# MERCK AGRICULTURAL PRODUCTS



for the Control of Bacterial Plant Diseases.

#### Pears and Apples

Effective control of fire blight

- AGRI-STREP is more economical than pruning
- Does not impair fruit finish or yield
- Eliminates pruning of fruit-bearing portions of trees
- Systemic—provides protection during rainy weather
- = Effective against blossom blight and twig blight
- Short interval—use up to 30 days before harvest for pears. 50 days for apples

#### **Tomatoes and Peppers**

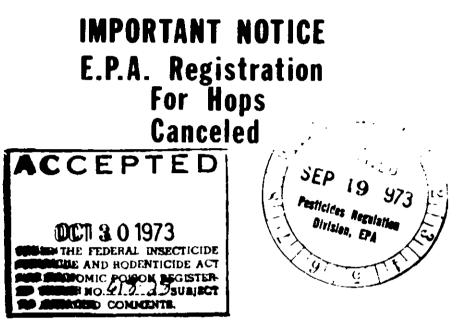
Effective control of bacterial spot

- Systemic—provides protection during rainy weather
- Does not impair fruit finish or yield



#### MERCK CHEMICAL DIVISION, MERCK & CO., INC., RAHWAY, N. J. 07065







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CAUTION: Keep out of reach + - - - -MAY CAUSE ALLERGIC SKIN FEAST, IN Avoid contact with skin and eyes tax to breather dust or spray mist whan sust mask and ruther glove wash thoreaging after handling end common and water by clear -

All senation particular to encl

HOPS-downy mildew

CELERY---bacterial blight (Florida)

POTATOES—Soft rot and blackleg (Maine)

TOBACCO—Wild fire and blue mold

CHRYSANTHEMUMS---Bacterial wilt

**IMPORTANT NOTICE** E.P.A. Registration For Hops Canceled ACCEPTED

### DCT 3 0 1973

THE FEDERAL INSECTICIDE FUNCTIONE AND RODENTICIDE ACT SCR 1920NOMIC POLEON BEGISTER TO MANAGERED COMMENTS.

# for the Control of Bacterial Plant Diseases.

Jgri-Strep

### **Pears and Apples**

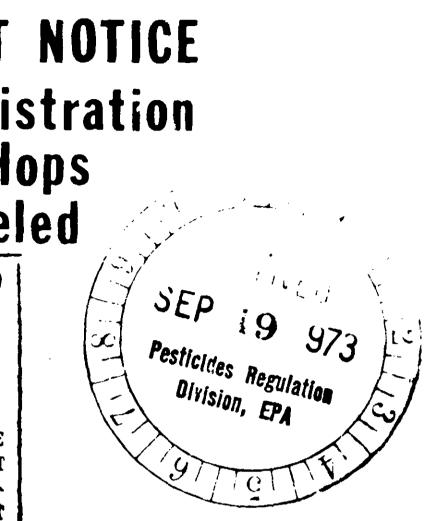
- Effective control of fire blight
- AGRI-STREP is more economical than pruning
- Does not impair fruit finish or yield
- Eliminates pruning of fruit-bearing portions of trees
- Systemic—provides protection during rainy weather

- Effortive against blasses blight and this blight



LARS-Fire Blight APPLES - Fire Bright UMATOES - Becterial Spot PEPPERS - Becterial Score HUPS - Downy Mildew 108ACCO - Wildfire and Blue Mold POTATOES-Soft Rot and Black Lag in Maine and a tack-farmer CFLERY-Becteriel Blight in Florida HRYSANTHEMUMS - Hecterial Witt For further details consult your State Agriculturel Experiment States

USDA Registration No. 518-28



CAUTION: Keep out of reach if in tren MAY CAUSE ALLERGID SKIN FEACTIONS

Avoid contact with skin and eyes, Do not breathe dust or spray mist hear dust mask and rubber gloves Wash thoroughly after handling inquipment or disposal of wasters

Product Sp. 1003 1⁄2 LB.

