | ---   |
| Potassium polyphosphate. . . . .                | L    | ---                        | 40-60                         | 22-48            | ---   |
| Potassium sodium nitrate. . . . .               | D    | 15                         | ---                           | 14-15            | ---   |
| Potassium solutions. . . . .                    | L    | ---                        | ---                           | 13-15            | ---   |
| Potassium sulfate. . . . .                      | D    | ---                        | ---                           | 50-53            | 16    |
| Sodium nitrate (Nitrate of Soda). . . . .       | D    | 15-16                      | ---                           | ---              | ---   |
| Sulfuric acid. . . . .                          | L    | ---                        | ---                           | ---              | 20-26 |
| Super phosphate (22% & under). . . . .          | D    | ---                        | 16-22                         | ---              | 11    |
| Super phosphate (over 22%). . . . .             | D    | ---                        | 23-39                         | ---              | 11    |
| Triple super phosphate. . . . .                 | D    | ---                        | 40-54                         | ---              | 11    |
| Urea. . . . .                                   | D    | 45-46                      | ---                           | ---              | ---   |
| Urea, sulfur coated. . . . .                    | D    | 36-38                      | ---                           | ---              | 13-16 |
| Urea ammonium phosphate. . . . .                | D    | 25-58                      | 28-35                         | ---              | ---   |
| Urea ammonium nitrate (UAN). . . . .            | L    | 28-32                      | ---                           | ---              | ---   |

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