

57538-15

03/21/2007

119

X-CYTE™

A Plant Growth Regulator and Yield Stimulant

ACTIVE INGREDIENT:

Cytokinin, as kinetin, based on biological activity 0.04%

INERT INGREDIENTS:..... 99.96%

TOTAL 100.00%

ACCEPTED

MAR 21 2007

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 57538-15

(Contains 0.0064 oz. cytokinin/pint)

CONTAINS NON-PLANT FOOD INGREDIENT:

0.04% Cytokinin

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

If on skin or clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If swallowed

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-539-5283 for emergency medical treatment information.

See additional precautions on side or back panel.

EPA Reg. No. 57538-15

EPA Est. No. 57538-TX-1

NET CONTENTS

- 2-1/2 Gallons 1 Gallon
 1 Quart 1 Pint

Manufactured By
STOLLER ENTERPRISES, INC.
4001 W Sam Houston Pkwy N, Suite 100
Houston, Texas 77043 U. S. A.
Toll Free 1-800-KEYLATE (539-5283)
Phone (713) 461-1493 • Fax (713) 461-4467

Web: www.keylate.com • E-mail: stoller@keylate.com

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION: Harmful if absorbed through skin or swallowed. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

Personal Protective Equipment

Some materials that are chemical-resistant to this product are any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- long-sleeved shirt and long pants,
- chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, and
- shoes plus socks.

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

For terrestrial uses: 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 washwater or rinsate. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of all excess treated seed and seed packaging by burial away from streams and bodies of water.

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 State or Tribal 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 unless wearing the appropriate PPE.

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, wear:

- coveralls over long-sleeved shirt and pants,
- chemical-resistant gloves made of any waterproof material, and
- shoes plus socks.

CHEMIGATION

Application and Calibration Techniques for Sprinkler Irrigation

Apply this product only through the following types of irrigation systems: sprinkler including center pivot, traveler, big gun, motorized lateral move, end tow, side (wheel) roll, solid set, or hand move irrigation; furrow; or drip (trickle) irrigation systems. Do not apply through any other types of irrigation systems. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Experiment Station specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise.

A. Center Pivot, Traveler, Big Gun, Motorized Lateral Move, End Tow, and Side (Wheel) Roll

Irrigation Equipment: Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank of injection equipment with water. Operate system for one complete circle for center pivot or one complete run for the other recommended equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run, but continue to operate irrigation system until product has been cleared from last sprinkler head. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur.

B. Solid Set and Hand Move Irrigation Equipment: Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of product for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Provide constant mechanical agitation in the mix tank to insure that product will remain in suspension during the injection cycle. Product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until pesticide is cleared from last sprinkler head.

Safety Devices for Sprinkler Chemigation

- (1) The systems designated above must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- (2) All pesticide injection pipelines must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- (3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- (4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- (5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- (6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- (7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Systems Connected to Public Water Sources

- (1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regular serves an average of at least 25 individuals daily at least 60 days out of the year.
- (2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- (3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- (4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- (5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- (6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- (7) Do not apply when wind speed favors drift beyond the area intended for treatment.

In-Furrow Chemigation

- (1) Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
- (2) Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
 - a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
 - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
 - c. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
 - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
 - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
 - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Apply X-CYTE in sufficient water to penetrate into the root zone without excessive leaching into deeper soil.

Drip (Trickle) Chemigation

- (1) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- (2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- (3) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- (4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- (5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- (6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Apply X-CYTE in sufficient water to penetrate into the root zone without excessive leaching into deeper soil.

GENERAL USE INSTRUCTIONS

For best results, apply X-CYTE before noon or after four p.m. Use a spreader/sticker (surfactant) cleared for application to growing crops with this product. Before using, clean with disinfectant (bleach and water, etc.) any spigot or pump put into an X-CYTE drum. Mix X-CYTE with enough water to get thorough coverage of plant surfaces. X-CYTE is compatible with most other spray materials.

CROP USAGE - ALL CROPS FOR STRESS RELIEF

Use 1 pint X-CYTE per acre (1.2 liters/hectare) any time a crop is prematurely dying down (loss of color) due to stress caused by one or more of the following conditions: weather (frost, drought, excessive moisture), insect infestation, fungus attack, and/or herbicide burn.

