

PM90

275-108

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**ABG-3170™  
PLANT GROWTH REGULATOR  
SOLUTION**

**Active Ingredients:**

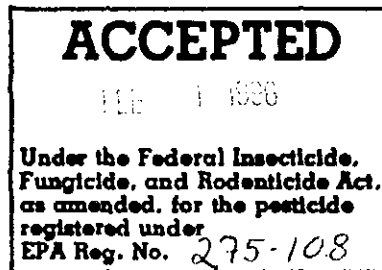
N-(phenylmethyl)-1H-purine 6-amine.....	1.8% w/w
Gibberellins A <sub>4</sub> A <sub>7</sub> .....	1.8% w/w
<u>Inert ingredients.....</u>	<u>96.4% w/w</u>
Total:.....	100.0% w/w

Store below 75° F (24°C)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

Chemical and Agricultural Products Division  
Abbott Laboratories  
North Chicago, Illinois 60064

EPA Reg. No. 275-  
EPA Est. No. 33762-IA-1  
Net contents: One quart



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**STATEMENT OF PRACTICAL TREATMENT**

If in Eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

**PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS (& DOMESTIC ANIMALS)****CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment:**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store below 75°F (24° C). Keep containers tightly closed when not in use.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**GENERAL INFORMATION**

Do not apply this product through any type of irrigation system.

ABG-3170 is a plant growth regulator for use on apples and non-bearing pears and non-bearing sweet cherries. When applied at specific spraying timing and concentration, ABG-3170 will provide the following effects:

1. ABG-3170 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, ABG-3170 may increase weight of individual fruit and yield per tree. Some thinning may occur from the use of ABG-3170.
3. On most apple varieties, ABG-3170 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.
4. ABG-3170 may be used on non-bearing pears and non-bearing sweet cherry trees, including nursery stock, to increase lateral bud break, shoot growth, improve branch angles, and provide a better tree frame work for early croppings.

# APPLICATION INSTRUCTIONS FOR FRUIT DEVELOPMENT

## RATE AND TIMING

1. Single Application for Improved Type:

**For all states except Washington, Oregon, Idaho and Utah**

A single application of ABG-3170 should be made from early king bloom to the early stages of petal fall of the side blossoms.

Apply 1 to 2 pints of ABG-3170 per acre in 50 to 200 gallons of spray mixture as a fine mist spray.

**For the states of Washington, Oregon, Idaho and Utah**

A single application of ABG-3170 should be made from early king bloom (king blossoms opening and side blossoms in the balloon stage) to the early stages of petal fall of the king blossoms.

Apply 1 to 2 pints of ABG-3170 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 typing 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 ABG-3170 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 Applications to Improve "Typiness" in Locations where the Bloom Period is Prolonged or Occurs over a Period of Several Days:

Make two ABG-3170 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 ABG-3170 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 ABG-3170, bloom progression within individual orchards should be assessed at least every 48 hours.

Apply ABG-3170 twice as two concentrate sprays each containing 0.5-1 pint of ABG-3170 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. An appropriate wetting agent should be included so as to insure even thorough coverage of open blossoms.

4. Applications of ABG-3170 to non-bearing pears and non-bearing sweet cherries may be made no later than one year prior to first anticipated fruit harvest.

### MIXING INSTRUCTIONS

Add the required amount of ABG-3170 to a spray tank about half-filled with water. Agitate while bringing the total volume of water to the required level. New solutions should be mixed only in a clean, empty spray tank, and used within 24 hours. A non-ionic wetting agent, e.g. Tween-20, or Triton X-100, may improve spray coverage and enhance absorption.

### APPLICATION CONSIDERATIONS

1. Since ABG-3170 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 ABG-3170 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 ABG-3170. Application in morning or evening may be

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preferable. Conditions favoring rapid drying of the spray deposit should be avoided.

7. Rainfall within six hours after spraying may reduce activity of ABG-3170.
8. Do not apply ABG-3170 when air temperatures are lower than 40°F or greater than 90°F.
9. Do not apply ABG-3170 in more than 200 gallons of spray per acre.

