

NOTES ON TOBACCO

- To control tobacco suckers, apply MALEIC HYDRAZIDE 30% at the proper time. Spraying too early may prevent normal development of top leaves. Spraying too late will allow some sucker growth. Full flower is the stage when 90 percent of your plants have begun to shed their first flowers.
- Rains occurring within 12 hours after spraying may reduce effectiveness.
- Follow dosage recommendations carefully, spray field uniformly, and do not use less than the minimum amount of water recommended.
- MALEIC HYDRAZIDE 30% has been used successfully with tobacco insecticides, but separate application is recommended until further studies are made.
- Do not use on tobacco or potato plants for seed production.
- Do not spray tobacco in the middle of hot, dry days when leaves are severely wilted. For best results spray during early morning, all day on cloudy days, avoiding late afternoon or night applications. Use a nozzle delivering a fine mist spray. Do not use a broad jet type of spray.
- Closely hand-suckered or MALEIC HYDRAZIDE 30%-treated tobacco will not ripen as rapidly as poorly suckered tobacco. Also, under some conditions MALEIC HYDRAZIDE 30%-treated tips have a tendency to turn yellow prematurely. This is not harmful and does not mean that your tobacco is ripe. Therefore, do not harvest MALEIC HYDRAZIDE 30%-treated tobacco by using time and color of leaves as your only guides to ripeness. Use other characteristics indicative of ripeness such as:
 - Fading color from midrib.
 - Change in apparent leaf texture.
- If tobacco plants have been grown under drought conditions, absorption

of MALEIC HYDRAZIDE 30% will be slow and results may not be as good as with plants grown under normal conditions.

- Too little MALEIC HYDRAZIDE 30% will result in less than desired control. Too much is wasteful and may cause burning of leaves and reduce tip quality.
- ON OTHER CROPS**
- For control of wild onions and garlic do not apply to young seedlings less than one season old or to winter pastures consisting of small grains such as rye. Do not pasture stock in, or cut hay from a treated area.
- Do not apply MALEIC HYDRAZIDE 30% in combination with other MALEIC HYDRAZIDE 30% compatible with Maneb, Zineb, Dithion XL, Malethion, Methoxychlor, Aldrin, heptachlor, Neutra, Dieldrin, Fungicide, Toxaphene, DDT, Dieldrin, Systox, Nabam and Zinc Sulphate Mix Nabam and Zinc Sulphate in spray tank before adding MALEIC HYDRAZIDE 30%. Use any of these pesticides only on crops for which they are registered. Observe all cautions and limitations in labeling of products used in mixtures.
- Spray potatoes and grass at least 24 hours before rain. Rain occurring within 24 hours after application will reduce effectiveness.
- MALEIC HYDRAZIDE 30% is not corrosive to spray equipment. It is non-volatile. Avoid drift on nearby crops.
- Rinse spray equipment with water after use.
- MALEIC HYDRAZIDE 30% will not freeze even at zero degrees F. Separation of wetting agent occurs at 40° F. Warming from 60° F. with mild agitation restores product to original condition.

FOR TOBACCO

To stop sucker development on blue-veined and burley tobacco MALEIC HYDRAZIDE 30%, a plant inhibitor, offers a new method of controlling sucker growth by keeping suckers from growing rather than by killing them. Since MALEIC HYDRAZIDE 30% is absorbed and moves inside the tobacco plant, spraying the whole plant is not necessary. Best results are obtained by spraying the upper 1/3 to 1/2 of the plant. It is very important to apply equal amounts of MALEIC HYDRAZIDE 30% to each plant at time of topping.

When to spray: Satisfactory sucker control depends on correct timing of the spray.

a. If all plants flower at about the same time, proceed as follows: As soon as the plants are in full flower, top, pull all suckers from early-maturing plants and spray MALEIC HYDRAZIDE 30% uniformly onto the entire field within 24 hours after topping (see Notes 1-9).

b. If there is a wide range in the time of flowering, use the following procedure:

- Go through the field and top the few plants in flower.
- Wait until the remaining plants are in full flower, top them, remove all

suckers from the entire field, and apply MALEIC HYDRAZIDE 30% within 24 hours after topping (see Notes 1-9). Leaves to be harvested should be at least 6 inches long at time of spraying.

How to spray MALEIC HYDRAZIDE 30% may be applied with either tractor or with a shoulder sprayer.

a. Tractor or mule-drawn insecticide sprayers. Any number of nozzles may be used. Can be applied in the same manner as insecticide, spraying one or more rows at a time, wetting upper 1/3 to 1/2 of plant.

b. Compressed air shoulder sprayer with single nozzle spraying a wide cone. Spray one side of each tobacco row while walking at a constant rate. Use up-and-down motion of spray nozzle to moisten upper 6 to 8 leaves of each plant. Apply equal spray to each plant.