CROP USAGE - ALL CROPS LISTED FOR TRANSPLANTING AND SEED BED TREATMENT

Use 2 pints X-CYTE per acre (2.4 liters/hectare) or 1 part X-CYTE to 1000 parts water (approximately 1 tablespoon X-CYTE to 1 gallon water) as a root dip and watering solution when transplanting.

Use 2 pints X-CYTE per acre (2.4 liters/hectare) applied to the seedbed at time of seeding or up to 20 days thereafter.

ALFALFA - 1 pint/acre (1.2 liters/hectare)

1st application: After cutting with repeat sprays at 14 to 21 day intervals.

APPLES - 1 pint/acre (1.2 liters/hectare)

1st application: At full pink. 2nd application: At calyx (petal fall).
3rd application: 3 weeks after 2nd spraying. 4th application: 4 weeks after 3rd spraying.

ASPARAGUS - 1 to 2 pints/acre (1.2 to 2.4 liters/hectare)

1st application: Spray crowns when growth begins.
2nd application: Spray crowns after each cutting.

BANANAS - 0.85 to 8.5 pints per acre (1 to 10 liters/hectare)

To reduce stress: Apply when stress conditions are anticipated. Rates and timing must be determined for each site. Make applications at least 14 days apart using ground sprayers, aerial sprayers, or by plant injection.

BEANS - 0.5 to 1 pint per acre (0.6 to 1.2 liters/hectare)

1st application: 4 to 5-inch stage. 2nd application: At early bloom.
3rd application: At early pod set.

CARROTS - 1 pint/acre (1.2 liters/hectare)

1st application: At tuber initiation. 2nd application: 2-3 weeks after 1st spraying.

CELERY

1st application: Use 2 pints X-CYTE per acre (2.4 liters/hectare) applied to the seed bed at time of seeding or up to 20 days thereafter.
2nd application: Use 2 pints X-CYTE per acre (2.4 liters/hectare) at the time seedlings are transplanted: See Transplanting instructions above.
3rd application: Use 1 pint X-CYTE per acre (1.2 liters/hectare) 2-3 weeks after transplanting.

CORN - 1 pint/acre (1.2 liters/hectare)

1st application: At the 1 to 1-1/2 foot stage. 2nd application: At tassel time.

COTTON - 1 pint/acre (1.2 liters/hectare)

1st application: At pinhead square with repeat applications at 14 to 21 day intervals.

CRUCIFEROUS CROPS - 0.5 to 1 pint per acre (0.6 to 1.2 liters/hectare)

(Cabbage, Broccoli, Cauliflower, Brussels Sprout)

1st application: 3 to 4-inch stage. Repeat at 10 to 14 day intervals.

CUCURBITS - 0.5 to 1 pint/acre (0.6 to 1.2 liters/hectare)

(Cucumbers, Muskmelon, Cantaloupe, Watermelon, Honey Dew, Squash)

1st application: 4 to 8-inch stage.

2nd application: At early bloom.

3rd application: Start of fruiting.

GRAPES - 1 pint/acre (1.2 liters/hectare)

1st application: Between leafout and prebloom. 2nd application: At petal fall.

3rd application: 30 days before harvest.

ORANGES - 1 pint/acre (1.2 liters/hectare)

1st application: At prebloom.

2nd application: At calyx (petal fall).

3rd application: 3 weeks after 2nd spraying.

4th application: 4 weeks after 3rd spraying.

PEACHES AND NECTARINES - 1 pint/acre (1.2 liters/hectare)

1st application: At prebloom.

2nd application: At calyx (petal fall).

3rd application: 3 weeks after 2nd spraying.

4th application: 4 weeks after 3rd spraying.

PEANUTS - 1 pint/acre (1.2 liters/hectare)

1st application: At pegging.

2nd application: 2-3 weeks after 1st spraying.

PEAS - 0.5 to 1 pint per acre (0.6 to 1.2 liters/hectare)

1st application: 3 to 4-inch stage.

2nd application: Prebloom.

3rd application: At early pod set.