## B. APPLICATION INSTRUCTIONS FOR LATERAL BRANCHING AND TREE DEVELOPMENT

A single foliar application of ABG-3170 or a ABG-3170-latex paint spot application may be applied to apples, non-bearing pears, and non-bearing sweet cherry 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

Foliar applications have proven to be efficacious in increasing bud break and branch angles on apples, non-bearing pears, and non-bearing sweet cherries being grown in nurseries.

### APPLICATION RATES FOR FOLIAGE

CROP	RATE	TIMING
Apples (Nursery and Orchard)	125-500 PPM (.25-1 pt. ABG-3170/5 gal. of spray solution)	For orchard trees (apples and non-bearing pears) apply at 1-3 inches of new terminal growth.
Non-bearing Pears (Nursery and Orchard)	250-1000 PPM (.5-2 pt. ABG-3170/5 gal. of spray solution)	For nursery stock (apples, non-bearing pears and non-bearing sweet cherries), treat after trees have reached a terminal height at which lateral branching is desired.
Non-bearing Sweet Cherries (Nursery only)	250-1000 PPM (.5-2 pt. ABG-3170/5 gal. of spray solution)	

A buffered wetting agent, e.g., Buffer X® or non-ionic wetting agent, e.g., Tween® 20, or Triton® X-100, etc. should be added to the tank at a rate of .2-.3% (1-2 oz./5 gal.) prior to the addition of ABG-3170. The final spray solution should not exceed a pH of 8.

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Uniformly apply ABG-3170 with a pressurized hand sprayer, hand gun attachment to an airblast sprayer, or an airblast sprayer to thoroughly wet the bark and foliage surfaces. Total spray volume needed to achieve thorough wetting will vary with the equipment used and the size of the trees to be treated. Generally, 50-100 gallons of spray mixture will treat an acre of nursery trees planted on a 4 foot by 4 inch spacing (2200 trees). Approximately 5-10 gallons of spray mixture applied with a pressurized hand sprayer will treat 200-300 non-bearing orchard trees 1-4 years old.

**LATEX APPLICATIONS**

ABG-3170 applied in latex paint has proven effective in increasing bud break and branch angles when applied to one year old wood on apples and orchard grown non-bearing sweet cherries.

**APPLICATION RATES FOR LATEX**

CROP	RATE	TIMING
Apples (Nursery and Orchard) and Non-bearing Sweet Cherries (Orchard Only)	5000-7500 PPM (.2-.33) pt ABG-3170 per pint of latex paint)	Apply in the spring and when terminal buds begin to swell but before shoots emerge.

NOTE: Do not apply after buds break. Applications after buds have broken may cause some injury to tender shoot tips and fail to promote shoot growth from that point.

A buffered or non-ionic wetting agent should be added to the ABG-3170 and latex paint mixture at the rate of .5-1% (.1-.15 oz. per pint of paint) prior to the addition of ABG-3170. The addition of a wetting agent will improve the dispersion of ABG-3170 in the latex paint and will also improve wetting and absorption through the waxy cuticular layer of the bark surface.

Uniformly apply the ABG-3170-latex paint mixture with a brush or sponge to thoroughly cover the bark surface. NOTE: Apply only to one year old wood.

**TANK MIX COMPATIBILITY**

- 1 ABG-3170 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, Polyram\*, Thiram, Dithane\* M-45, Orthocide\*, wettable sulfur may be tank mixed with ABG-3170 at the recommended timing associated with bloom applications as described under "Rate and Timing of Application" for ABG-3170. When using fungicides, refer to respective labels for directions and precautionary statements.

**NOTICE TO USER**

Seller 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.

For information, call: 1-800-323-9597

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Tween\*-20 is a registered trademark of ICI Americas, Inc.

Dithane\*M-45 and Triton\* X-100 are registered trademarks of Rohm and Haas Company.

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Polyram\* is a registered trademark of BASF AG.

Orthocide\* is a registered trademark of Chevron Chemical Co.

Buffer-X\* is a registered trademark of Kalo, Inc.

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