

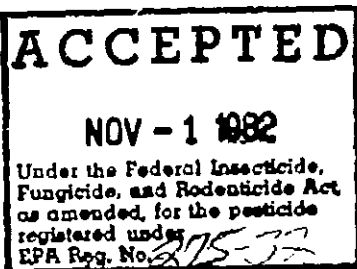
ABBOTT 275-32
October 4, 1982
Insert and carrier carton

promalin

PLANT GROWTH REGULATOR

PROMALIN® is a plant growth regulator for use on apples*. When applied at specific spray timing and concentration, Promalin will provide the following effects:

1. PROMALIN improves the shape of Delicious* apples through elongation of fruit and development of more prominent calyx lobes. These desirable effects will be most evident in years when natural typiness is limited.
2. On Delicious and other varieties PROMALIN may increase weight of individual fruit and yield per tree. Some thinning may occur from the use of Promalin.
3. On red apple varieties, e.g. Delicious, Jonathan, Jonamac, MacIntosh, Paulared, Spartan, Empire, PROMALIN may be combined (in all States except California) with Alar®-85 to enhance expected desirable effects from Alar-85, including improved color, earlier coloring, increased fruit pressure and prevention of preharvest fruit drop.
4. On most apple varieties, PROMALIN will increase lateral bud break, shoot growth, and improve branch angles on non-bearing apple trees, including nursery stock. This effect will provide a better tree framework for early cropping.



Directions for Use
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Do not apply to any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

Storage and Disposal
Do not contaminate water, food or feed by storage and disposal. Open dumping is prohibited. Do not reuse empty container.
Pesticide spray mixture or residue that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies. Triple rinse container and dispose in an incinerator or landfill approved for pesticide containers or bury in a safe place.

Consult federal, state or local disposal authorities for approved alternative procedures such as incineration or burning.

Rate and Timing of Application

1. Single Application for Improved Type
2. Single Application for Improved Type

*In California, use only on Delicious.

[- Fruit Development

Western U.S. A single application of PROMALIN should be made from early king bloom (king blossoms opening and side blossoms in the bud stage) to the early stages of petal fall of the king blossoms.

***PROMALIN-ELGETOL® (DNOC, 15% A.I.)** Use type and timing on spur Delicious strains. Apply a tank mix of PROMALIN and Elgetol at the recommended Elgetol timing, i.e. 80% full king bloom on the north side of the tree. Apply 2 pints of PROMALIN plus 4 pints of Elgetol in 200 gallons of water per acre. Observe all precautionary statements on Elgetol label.

Eastern U.S. A single application of PROMALIN should be made from early king bloom to the early stages of petal fall of side blossoms.

For both eastern and western U.S. apply 1 to 2 pints of PROMALIN per acre in 50 to 200 gallons of spray mixture as a fine mist spray.

2. Split Applications for Improved Type and Size

A split application may be utilized to improve type and sizing responses. The first application should be made from early king bloom to the early stages of petal fall of the king bloom. The second application should be made 7 to 21 days later. Apply 0.5 to 1 pint of PROMALIN per acre in 50 to 200 gallons of spray mixture in each application. Do not, however, exceed the maximum recommended rate of a total of 2 pints per acre for the combined sprays.

***3. Split Application to Improve Typiness in Locations where the Blossom Period is Prolonged or Occurs over a Period of Several Weeks**

Make two PROMALIN applications three or more days apart. The first spray should be timed during the first flush of bloom. A second application should be made when the remainder of the tree canopy comes into bloom.

The time between PROMALIN applications may vary from orchard to orchard within a given growing area because of the influence of the local microclimate. In most instances a period from 3 to 7 days between sprays is adequate. The time interval between sprays should be lengthened should cool weather further prolong bloom. For the most efficient use of PROMALIN, bloom progression with individual orchards should be assessed at least every 48 hours.

*An Spray except California

Apply PROMALIN twice as two concentrate sprays each containing 0.5 pint of PROMALIN in 100 gpa. The spray machine should be calibrated to deliver 100 gpa and nozzled to direct the spray mist to those portions of the tree canopy currently in bloom. ~~Do not exceed the recommended rate of 2 pints per acre.~~ ~~Do not exceed the recommended rate of 2 pints per acre.~~

[An appropriate wetting agent

***4. PROMALIN and ALAR® P5 (Plant Growth Regulator) for Commercial Applications to Apples**

PROMALIN and Alar P5 may be combined as a tank mix application during mid summer (60-80 days preharvest) on apples. This tank mix may enhance the expected desirable effect from Alar P5 application including improved color, earlier coloring, increased fruit pressure and prevention of preharvest fruit drop.

Use 1 to 2 pints of PROMALIN and 2 to 4 pounds of Alar P5 per acre in 100-400 gallons of spray solution. Alar should be added to the tank mix prior to the addition of PROMALIN. The PROMALIN and Alar P5 tank mix should be applied as a foliar spray in a manner that insures uniform and complete coverage. Do not exceed the per acre recommended rate. See current Alar P5 label for precautionary statements and other specific recommendations.

