



collate™

**FOR COMMERCIAL USE OR
AGRICULTURAL USE ONLY
NOT INTENDED FOR
RESIDENTIAL USE**

For Increased Lateral Branching in
Ornamentals and for Fruit Elimination in
Ornamental Trees and Shrubs; For Use
in Production of Cantaloupe, Cucumber,
Squash and Pumpkin Hybrid Seed;
For Inducing Flowering of Ornamental
Bromeliads; For Reducing Plant Height of
Potted Daffodils and Stem Topple of Potted
Hyacinths; For Removal of Mistletoe from
Ornamental Trees and Shrubs

STATE OF HAWAII
Department of Agriculture

ACCEPTED
LICENSE NO. **8464.8**

Active Ingredient:

Ethephon (2-chloroethyl) phosphonic acid*	21.7%
Other Ingredients:	78.3%
Total	100.0%

*Contains 2 pounds ethephon per gallon

**KEEP OUT OF REACH
OF CHILDREN
DANGER PELIGRO**

Si usted no entiende la etiqueta, busque a alguien
para que se la explique a usted en detalle.
(If you do not understand the label, find someone
to explain it to you in detail.)

Net contents:
1 Gallon (3.78 L)

EPA Reg. No. 85678-9-82917
EPA Est. No. 39578-TX-001

Refer to booklet for
additional
precautionary, handling
and use statements.

Collate™ is a trademark of
Fine Agrochemicals Ltd.

COL/US/1G/13



fine

Distributed by:
Fine Americas, Inc.
1850 Mt. Diablo Blvd.
Suite 405
Walnut Creek, CA 94596
USA

Tel. 1-888-474-3463
info@fine-americas.com
www.fine-americas.com

FIRST AID

IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• Immediately call a poison control center or doctor for treatment advice.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Have person sip a glass of water if able to swallow.• Do not give anything to an unconscious person.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient overexposure to materials other than this product may have occurred. Victims of severe overexposure by inhalation should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. This material is an acid, but the use of alkaline substances to neutralize it is contraindicated.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER**

Corrosive. Causes irreversible eye damage. Wear safety goggles when handling. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Do not inhale vapors, as this product will irritate mucous membranes.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirts and short pants OR long-sleeved shirts and long pants.
- Chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene and/or barrier laminate.
- Chemical-resistant footwear plus socks.
- Protective eyewear such as, goggles, face shield, or safety glasses.
- Chemical-resistant headgear for overhead exposure.
- Chemical-resistant apron when mixing, loading or cleaning equipment.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, 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. Wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not contaminate water used for irrigation or domestic purposes. 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 when disposing of equipment washwaters.

Avoid spray drift to nearby crops as this product will cause modifications in plant growth. Plant injury or reduced yields may result.

Do not plant another crop within 30 days after treatment.

PRODUCT INFORMATION

Apply COLLATE spray solution within 24 hours after mixing. DO NOT save unused diluted spray solutions as they will not be as effective as fresh solutions.

COLLATE is labeled for ground application only.

UNDESIRABLE FRUIT ELIMINATION

Foliar applications of COLLATE will reduce or eliminate undesirable fruit development on many ornamental trees and shrubs: Apple, Carob, Crabapple, Elm, Flowering pear, Flowering plum, Horsechestnut (Buckeye), Oak, Olive, Sour Orange, Sweetgum, and Sycamore.

MISTLETOE SHOOT REMOVAL

A foliar spray of COLLATE will cause the abscission of dwarf mistletoe shoots in ornamental conifers and leafy mistletoe shoots in ornamental deciduous trees.

GREENHOUSE, SHADEHOUSE AND FIELD GROWN FLORICULTURE CROPS

A foliar spray of COLLATE will increase lateral branching, prevent flower initiation and development, and inhibit internode elongation in the following ornamental species: Azalea, Begonia, Chrysanthemum, Fuchsia, Zonal and Ivy Geranium, Impatiens, English Ivy, Lantana, Petunia, Poinsettia, Verbena, and Vinca vine (*Vinca major*).

DEFOLIATION

COLLATE applied as a foliar spray after buds are matured will initiate earlier leaf drop of Roses, Tallhedge, and Apple nursery stock. This will allow digging of stock plants prior to the onset of unfavorable weather.

A foliar spray of COLLATE to container-grown plumeria plants accelerates defoliation prior to storage. This reduces fungal infestations on dormant plants. A foliar spray of COLLATE to plumeria trees in the field causes leaf

abscission and stimulates the appearance of inflorescence buds. COLLATE enhances winter flower production in warm sites such as Hawaii.

