APPLICATION INSTRUCTIONS FOR LATERAL BRANCHING AND TREE GROWTH PROMOTER

1. Rate and Timing

A single foliar application of Promalin or a Promalin-latex paint spot application to apples, non-bearing pears, and non-bearing sweet cherry trees, including nursery stock, to increase lateral bud break and shoot growth, improve branch ascension, and provide a better tree framework for early cropping.

Spray Volume

A single foliar application of Promalin or a Promalin-latex paint spot application to apples, non-bearing pears, and non-bearing sweet cherry trees, including nursery stock, to increase lateral bud break and shoot growth, improve branch ascension, and provide a better tree framework for early cropping.

NOTE: Uniformly apply the Promalin-latex paint mixture with a brush or sponge to cover the bark surface thoroughly. Apply only to one-year old trunks.

For nursery stock, apply at the rates specified below to control the growth of non-terminal growth. For spruce stock, apply at the rates specified below to ensure maximum bud break.

The spray volume of 75 - 150 gallons/acre is adequate for most orchards. Excessive spray volumes have been known to reduce productivity and increase costs.

Apply Promalin in a sufficient amount of water to ensure thorough, but not excessive, coverage. Adjust water volumes based on site size and spacing. A spray volume of 15 – 50 gallons/acre is adequate for most orchards. Excessive spray application volumes that result in spray runoff have been known to reduce photosynthetic performance.

Table 1 – Foliar Applications

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rate</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples (Bearing and Non-Bearing)</td>
<td>1.8% (1 pt Promalin per 5 gal spray solution)</td>
<td>100.0% (w/w) at time of application of Promalin-latex paint on terminal bud tips or at new leaf primordia.</td>
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<tr>
<td>Pears (Bearing and Non-Bearing)</td>
<td>1.8% (1 pt Promalin per 5 gal spray solution)</td>
<td>96.4% (w/w) at time of application of Promalin-latex paint on terminal bud tips or at new leaf primordia.</td>
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<tr>
<td>Sweet Cherries (Non-Bearing)</td>
<td>1.8% (1 pt Promalin per 5 gal spray solution)</td>
<td>100.0% (w/w) at time of application of Promalin-latex paint on terminal bud tips or at new leaf primordia.</td>
</tr>
</tbody>
</table>

Do not contaminate water, food or feed with this product or any of its residue.

Post-Harvest and Disposal: Store the remaining contents into application equipment or a mix tank and rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

- Empty the remaining contents into the application equipment or a mix tank, drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, drain for 10 seconds. Repeat this procedure two more times.
- Do not apply the Promalin-latex paint mixture after a bud break. Applications after bud break have been known to cause some injury to younger tips and fail to promote shoot growth from that point.

NOTE: This container will treat 1.0 acre at the maximum use rate of Promalin-latex paint mixture with a brush or sponge to cover the bark surface thoroughly. Apply only to one-year old trunks.

Any type of application of Promalin to non-bearing trees and non-bearing sweet cherries must not be made later than six years prior to first anticipated harvest.

STORAGE AND DISPOSAL

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Application Method and Timing

Apply within 24 hours after a frost.

Application Method and Timing instructions for washables, use detergent and hot water. Keep and wash PPE separately.

Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions exist, use detergent and hot water. Keep and wash PPE separately. If more than one type of PPE is required, wash each type separately.

Personal Protective Equipment (PPE)

• Shoes plus socks
• Waterproof gloves
• Coveralls
• Long-sleeved shirts and long pants
• Non-skid shoes or boots
• Face shield

User Safety Requirements

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Discard any unused spray material following local, state, or federal law.

Mixing Instructions:

Caution: Do not apply Promalin through any type of irrigation system.

Compatibility:

The Promalin Application Instructions refer to use of the pesticide in a Federal Standard 414 Part 519 matrix. Data for compatibility of Promalin with other agricultural pesticides is not available. Valent BioSciences Corporation does not assume any responsibility for unexpected results due to the tank mixing of Promalin with other pesticides. For tank mixing instructions, see the mixing section of the tank mixing instructions.

Promalin applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorbency of the plant, thus optimizing effectiveness. Applications during periods of late afternoon and early morning shall be avoided whenever possible under certain atmospheric conditions and not conducted to slow drying conditions. Do not apply Promalin when air temperature is below freezing or greater than 100°F.

FIRST AID

For skin contact: Wash the affected part with soap and water. For eye contact: Wash the outside of the eye with large amounts of water for 15-20 minutes. If eye irritation persists, consult a physician.

DIRECTIONS FOR USE

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or in transit below the mine or water table. Do not recontaminate treated areas with irrigation water.

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For Improved Typiness and Size:

Apple

Crop

Benefit

Apples

3 - 21 pint

Apply in 75 - 150 gallons of water

If more than one type of PPE is required, wash each type separately.

GENERAL INSTRUCTIONS

Do not use a surfactant. Avoid deep sprays and arcs, and use drift reduction sprayers. Do not use or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless wearing appropriate PPE.

For improved typiness and size (continued):

Apply in 150 - 750 gallons of water

Do not apply to fruits, leaves, shoots, or blossoms that are damaged or wilted. Do not apply in conditions of high wind, high temperature, or high relative humidity. Do not apply to orchard trees in full bloom.