PEPPERS AND EGGPLANT - 0.5 to 1 pint/acre (0.6 to 1.2 liters/hectare)

1st application: Just prior to 1st bloom.

2nd application: 10 days after first spraying.

3rd application: 10 days after 2nd spraying.

PINEAPPLE - 2 to 6 pints/acre (2.4 to 7.2 liters/hectare)

To reduce plant stress*: Apply to vegetative growth according to climate and crop needs at the site of proposed application.

To improve fruit growth*: Apply post bloom according to climate and crop needs at the site of proposed application.

*Allow at least 14 days between applications.

POTATOES - 1 to 2 pints/acre (1.2 to 2.4 liters/hectare)

1st application: At tuber set. The time of application is determined by pulling an average size plant in the field 4 weeks (and every 7 days thereafter if necessary) after planting. Observe the roots to see if tubers are forming. Anytime you see the small tubers forming, it is time for the 1st application. Usually tubers start to set 5 to 6 weeks after planting.

2nd application: At full blossom. Spray Russet Burbanks, which do not show full blossom, 2-3 weeks after 1st spraying.

RADISH - 1 pint/acre (1.2 liters/hectare)

Application: In furrow at planting.

RICE - 1 pint/acre (1.2 liters/hectare)

1st application: At 2 to 5 leaf stage with repeat application 14 to 21 days later.

SORGHUM - 1 to 2 pints/acre (1.2 to 2.4 liters/hectare)

1st application: At 2 to 5 leaf stage. 2nd application: At 8 to 12 leaf stage.

SOYBEANS - 1 pint/acre (1.2 liters/hectare)

Application: At first bud formation.

SPINACH AND LETTUCE - 0.5 to 1 pint/acre (0.6 to 1.2 liters/hectare)

1st application: 3 to 4-inch stage.

STRAWBERRIES - 2 pints/acre (2.4 liters/hectare)

1st application: As a transplant solution. See Transplanting instructions above.

2nd application: At prebloom.

3rd application: At petal fall.

4th application: After harvest.

SUGAR BEETS - 1 pint/acre (1.2 liters/hectare)

1st application: At tuber initiation. 2nd application: 2-3 weeks after 1st spraying.

SWEET POTATOES AND YAMS - 1 pint/acre (1.2 liters/hectare)

Application: In furrow at planting.

TOMATOES

1st application: Use 2 pints X-CYTE per acre (2.4 liters/hectare) applied to the seedbed at time of seeding or up to 20 days thereafter.

2nd application: Use 2 pints X-CYTE per acre (2.4 liters/hectare) at the time seedlings are transplanted. See Transplanting instructions above.

3rd application: Use 1 pint X-CYTE per acre (1.2 liters/hectare) 2 to 3 weeks after 1st bloom.

WHEAT - 1 pint/acre (1.2 liters/hectare)

Application: 1-2 weeks before boot stage.

ORNAMENTAL TREES AND HERBACEOUS PLANTS

Apply 2 pints per acre (2.4 liters/hectare) in transplant water.

Apply 1 pint per acre (1.2 liters/hectare) as a foliar spray when growth begins in the spring.

Apply 1 pint per acre (1.2 liters/hectare) at bud burst.

Apply 1 pint per acre (1.2 liters/hectare) at bud set.

Apply 1 pint per acre (1.2 liters/hectare) at the end of summer to maintain color through autumn.

SEED TREATMENT

Use only on seeds for crops listed elsewhere on the label. Do not use treated seed for food, feed or oil purposes. Commercially treated seed must be labeled in accordance with the requirements of the Federal Seed Act and applicable State seed laws. An approved dye must be added to distinguish treated seed and prevent inadvertent use for food, feed, or oil purposes.

Per hundred weight of seed, dilute 2 fl. oz. X-CYTE in equal amounts of water and mist spray on seed (0.75 mL/kg of seed). X-CYTE can be poured/mixed on seed in hopper at planting.

STORAGE AND DISPOSAL

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

STORAGE: Store in a cool place and out of direct sunlight.

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 incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY

To the fullest extent permitted by law, neither the manufacturers nor the seller make any warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use of this material when such use is contrary to label instructions. Read and follow the label directions carefully.