For the Control of certain Bacterial Plant Diseases

PEARS-Fire Blight APPLES\_Fire Blight TOMATOES\_Bacterial Spot PEPPERS-Bacterial Spot PEPPERS—Bacterial Spot HOPS—Downy Mildew TOBACCO---Wildfire and Blue Mold POTATOES---Soft Rot and Black Leg in Maine and adjacent areas CELERY-Bacterial Blight in Florida CHRYSANTHEMUMS---Bacterial Will

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For further details consult your State Agricultural Experiment Station



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#### **DIRECTIONS FOR USE**

|   |           | DIRECTI  | UNS FUR USE   |   |
|---|-----------|--|---|---|
|   | Applic    | ation  |   |   |
| Crop & Disease<br>PEARS   | Method    | Rate*  | Apply First   | Follow-up                                       |
| (Fire Blight)<br>West Coast   | Spray     | 28.8 oz. AGRI-STREP per<br>acre (equivalent to 60 ppm<br>at 600 gal A)       | 10% bloom   | Repeat at<br>is over. C<br>to contro            |
|   | Dust      | 40 lb. of 1500 ppm dust<br>per acre  | 10°,5 bloom   | apply wit<br>Same as                            |
| Other Areas   | Spray     | 24 48 oz. AGRI-STREP per<br>acre (equivalent to 50-100<br>ppm at 600 gal. A) | 20 30%, bloom   | Spray tre<br>time. Afte<br>days to<br>within 30 |
| APPLES  |           |  |   |   |
| (Fire Blight)<br>West Coast   | Spray     | 28.8 oz. AGRI-STRÉP per<br>acre (equivalent to 60 ppm<br>at 600 gal A)       | fuli bloom  | Apply at<br>Continue<br>maintain<br>50 days o   |
|   | Dust      | 40 lb. of 1500 ppm dust<br>per acre  | full bloom  | Same as   |
| Other Areas   | Spray     | 24-48 oz. AGRI-STREP per<br>acre (equivalent to 50 100<br>ppm at 600 gai A)  | 20 30 % bloom   | Spray tre<br>time Afte<br>days to<br>within 50  |
| TOMATOES & PEPPERS  |           |  |   | within 50                                       |
| (Bacterial Spot)  | Spray     | 200 ppm  | When first true leaves<br>appear  | Continue  |
| HOPS<br>(Downy Mildew)  | Spray     | 1000 ppm   | Soak spray crown when shoots first appear   | Repeat s<br>⇔nen sho<br>appiy afte              |
| TOBACCO<br>(Blue Mold)  | Spray     | 100 ppm (200 ppm for seri-<br>ous infection)                                 | When plants are the size<br>of a dime, or when disease is<br>first reported in the area | Spray at a into the fa                          |
| TOBACCO<br>(Wildfire)   | Spray     | 100 ppm (200 ppm where<br>wildfire is already estab-<br>lished)              | When plant bed is in 2-leaf<br>stage  | Spra ea<br>trspiant                             |
| POTATOES<br>(Soft Rot and Black Leg in<br>Maine and adjacent areas) | Soak      | 100 ppm  | Soak cut seed pieces in<br>solution for 30 minutes<br>Then plant as usual.              | -   |
| (Bacterial Blight in Florida)                                       | Spray     | 50 ppm   | When conditions favor<br>blight.  | Spray you<br>until trans                        |
| CHRYSANTHEMUMS<br>(Bacterial Wilt)                                  | Soak      | 50 ppm   | Soak basal ends of cuttings<br>for 6 hours. Then plant as<br>usual                      |   |
|   | •ppm refe | rs to Streptomycin content   | vaun  |   |

MIXING DIRECTIONS: Sprays containing 50 1000 parts per mil-lion of streptomycin are suggested AGRI-STREP contains 17 strep-tomycin (21.2 streptomycin sulfate) so that the following dilutions will supply the indicated concentrations

.

50 ppm—Mix 14 pound in 100 gallons of water 100 ppm—Mix 12 pound in 100 gallons of water 200 ppm—Mix 1 pound in 100 gallons of water 1000 ppm—Mix 5 pounds in 100 gallons of water

NOTICE TO BUYER: Buyer assumes all risks of use and handling which are at variance in any way with the directions hereon. There are no warranties which extend beyond the description on this label

USDA Registration No. 618-28



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Active Ingredient

Streptomycin Sulfate Inert Ingredients

CAUTION

Keep out of reach of children

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21.2°,

78.8°5

100 "

MAY CAUSE ALLEPGIC SKIN REACTIONS Avoid contact with skin and eyes Do not breathe dust or spray mist

Wear dust mask and rubber gloves Wash thoroughly after handling Do not contaminate water by cleaning of equipment or disposal of wastes.