Amount to use: 1 pint MALEIC HYDRAZIDE 30% per 1,000 plants. Example: Use 3 quarts for 6,000 plants per acre, or 1 gal MALEIC HYDRAZIDE 30% for 8,000 plants per acre. Use not less than 20 gallons of water per acre; from 20 to 50 gallons of water per acre can be used (see Note 9).

FOR OTHER CROPS

To control sprouting of onions in storage Apply 5 1/2 pints MALEIC HYDRA-

Prevents Growth of Tobacco Suckers and Sprouting of Potatoes and Onions

Maleic Hydrazide 30%

ACCEPTED
MAY 25 1973
UNIVERSITY OF TEXAS AT AUSTIN
FOR REGISTRATION OF PATENT RIGHTS
ED. UNDER NO. 2243



1525 N. POST OAK ROAD • HOUSTON, TEXAS 77055

DIRECTIONS FOR USE

Apply 1 to 2 gallons of water per acre with a ground sprayer. Airplane application can also be made. The spray should be applied when the bulbs are mature, have 5 to 8 green leaves, and necks soft enough for the tops to pull off if they have not already done so. The spray is often applied when 50 percent of the tops have fallen but all tops are still green. This condition usually occurs about 10 days to two weeks before harvest time. Green tops are essential for the absorption of MALEIC HYDRAZIDE 30%. CAUTION: Avoid too early spraying of edible onions. Spongy bulbs might result if spraying is done earlier than two weeks before maturity.

To control sprouting of potatoes in storage Apply 1 gallon MALEIC HYDRAZIDE 30% in 30-150 gallons of water per acre by ground equipment. Airplane application can be made in irrigated sections of the country. Check your field to see if you have a good set of potatoes. MALEIC HYDRAZIDE 30% is applied when most of the tubers set are approximately 1 inch in diameter. This occurs when the few lower leaves show a yellow color. In areas where potatoes flower uniformly, this is 1 week after blossoms fall off the vine, usually in August

about 4 to 5 weeks before harvest (see Notes 5, 11 and 12).

To induce dormancy in young non-bearing citrus trees in Florida: By inducing dormancy, MALEIC HYDRAZIDE 30% offers protection against frost damage (down to 21° F in recent experiments). Add 2 quarts MALEIC HYDRAZIDE 30% to 100 gallons water and spray with coarse cone nozzle between November 1-15. The spray should thoroughly wet upper and lower leaf surfaces, branches and trunks of trees. A second treatment may be necessary in 6 to 8 weeks if unusually warm weather persists during November and December; no more than two sprays per season are necessary. Periodically check for bud swell which indicates that regrowth is occurring, and respray if swelling of buds occurs. Do not spray trees within the year in which fruit to be harvested is set. Spray citrus trees at least 24 hours before rain. Rain within 24 hours after application will reduce effectiveness. Citrus trees sprayed with MALEIC HYDRAZIDE 30% may show a delay in regrowth in spring for several weeks if the winter remains cold. The first new growth of foliage may be slightly "Frenched," or narrow leaved, but subsequent growth will be normal.

E.P.A. Reg. No. 9663-4

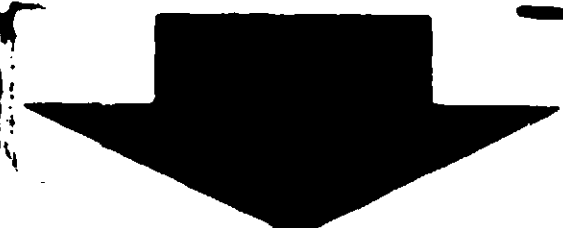
NET CONTENTS: 1 GALLON

ACTIVE INGREDIENTS

D ethanotamine salt of 1,2-Dihydro-3,6-pyridazinedione 58.0%

INERT INGREDIENTS 42.0%

100.0%



CAUTION:

Keep Out of Reach of Children. Avoid inhalation of mist. Avoid contact with skin, eyes, or clothes. May be harmful if swallowed.

Container Disposal: Chop holes in top and bottom. Bury 18" below soil surface at safe disposal site. Never re-use for food or water.

OTHER USES

To control wild onions and garlic in lawns and grass along highway (not pasture or crop land): Apply 1 to 2 gallons MALEIC HYDRAZIDE 30% in 20 to 100 gallons water per acre in spring or fall when about 90-95 percent of the bulbs have started regrowth. Use on lawns only when grass is brown and dormant.

To control quackgrass: Apply 1 1/2 gallons MALEIC HYDRAZIDE 30% in 20-100 gallons of water per acre in spring when grass is 4-10 inches tall. From 4 to 8 days after spraying, plow the sod, rototill, spade or in some manner turn under the quackgrass leaf growth. Prepare the plowed soil by discing, harrowing, etc. The following crops can be planted immediately: field and sweet corn, potatoes, tomatoes, green, dry, and lima beans, peas, red and sugar beets (see Note 12).

NOTICE

Use of this material in a manner or at any time other than in accordance with the directions may produce plant injury or other undesirable results. Crystal Manufacturing Corporation makes no express or implied warranties, other than specified on this label.

Cameraman's Note
Poor Copy