

Maleic Hydrazide – 30% Plant Growth Regulator

FOR PREVENTION OF SPROUTING IN POTATOES AND ONIONS AND SUPPRESSING THE GROWTH OF TOBACCO PLANT SUCKERS. ALSO FOR INDUCING DORMANCY IN YOUNG NON-BEARING CITRUS FRUIT TREES TO PREVENT FROST DAMAGE.

ACTIVE INGREDIENT:	
Diethanolamine salt of 1,2-Dihydro-3,6-Pyridazinedione	•
- Total	100%

CONTENTS: ONE LIQUID GALLON

One gallon contains the equivalent of 3 pounds of maleic hydrazide which is 30% maleic hydrazide by weight.

CAUTION: Keep Out of Reach of Children See side panel for additional cautions

Manufactured By VINELAND CHEMICAL COMPANY VINELAND, NEW JERSEY

USDA Reg. No. 2853-40

SUGGESTIONS

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(7) Tobacco plants grown under drought conditions will absorb Maleie Hydrazide - 30% slowly and results may not be as good as with plants grown under normal conditions.

(8) Use the correct amount of Maleic Hydrazide - 30% with the proper amount of water called for in the directions. Too little Maleic Hydrazide - 30% will not provide the desired control. Too much is wasteful and may cause burning of leaves and may reduce quality of tips.

(9) Maleic Hydrazide - 30% is compatible with DDT, Malathion, Parathion, Toxaphene and Zineb.

(10) Maleic Hydrazide - 30% is not corrosive to spray equipment. Following use, all spray equipment should be thoroughly flushed with water.

(11) Maleic Hydrazide - 30% is nonvolatile, but care should be taken to prevent drift onto nearby crops, especially when aerial applications are being made.

(12) Maleic Hydrazide - 30% will not freeze even at 0° F. If separation of wetting agent or turbidity occurs during cold weather, warming to $60^{\circ}-70^{\circ}$ F. with mild agitation will restore Maleic Hydrazide - 30% to its original condition.

FISH AND WILDLIFE

Do not contaminate water by cleaning of equipment or disposal of wastes.

CONTAINER DISPOSAL

It is recommended that holes should be chopped into top and bottom of can, and it should be buried 18" below soil surface at safe disposal site. Never reuse container for food or water.

DIRECTIONS

To control sprouting of potatoes in storage:

For using ground spray equipment, mix one gallon Maleic Hydrazide - 30% with 30 - 150 gallons of water and spray as uniformly as possible over one acre. (The water volume depends upon the pressure and size of nozzles of the spray equipment). The best time to spray is when the few lower leaves show a yellow color, about a week after blossoms fall off the vines - about 5 weeks before harvest. Maleic Hydrazide - 30% should not be used on potato plants grown for seed.

To control sprouting of onions in storage:

Mix 5 pints Maleic Hydrazide - 30% with 100 - 150 gallons of water and apply by ground or airplane sprayer to one acre. Spray must be applied when all tops are still green but about 50% of them have fallen. This occurs about 10-14 days before harvest time.

CAUTION: Avoid spraying edible onions earlier than 2 weeks before maturity as spongy bulbs may result if spraying is done too early.

To prevent sucker growth on flue cured and burley tobacco plants:

Use one pint Maleic Hydrazide - 30% for each 1,000 plants. 20-50 gallons of water per acre should be used as the carrier. Example: To spray 6,000 plants per acre, mix 3 qts. Maleic Hydrazide - 30% with 20-50 gallons of water and distribute over the entire acre. If there are 8,000 plants per acre, use 1 gallon Maleic Hydrazide - 30% and 20-50 gallons of water.

Maleic Hydrazide - 30% is absorbed by the plant, hence only the upper 1/2 to 1/3 of the plant need be sprayed.

When to spray: Correct timing is necessary to secure satisfactory control.