-up

at 5 day intervals until all late bloom . Continue to spray at 5 7 day intervals trol shoot and fruit infections, Do not within 30 days of harvest. s Spray.

trees every 3.4 days during blossom After petal fall, apply sprays every 10.14 to control twig blight. Do not apply 30 days of harvest.

at petal fail and late secondary bloom. re to spray at 5.7 day intervals to in disease control. Do not apply within is of harvest. Spray.

trees every 3.4 days during blossom After petal fall, apply sprays every 10.14 to control twig blight. Do not apply 50 days of harvest.

every 4.5 days until transplanting.

soaking spray after crown pruning hoots are 4-12 inches long. Do not fter first vine training.

it 5.7 day intervals until plants are set a field or until the disease is no longer

each week for 5 weeks or until nting

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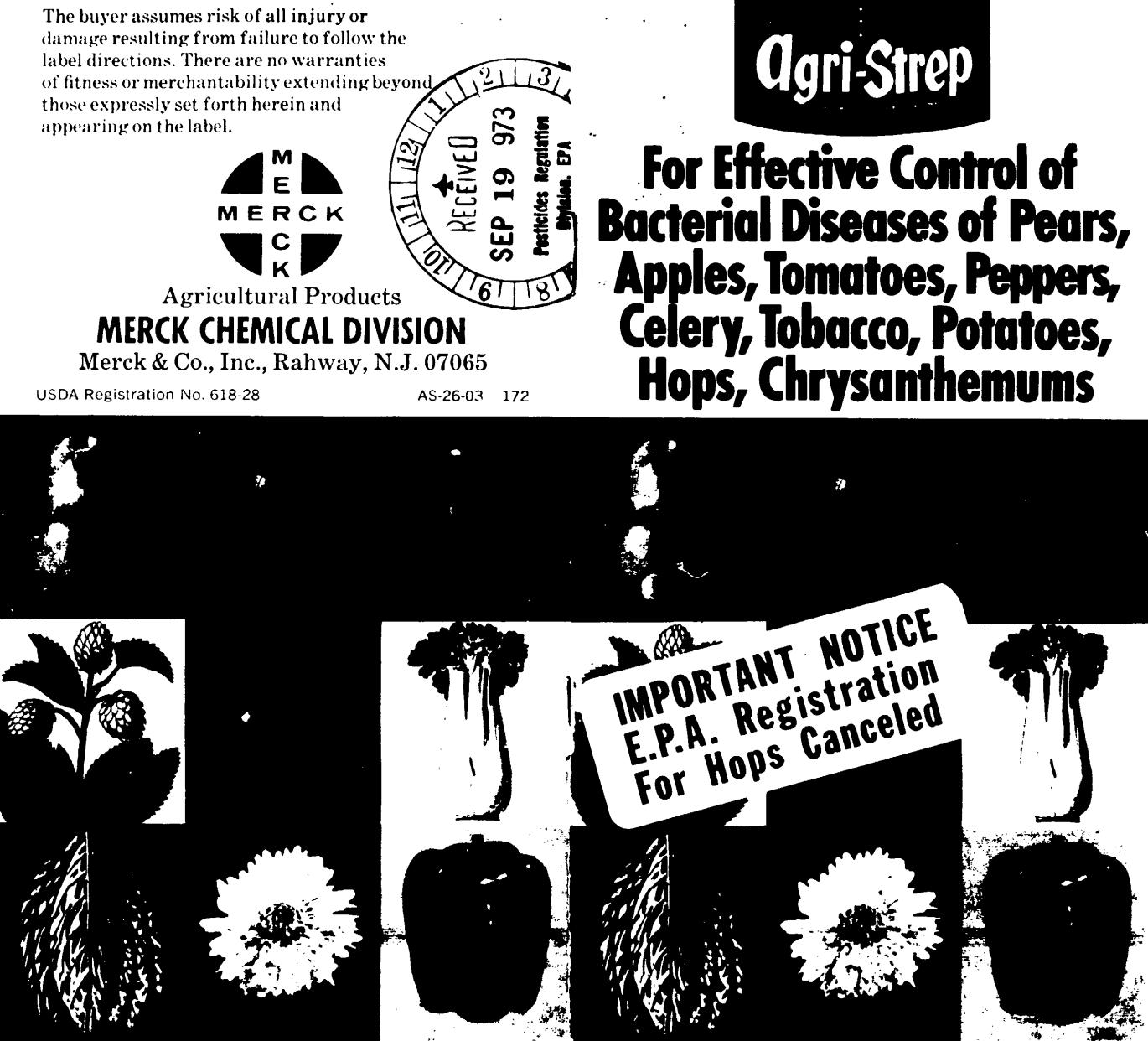
noing plants in seedled taken weekly

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### Notice to Buyer.