FLOWER INDUCTION OF BROMELIADS

A foliar spray of COLLATE initiates flowering of ornamental bromeliads such as Ananas, Aechmea, Neoregelia, Vriesia, and Billbergia.

REDUCTION OF PLANT HEIGHT AND STEM TOPPLE

COLLATE applied as a foliar spray will help in reducing total plant height of potted daffodils and stem topple of potted hyacinths at time of full flower.

HYBRID SEED PRODUCTION

A foliar spray of COLLATE will modify sex expression and flowering pattern of cantaloupe, cucumbers, pumpkins and squash to facilitate hybrid seed production. Do not use on cantaloupe, cucumbers, pumpkins or squash to be harvested for fresh or processed markets.

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 regulations. Read the entire label before using this product.

Do not apply COLLATE through any type of irrigation system.

Do not use this product for purposes other than those listed on the label.

Do not exceed the rate of COLLATE per acre per year specified on this label.

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), notification to workers, and restricted-entry intervals. 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 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches per year.

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 over short-sleeved shirts and short pants or long-sleeved shirts and long pants, chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene and/or barrier laminate, chemical-resistant footwear plus socks, and protective eyewear such as goggles, face shield, or safety glasses. For overhead exposure, chemical-resistant headgear is also required. When mixing, loading, or cleaning equipment, a chemical-resistant apron is required.

Notify workers of the application by warning them orally and by posting warning signs at entrance to treated areas.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

For ornamental fruit elimination and mistletoe removal, DO NOT allow people (other than applicator) or pets on treatment area during application. DO NOT enter treatment areas until spray has dried. DO NOT allow people or pets to touch treated plants until sprays have dried.

UNDESIRABLE FRUIT ELIMINATION (Ornamental Use Only)

A foliar spray of COLLATE will reduce or eliminate undesirable fruit on ornamental trees and shrubs: Apple, Crabapple, Carob, Elm, Flowering Pear, Flowering Plum, Horsechestnut (Buckeye), Oak, Olive, Sour Orange, Sweetgum, and Sycamore. Applications must be made before fruit set for best results.

When applied to plants, COLLATE readily enters the plant and breaks down to ethylene, a naturally occurring plant hormone. Ethylene production within the plant is stimulated by stress. For this reason it is important that plants being treated are not under stress from drought, high temperature, disease or other environmental stress conditions. Treating stressed plants can cause severe injury to the plant such as defoliation or leaf scorching. Injury from COLLATE usually does not kill the plant, but can render it unsightly.

Applications should be made at the mid to full bloom stage, prior to fruit set in spray volumes sufficient to wet, but not to runoff. Failure to wet blooms thoroughly will cause incomplete fruit elimination. Spraying too much (until runoff) may cause some defoliation or other plant injury. Sprays applied too early or too late will be less effective and result in incomplete fruit elimination. The activity of COLLATE is associated with plant growth activity and is therefore slower acting when temperatures are low (60°F) or very high (95°F). Trees or shrubs should not be under stress when treated such as from drought, insects or diseases. Apply when rain is not expected for 24 hours.

For most species, mix 5.3 fluid ounces of COLLATE in 10 gallons of water (1,000 ppm of ethephon in spray solution) and apply to thoroughly wet blooms but not to runoff. Amount of spray used will depend on tree size. Some temporary leaf yellowing and leaf drop of old leaves may occur after treatment.

For sensitive species such as Carob: Mix 2.7 fluid ounces COLLATE in 10 gallons of water (500 ppm of ethephon in spray solution) and apply to thoroughly wet buds and blooms but not to runoff. Amount of spray solution used will depend on tree size. Some temporary leaf yellowing and drop of old leaves may occur after treatment.

COLLATE has not been tested on all varieties of trees or shrubs which may have undesirable fruit. If it is necessary to treat plant species not listed above, treat only a small portion of the plant to determine the effectiveness of the product and to evaluate plant injury.

NOTES: (1) Plants under sprayed trees are usually not affected at this

rate. However, some plants are sensitive to COLLATE (Nandina, Maples, etc.). If desired or if effects are unknown, the plants may be covered before spraying or the solution can be washed off of foliage with a water hose after application. (2) COLLATE is not intended to be used in commercial fruit production as a thinning agent.

RESTRICTIONS:

- Do not treat weak trees or trees under stress (drought, insect, or disease damaged trees), as excessive leaf drop or twig drop can result.
- Do not use on small red fruited varieties of crabapple, as fruit elimination will not be satisfactory.