Mixing Instructions
Add the required amount of Promalin to a spray tank about
half full with water. Agitate while adding the material. Add
of water to the tank to fill. Add the required amount of
only in a spray tank. Add the required amount of water to
the tank. Add the required amount of water to the tank.
Application Considerations

[or Buffer-X®
and enhance absorption.

1. Since Promalin is a plant growth regulator that must be absorbed by the plant to be effective, best performance can be expected with good absorption conditions and healthy, vigorous trees. Do not spray the recommended tank mixes on any low vigor trees or trees under stress as from drought, low fertility, winter injury, etc.

2. Apply PROMALIN spray mixture as a uniform fine mist spray.
3. Use a properly calibrated and adjusted sprayer that insures uniform and complete coverage of all foliage and blossoms. Spray volume should be adjusted to tree size and density.
4. Approximately 85% of the spray volume should be directed into the upper two thirds of the trees.
5. To minimize excessive spray drift apply when air is calm.
6. High relative humidity and slow drying conditions favor maximum absorption of PROMALIN. Application in morning or evening may be preferable. Conditions favoring rapid drying of the spray deposit should be avoided.
7. Rainfall within six hours after spraying may reduce activity of PROMALIN.
8. Do not apply PROMALIN when air temperatures are lower than 40°F or greater than 90°F.
9. Do not apply PROMALIN in more than 200 gallons of spray per acre.

B. Rate and Timing of Application -
*Lateral Branching and Tree Development (Non-bearing trees)

A single foliar application of Promalin or a Promalin-latex spot application may be applied to non-bearing trees, including nursery stock, to increase lateral bud break, shoot growth, improve branch angles, and provide a better tree framework for early cropping.

FOLIAR APPLICATIONS

For foliar sprays, use one-quarter (0.25) to one (1) pint of Promalin per 5 gallons of spray solution to attain a concentration of 125 to 500 ppm of Promalin in the final spray solution. Preferably a buffered wetting agent, e.g. Buffer-X or a non-ionic wetting agent, e.g. Tween-20, Triton X-100, Glyodin, etc. should be added to the tank-mix at a rate of 0.2-0.3% (1-2 oz./5 gal.) prior to the addition of Promalin. This practice will improve wetting and absorption through the waxy cuticular layers on the foliage and bark surfaces. In all cases the final spray should not be alkaline.

Uniformly apply the Promalin spray mixture with a pressurized hand sprayer, hand gun attachment to an airblast sprayer, or an airblast sprayer to thoroughly wet the bark and foliage surfaces. Approximately five to ten (5-10) gallons of spray mixture will treat an acre of non-bearing (1-4 year old) trees on a 12 by 12 spacing (310 trees).

*All States except California

Application of Promalin should be made during the period from one (1) to three (3) inches of new terminal shoot growth. This period generally coincides with a timing of one (1) to two (2) weeks after full bloom. Applications should be terminated when new terminal shoot growth ceases. Nursery stock should be treated after trees attain a terminal height at which the first lateral scaffold branches are desired (i.e., greater than 12 inches).

LATEX APPLICATIONS

For latex applications, use one-third (0.33) pint of Promalin per one (1) pint of interior flat latex paint to attain a concentration of 7500 ppm. Mix thoroughly. Preferably a buffered wetting agent, e.g. Buffer-X or non-ionic wetting agent, should be added to the tank-mix at the rate of 0.5 to 1.0% prior to the addition of the Promalin. This practice will improve the dispersion of Promalin in the latex paint and will also improve wetting and absorption through the waxy cuticular layers on the bark surfaces. The final application mixture should not be alkaline.

Uniformly apply the Promalin-latex mixture with a brush or sponge to thoroughly cover the bark surface. Apply only to one-year-old dormant branches.

Since this application is intended primarily for stimulating lateral growth from vegetative buds on one-year-old dormant wood, application of Promalin should be made in late April and early May depending on season and locality. A useful guide is to make the application just as the terminal buds on shoots or spurs are beginning to break. Applications after lateral buds have broken may cause some injury to the tender shoot tips and fail to promote continued shoot growth from that point.

*All States except California

Tank Mix Compatibility

1. PROMALIN may be applied in combination with plant nutrients.
2. A buffer should be added to alkaline spray water to reduce the pH below 8.
3. Fungicides: Benlate[®], Ferbam[®], Poyram[®], Thiram[®], Glyodin[®], Ortho[®] rose[®] wettable sulfur may be tank mixed with PROMALIN at the recommended timing associated with bloom applications as described under Rate and Timing of Application for PROMALIN. When using fungicides, refer to respective labels for directions and precautionary statements.

[Dithane[®] M-45,

Notice to User

Sever makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

*All States except California

Benlate[®], Benlate[®] X, Buffer-X[®], Treen[®], Benlate[®], Ferbam[®], Poyram[®], Thiram[®], Glyodin[®] and Ortho[®] are trademarks of companies other than Abbott Laboratories.

[Dithane M-45, Triton,



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