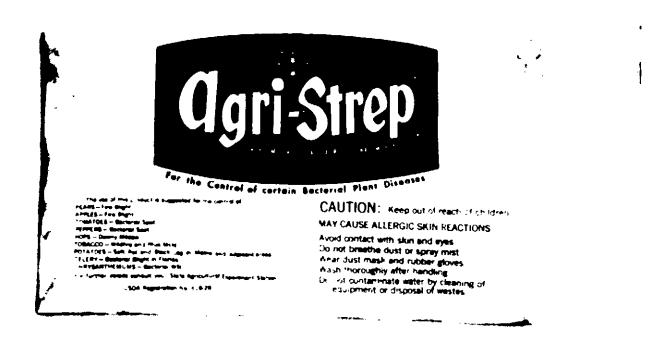
### AGRI-STREP is the best, most economical harvest insurance you can buy.

The cost of bacterial disease is high. In orchards the cost is multiplied over many seasons. Fruit-bearing parts of trees pruned to combat bacterial disease take several seasons to bear again. This season, fight bacterial disease the sure way-the economical way-AGRI-STREP from Merck.



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No detectable residue in fruit at harvest if used according to package directions. Systemic as well as surface action-protects during drizzle and rainy conditions, regardless of temperatures. Improves yield because bearing portions of trees are not pruned out. Can be used up to 30 days before harvest.

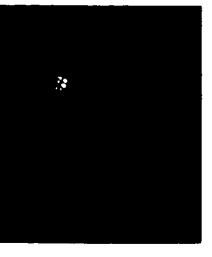




## PEARS

**AGRI-STREP** controls pear blight. Costs less than pruning. Will not impair fruit finish or yield. Effective on both blossom

and twig blight.



### **APPLES**

**AGRI-STREP** controls apple blight. Costs less than pruning. Effective on both blossom and twig blight.

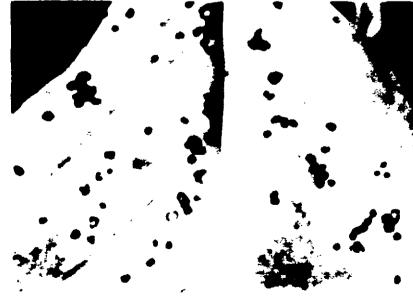
No detectable residue in fruit at harvest if used according to package directions. Systemic as well as surface action-protects during drizzle and rainy conditions, regardless of temperatures. Improves yield because bearing portions of trees are not pruned out. Can be used up to 50 days before harvest.

# VEGETABLES

**AGRI-STREP** is effective against bacterial spot on tomatoes and peppers, bacterial blight on Florida celery, and soft rot and black leg on potatoes. It provides systemic as well as surface action, and stays effective during rainy conditions. It will not impair the finish or yield of tomatoes and peppers. For potatoes, soak the seed pieces 30 minutes in an **AGRI-STREP** solution. **AGRI-STREP** should be used in combination with a standard seed protectant for controlling seed rot and damping off.



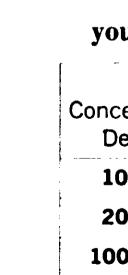
Tomato stem and leaves with bacterial wilt



Bacterial spot of peppers







See the Application Chart on the next two pages.

### CHRYSANTHEMUMS, HOPS, TOBACCO

**AGRI-STREP** controls downy mildew of hops, tobacco wildfire and blue mold, and bacterial wilt of chrysanthemums. For hops, a soak spray should be used when the shoots first appear, with applications repeated up to the first vine training. Chrysanthemum cuttings should have their basal ends soaked for six hours to prevent wilt. Tobacco spraying should begin when the seedlings are in the two-leaf stage. **AGRI-STREP** works with both systemic and surface action and protects under all temperature and rain conditions.