(1) If all plants flower at about the same time:

When the plants are in full flower, top, pull all suckers from early-maturing plants and spray the entire field within 24 hours after topping.

(2) If there is a wide range in flowering time:

Top the few earliest flowering plants. Wait until the remaining plants are in full flower, top them, remove all suckers and apply Maleic Hydrazide $\cdot 30\%$ to all plants. Tip leaves to be harvested should be at least 6 inches long at time of spraying. Method of spraying: Maleic Hydrazide $\cdot 30\%$ may be applied with either power-drawn insecticide sprayer or with a compressed air portable sprayer.

(1) Powered insecticide sprayers:

Apply in same manner as insecticide, using any number of nozzles. Only the upper 1/3 to 1/2 of the plant need be wet.

(2) Portable sprayer:

Spray one side of each tobacco plant row while walking at a constant rate. Moisten upper 6 to 8 leaves on each plant. Spray as uniformly as possible.

Amount needed: Use 1 pint Maleic Hydrazide $\cdot 30\%$ for each 1,000 plants. For example: Use 3 quarts of Maleic Hydrazide $\cdot 30\%$ in from 20 to 40 gallons of water for 6,000 plants per acre. 1 gallon Maleic Hydrazide $\cdot 30\%$ in from 30 to 50 gallons of water will cover 8,000 plants per acre.

To protect young non-bearing citrus trees in Southern States against frost: Maleic Hydrazide $\cdot 30\%$ may be used to induce dormancy and thus protect non-bearing citrus trees against frost damage down to 21° F. Mix two quarts of Maleic Hydrazide $\cdot 30\%$ with 100 gallons of water and spray with coarse cone nozzle between November 1-15. Thoroughly wet upper and lower leaf surfaces, branches and trunks of trees. If unusually warm weather persists during November and December, a second treatment may be required, but no more than two treatments per season are necessary. Periodically check for swelling buds which indicate that regrowth is occuring and respray when this is evident. Do not spray trees within the year in which the fruit to be harvested is set. Rain occuring within 24 hours after application will reduce efficacy. Maleic Hydrazide $\cdot 30\%$ sprayed citrus trees may show a delay in regrowth in the spring for several weeks if the winter remains cold. The first new growth of foliage may be slightly narrowleafed, but subsequent growth will be normal.

NON-WARRANTY: Vineland Chemical Company and seller warrant that this material will conform to ingredients indicated on label, but make no other warranty, implied nor expressed. Neither Vineland Chemical Company nor seller shall be held responsible for personal injury, property damage loss resulting from the handling, storage, or use of this product whether or not in accordance to directions. Buyer assumes all risks and liability, and accepts and uses the product on these conditions. No person is authorized to waive this notice.

SUGGESTIONS

TOBACCO

(1) Best control of tobacco suckers is obtained if application is made during FULL FLOWER stage, which is the stage when 90% of the plants have begun to shed their first flowers. Too early spraying may prevent normal development of top leaves, while too late spraying will allow some sucker growth.

(2) Rains occurring within 12 hours after spraying will reduce effective-ness.

(3) Maleic Hydrazide - 30% has been used successfully with tobacco insecticides, but separate applications are recommended until further studies are completed.

(4) Do not use on tobacco or potato plants grown for production of seed.

(5) Do not spray tobacco leaves when they are in a wilted condition on hot, dry days. For best results spray on cloudy days, in eary morning. Avoid late afternoon or evening applications. Use a fine mist spray, not a broad jet type.

(6) Hand-suckered or Maleic Hydrazide - 30% treated tobacco will not ripen as rapidly as non-suckered treated tobacco. Also, under some conditions Maleic Hydrazide - 30% treated tips have a tendency to turn yellow prematurely. This is not harmful but does not mean that your tobacco is ripe. Therefore, do not harvest Maleic Hydrazide - 30% treated tobacco until ripeness is evidenced by other characteristics such as-fading_of color from midrib or change in leaf texture.

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