DWARF MISTLETOE REMOVAL

Use COLLATE as a foliar spray on ornamental conifers for removal of dwarf mistletoe shoots and seeds. Applications made in conjunction with silvicultural mistletoe management will prevent spread of the mistletoe parasite to other parts of the tree and to other trees. Mix 5.3 fluid ounces of COLLATE in 4 gallons of water (2,700 ppm of ethephon in spray solution) and spray to “wet.” When treating mistletoe in Douglas Fir, mix 2.7 fluid ounces of COLLATE in 4 gallons of water (1350 ppm of ethephon in spray solution). Application of higher rates on Douglas Fir may result in excessive needle drop. Use of a nonionic surfactant at recommended rates may increase effectiveness. Treat any mistletoe re-growth before seed dispersal occurs. Mature needle drop that normally occurs in the fall may be hastened by the use of COLLATE. Apply when temperature is above 65°F and rain is not expected for 24 hours.

NOTE: Plants under sprayed trees may be sensitive to COLLATE at this rate. Either cover the plants before spraying or wash the solution off of foliage with a water hose after application.

LEAFY MISTLETOE REMOVAL

Use COLLATE as a foliar spray on ornamental deciduous trees for removal of leafy mistletoe shoots and seeds. Make applications after fall leaf drop or in spring just before leaf out. Apply when temperature is above 65°F and rain is not expected for 24 hours. Mix 10.6 fluid ounces of COLLATE in 4 gallons of water (5,400 ppm of ethephon in spray solution). Use of a nonionic surfactant at recommended rates may increase effectiveness. For effective removal of all mistletoe, shoots must be sprayed to “wet.” Large mistletoe infections and mistletoe found in mesquite may be difficult to control with a single application and re-treatment may be necessary. Should re-growth of mistletoe occur, re-treat prior to mistletoe seed dispersal during the labeled application window. **NOTE:** Plants under

sprayed trees may be sensitive to COLLATE at this rate. Either cover the plants before spraying or wash the solution off of foliage with a water hose after application.

GREENHOUSE, SHADEHOUSE AND FIELD GROWN FLORICULTURE CROPS

A foliar spray of COLLATE can be used to increase lateral branching, prevent flower initiation and development, and inhibit internode elongation in the following ornamental species: Azalea, Begonia, Chrysanthemum, Fuchsia, Zonal and Ivy Geranium, Impatiens, English Ivy, Lantana, Petunia, Poinsettia, Verbena, and Vinca (Vinca major). COLLATE has not been tested on all floricultural crops and varieties. If it is necessary to treat plants not listed above, treat only a small area using the lower rate of application to determine the effectiveness of the product.

A foliar spray with COLLATE in conjunction with hand pinching will increase the number of lateral branches on many ornamental species. In many species, this product can replace hand pinching. Plants being treated with this product will not initiate or develop flowers. COLLATE inhibits internode elongation which maintains plants in a compact form.

When applied, COLLATE readily enters the plant and breaks down into ethylene, a naturally occurring plant hormone. Ethylene production within the plant is stimulated by stress. For this reason, it is important that plants being treated are not under stress from drought, high temperature, disease or other environmental conditions. Treating stressed plants can cause severe injury such as defoliation or leaf scorching. While injury from this product usually does not kill the plant, it can render the plant unsightly and unfit for sale. The activity of this product is linked to plant growth activity and is therefore slower acting when temperatures are below 60°F or above 95°F. Avoid drift onto non-target plants.

Concentration and Coverage: Unless otherwise stated, the standard rate on greenhouse floricultural crops is 500 ppm of ethephon in spray solution (2.7 fluid ounces in 10 gallons of water). Concentrations below 500 ppm can be used depending upon the growth control desired. Apply COLLATE to thoroughly wet the foliage, just to the point of run-off. COLLATE is not translocated, so portions of the plant not covered will not be affected. On most floricultural crops, COLLATE can be applied at 2 to 4 week intervals to maintain the degree of desired control. The first application can be made 1 to 2 weeks following transplanting. The spray interval will depend upon growing conditions dictated by experience.

For Stock Plants (Except Azalea): Stock plants of vegetatively propagated crops can be treated with COLLATE during the time between transplanting and the harvest of cuttings. Treatment will prevent flowering and maintain the plant in a vegetative stage of growth. Cuttings should not be harvested for at least one week following treatment.

For Finished Plants (Except Azalea): Apply COLLATE 1 to 2 weeks after transplanting. Repeat at the desired interval (2 to 4 weeks). The last application should be made 6 to 8 weeks prior to the desired flower date.