#### Use this table to determine your AGRI-STREP concentrations

| centration | Quantity AGRI-STREP Per<br>Volume of Water |                 |                 |  |  |
|------------|--|-----------------|-----------------|--|--|
| esired     | <b>50</b> gal.                             | <b>100</b> gal. | <b>500</b> gal. |  |  |
| 00 ppm     | ¼ lb.                                      | ½ lb.           | 2½ lb.          |  |  |
| 00 ppm     | ½ lb.                                      | 1 lb.           | 5 lb.           |  |  |
| 00 ppm     | 21⁄2 lb.                                   | 5 lb.           | 25 lb.          |  |  |

| Crop & disease   | Method | pplication<br>Rate*  |            | Apply first   | Follow-up   |
|--|--------|--|------------|---|---|
| PEARS<br>(fire blight)<br>West Coast                                   | Spray  | 28.8 oz. AGRI-STREP<br>per acre (equivalent to<br>60 ppm at 600 gal/A)         |            | 10% bloom   | Repeat at 5 day intervals until all<br>late bloom is over. Continue to spray<br>at 5–7 day intervals to control shoot<br>and fruit infections. Do not apply<br>within 30 days of harvest. |
|  | Dust   | 40 lb. of 1500 ppm<br>dust per acre  | 3          | 10% bloom   | Same as Spray   |
| Other areas  | Spray  | 24—48 oz. AGRI-STREP<br>per acre (equivalent to<br>50—100 ppm at 600<br>gal/A) | د          | 20— <b>30 %</b><br>bloom  | Spray trees every 3–4 days during<br>blossom time. After petal fall, apply<br>sprays every 10–14 days to control<br>twig blight. Do not apply within 30<br>days of harvest.               |
| APPLES<br>(fire blight)<br>West Coast                                  | Spray  | 28.8 oz. AGR1-STREP<br>per acre (equivalent to<br>60 ppm at 600 gal/A)         |            | fuli bloom  | Apply at petal fall and late sec-<br>ondary bloom. Continue to spray at $5-7$ day intervals to maintain disease<br>control. Do not apply within 50 days<br>of harvest.                    |
|  | Dust   | 40 lb. of 1500 ppm<br>dust p 과 acre  |            | full blocm  | Same as Spray   |
| Other areas  | Spray  | 24–48 oz. AGRI-STREP<br>per acre (equivalent to<br>50–100 ppm at 600<br>gal/A) |            | 2030%<br>bloom  | Spray trees every 3–4 days during<br>blossom time. After petal fall, apply<br>sprays every 10–14 days to control<br>twig blight. Do not apply within 50<br>days of harvest.               |
| TOMATOES &<br>PEPPERS<br>(bacterial spot)                              | Spray  | 200 ppm  |            | When first true leaves<br>appear  | Continue every 4–5 days until trans-<br>planting.   |
| HOPS<br>(downy mildew)   | Spray  | 1000 ppm   |            | Soak spray crown when shoots first appear   | Repeat soaking spray after crown<br>pruning when shoots are 4–12 inches<br>long. Do not apply after first vine<br>training.   |
| (blue mold)  | Spray  | 100 ppm (200 ppm <b>for</b> serious infection)                                 | .•         | When plants are the<br>size of a dime, or<br>when disease is first<br>reported in the area. | Spray at 5–7 day intervals until plants are set into the field or until the disease is no longer a problem.   |
| TOBACCO<br>(wildfire)  | Spray  | 100 ppm (200 ppm<br>where wildfire is al-<br>ready established)                | <i>,</i> • | When plant bed is in 2-leaf stage   | Spray each week for 5 weeks or until transplanting.   |
| POTATOES<br>(soft rot and<br>black leg in Maine<br>and adjacent areas) | Soak   | 100 ppm  |            | Soak cut seed pieces<br>in solution for 30<br>minutes. Then plant as<br>usual.              | ·<br>·<br>·   |
| <b>CELERY</b><br>(bacterial blight<br>in Florida)                      | Spray  | 50 ppm   |            | When conditions favor blight.   | Spray young plants in seedbed twice weekly until transplanting.   |
| CHRYSANTHEMUMS<br>(bacterial wilt)<br>*ppm refers to Streptomyci       | Soak   | 50 ppm   |            | Soak basal ends of<br>cuttings for 6 hours.<br>Then plant as usual.                         |   |

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