For the period of 0.5 - 1 pint of Promalin per acre at the beginning of the bloom period, from early lamppick bloom to the early stages of full bloom of the side blossoms. Make the second application of 0.5 - 1 pint of Promalin per acre in 3 - 21 days after the completion of the first applications.

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DIRECTIONS FOR USE

1. Improve the shape of apples through fruit elongation and development of more uniform apples in some varieties:
   - For improved typiness and size:
     - For Improved Typiness and Size (continued):
       - Apple: 1-2 pints per acre (4-10 liters per ha) in 75-150 gallons of water per acre (275-650 l/ha). Apply in 1-2 field sprays.

2. Increase fruit size and weight on most apple varieties. Some fruit thinning has been known to occur from the use of Promalin.
   - For fruit size:
     - Apple: 0.5-1 pint per acre (2.5-5 liters per ha) in 3-21 gallons of water per acre (10-80 l/ha). Apply in 1-3 field sprays; separate equipment is recommended for spraying apples and pears. Applications may be made during the early stages of petal fall of the side blossoms. Note: The bloom period is prolonged, two applications give the best results. Use only with the most uniform crops. Apply in 1-3 fields within 1000 gallons of water per acre (4000 l/ha). Do not apply to honey bees, bumble bees, or other bees.

3. Increase lateral bud break and shoot growth, and improve branch angle on non-bearing trees of most European pear and sweet cherry varieties. This effect provides a better tree framework for early cropping.
   - For lateral bud break and shoot growth:
     - Apple: 0.5-1 pint per acre (2.5-5 liters per ha) in 3-21 gallons of water per acre (10-80 l/ha). Applications may be made during the early stages of petal fall of the side blossoms. Note: The bloom period is prolonged, two applications give the best results. Use only with the most uniform crops. Apply in 1-3 fields within 1000 gallons of water per acre (4000 l/ha). Do not apply to honey bees, bumble bees, or other bees.

4. Increase lateral bud break and shoot growth, and improve branch angle on non-bearing trees of most European pear and sweet cherry varieties. This effect provides a better tree framework for early cropping.
   - For increased fruit thinning and size:
     - Apple: 0.5-1 pint per acre (2.5-5 liters per ha) in 3-21 gallons of water per acre (10-80 l/ha). Applications may be made during the early stages of petal fall of the side blossoms. Note: The bloom period is prolonged, two applications give the best results. Use only with the most uniform crops. Apply in 1-3 fields within 1000 gallons of water per acre (4000 l/ha). Do not apply to honey bees, bumble bees, or other bees.

5. Increase branching in apple and pear trees. Applications are recommended only for improved typiness and size:
   - For increased branching:
     - Apple: 0.5-1 pint per acre (2.5-5 liters per ha) in 3-21 gallons of water per acre (10-80 l/ha). Applications may be made during the early stages of petal fall of the side blossoms. Note: The bloom period is prolonged, two applications give the best results. Use only with the most uniform crops. Apply in 1-3 fields within 1000 gallons of water per acre (4000 l/ha). Do not apply to honey bees, bumble bees, or other bees.

GENERAL DIRECTIVES

- Do not apply more than twice per season.
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Rate and Timing

1. Application for Branching:

- For non-bearing stock (apples, non-bearing pears, and non-bearing sweet cherries), apply at the maximum rate 1-3 inches of new terminal growth.
- For orchard trees (apples and non-bearing sweet cherries), treat after trees have reached a terminal height at which lateral branching is desired. Apply in the spring when the flow begins to drip. Repeat this procedure two more times.

2. Application for Fruit Development:

- For apples, sweet cherries and non-bearing pears, apply in the spring when the flow begins to drip. Repeat this procedure two more times.

NOTE: Uniformly apply the Promalin-latex paint mixture with a brush or sponge to cover the bark surface. Apply only to one year old wood. Do not apply prior to bud burst or when shoots are emerging. Apply in the spring when the flow begins to drip. Repeat this procedure two more times.

STORAGE AND DISPOSAL

No contaminant water, food or feed by ingredients. Always use appropriate application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use in disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

NOTE: Do not apply Promalin late in the growing season after hard fall. Application of other fungicides has been known to cause some injury to tender shoots and to promote shoot growth from that point.

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For use on apples, non-bearing pears, and non-bearing sweet cherries

Active Ingredients:
N-(phenylmethyl)-1H-purine 6-amine .............................. 1.8% w/w
Gibberellins A₄A₇ .................................................................. 1.8% w/w
Other Ingredients ................................................................. 96.4% w/w
Total ................................................................................ 100.0% w/w

KEEP OUT OF REACH OF CHILDREN

CAUTION

For MEDICAL and TRANSPORT Emergencies ONLY Call 24 Hours A Day
1-800-892-0099.
See succeeding panel for First Aid, additional Precautionary Statements, Directions for
Use and Storage/Disposal Statements.

Valent BioSciences
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870 Technology Way
Libertyville, IL 60048 U.S.A.
EPA Reg. No. 73049-41
1-800-323-9597
List No. 02571-04-05

Net Contents: 1 Quart (946 ml)
This container will treat 1.0 acre at the maximum use rate
as indicated for use on Apples for Fruit Development.
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