For New Guinea Impatiens: Premature flowering can be prevented with a COLLATE treatment. Since this species is more sensitive to this product, use a rate of 300 ppm of ethephon in spray solution (1.7 fluid ounces per 10 gallons of water) and make the last application no less than 8 weeks prior to the desired flower date.

For Azalea (Both Stock And Finished Plants): To increase lateral branching, mix 13.2 to 26.4 fluid ounces of COLLATE in 10 gallons of water (2,500 to 5,000 ppm of ethephon in spray solution) and apply to thoroughly wet the foliage. Application should be made at normal pinching times and can be used in conjunction with hand pinching or chemical pinching agents. Use the higher rate on vigorous, tolerant varieties as determined by experience. To prevent unacceptable plant injury, do not treat sensitive varieties such as Sweetheart. To optimize the vigor of cuttings, do not make application for 2 weeks prior to the harvest of cuttings from the treated stock plants. On finished plants, do not make application for 6 to 8 weeks prior to bloom or planned sale.

DEFOLIATION

A foliar spray of COLLATE will cause earlier leaf drop of roses, tall hedge and apple nursery stock. Apply only after the buds are mature or some injury may result.

A foliar spray of COLLATE to container-grown plumeria plants accelerates defoliation prior to storage. This reduces fungal problems on dormant plants. A foliar spray of COLLATE to plumeria trees in the field causes leaf abscission and stimulates the appearance of inflorescence buds.

For Roses: Mix 5.3 fluid ounces of COLLATE in 10 gallons of water and apply to thoroughly wet foliage. Amount of spray used will depend on the size of the rose bush. Amount of defoliation obtained will depend on the variety and temperature. The addition of 1 pint of a nonionic surfactant per 100 gallons of spray solution will improve defoliation. Do not treat sensitive varieties such as Red American Beauty as bud injury may result.

For Container-grown Plumeria: Mix 42.2 fluid ounces COLLATE in 100 gallons of water and apply ½ pint to 1 quart of spray solution per plant depending on size and leafiness. Use of a nonionic surfactant at 0.2% vol/vol improves defoliation. Apply in the fall just prior to frost. Spray upper and lower surfaces of foliage to wetness. Leaf drop occurs in 8-12 days. Young leaves may be slow to abscise. Short day lengths enhance response. Since varietal differences were noted between cultivars, make a test application on a limited number of plants prior to field-wide applications.

For Field-grown Plumeria: Mix 42.2 fluid ounces of COLLATE in 100 gallons of water and apply ½ to 2 gallons of spray solution per tree depending on size and leafiness. Use of a nonionic surfactant at 0.2% vol/vol improves defoliation. Spray upper and lower surfaces of foliage to wetness. Winter flowering of plumeria is attained when treatments are made in October. Defoliation is enhanced by short day lengths and water stress. Do not apply before September. Application before September may result in deformed inflorescences. Existing flowers will abscise with COLLATE treatment. Flower development in new inflorescences is dependent upon local temperature conditions, not COLLATE concentrations. Since varietal differences were noted between cultivars, make a test application on a limited number of plants prior to full-scale applications.

For Tallhedge Buckthorn: Mix 26.4 to 52.8 fluid ounces of COLLATE in 10 gallons of water and apply to thoroughly wet foliage. Amount of spray used will depend on size of tallhedge. Use the higher rate when temperatures are cool or earlier defoliation is desired.

For Apple Nursery Stock: Mix 2.6 to 5.3 fluid ounces COLLATE plus 3 quarts of a nonionic surfactant in 50 gallons of water and apply no more solution than is necessary to moisten foliage without runoff. A second treatment 3 to 7 days later using the above rates may be applied. Apply no more than 10.6 fluid ounces COLLATE per season. Do not use on Rome apples as defoliation will not be satisfactory. Amount of defoliation obtained will depend on variety and temperatures.

FLOWER INDUCTION OF BROMELIADS

COLLATE initiates flowering of ornamental bromeliads such as Ananas, Aechmea, Neoregelia, Vriesia, and Billbergia.

Amounts To Use: For most bromeliad varieties, mix 13.2 fluid ounces of COLLATE per 10 gallons of water. This prepares a spray concentration of approximately 2,500 ppm of ethephon. Spray all surfaces of the plant to “wet”. Avoid over spraying to “runoff” which may cause damage to leaves or the growing points. For treating groups of plants, use approximately ½ pint of

spray solution per 10 square feet of greenhouse bench or outdoor bed area. Apply COLLATE spray solutions within 4 hours after mixing. Mix up only the amount of spray you plan to use immediately. DO NOT save unused diluted spray solutions as they will not be as effective as fresh solutions.

The degree of flower induction with a given rate of COLLATE is influenced by the plant age, variety, growth rate, climate and cultural conditions. Lower rates may effectively force flowering or produce desirable foliage coloring on certain varieties. Trial applications at lower rates are suggested before making extensive treatments.

Guidelines For Consistent Flower Forcing:

1. Grow plants on photoperiods regulated to maintain plants vegetatively active prior to treatment; long days for Ananas, Billbergia, Neoregelia, and short days for Aechmea and Vriesia.
2. Treat mature plants that have well established root systems. Treatments too early in the development of the plant will cause erratic flower initiation and the few flowers formed will be small.
3. Remove water at base of leaves. Allow foliage to dry prior to treatment. Water may be replaced 24 hours after treatment.
4. A minimum night temperature of 65 to 70°F or higher should be maintained throughout the forcing period.
5. Do not apply fertilizer two weeks prior or for two weeks after treatment.

NOTE: Inconsistent results may be obtained if the leaf surface is covered with algae.

REDUCTION OF HYACINTH STEM TOPPLE AND DAFFODIL PLANT HEIGHT

To reduce potted hyacinth stem topple at time of full flower, apply a foliar spray of COLLATE before florets have opened. Most cultivars will respond to applications of COLLATE at 1,000 to 2,000 ppm of ethephon (1.3 to 2.7 fluid ounces COLLATE in 2.5 gallons of water). Bismarck, Jan Bos, Blue Giant, Delft Blue, and Madame Kruger may benefit from a second spray 2 days after the first.

To reduce total plant height of potted daffodils, apply a foliar spray of COLLATE when the shoots are 3 to 4 inches tall. Most cultivars will respond to 2,000 ppm (2.7 fluid ounces of COLLATE in 2.5 gallons of water) sprays of COLLATE. For earlier forcing, Dutch Master, Joseph MacLeod, Flower Record, and Barrett Browning will benefit from a second spray 2 or 3 days after the first. Bridal Crown and Geranium require only 1,000 ppm of ethephon in spray solution (1.3 fluid ounces in 2.5 gallons

of water). Gold Medal, Van Sion, February Gold, and Tete-a-Tete do not require COLLATE treatment.

HYBRID SEED PRODUCTION

COLLATE modifies sex expression and flowering pattern of cantaloupe, cucumber, squash and pumpkins to facilitate hybrid seed production. Application of COLLATE increases the number of pistillate (female) and decreases the number of staminate (male) flowers. COLLATE brings about earlier formation of female flowers at lower nodes where normally only male flowers are formed in standard (monoecious) cantaloupe, cucumber, squash and pumpkin varieties.

Sexual modification towards femaleness in treated plants is temporary (5 to 15 nodes). Variety, location, climate and cultural practices may influence the best rate for treatment. Due to the wide range in sensitivity of cantaloupe, cucumber and squash cultivars, excessive injury may result from COLLATE application even when all label directions are followed. Treatment of cultivars classified as strongly male (Straight Neck, Crookneck) may result in unacceptable level of male flowers remaining. New breeding lines will require trial applications before full scale treatments are made.

Plants sprayed with COLLATE often flower 7 to 10 days earlier than untreated. Therefore pollen source plants should be seeded prior to seed parent to insure adequate pollen availability for hybrid seed production. Temporary growth inhibition resulting from shortened internodes may be observed.

Hybrid Seed Production In Cantaloupe, Cucumbers, Pumpkins And Squash (CALIFORNIA ONLY)

Amounts to Use: Apply up to 15.8 fluid ounces per acre of COLLATE in 40 to 100 gallons of water (300 to 750 ppm of ethephon in spray solution) by ground application. Apply no more than 6 spray applications per year at 3 to 10 day intervals beginning at first true leaf stage. Do not harvest within 60 days of last application.

The actual amount and number of applications needed to achieve a satisfactory level of performance without excessive injury is dependent on the specific cultivar and environmental conditions at time of treatment.

DO NOT harvest any treated cantaloupe, cucumbers, pumpkins or squash for human or animal consumption. Treatments are to be made for seed production only.

Hybrid Seed Production In Cantaloupe, Cucumber And Squash

Amounts to Use: Apply 5.3 fluid ounces per acre of COLLATE in 40 to 100 gallons of water (100 to 250 ppm of ethephon in spray solution). The actual amount needed to achieve a satisfactory level of performance without excessive injury is dependent on the specific cultivar and environmental conditions at time of treatment. Spray plants at the two leaf stage.

When germination is variable, a repeat application 7 to 10 days after the first may be necessary.

DO NOT harvest any treated cantaloupe, cucumbers or squash for human or animal consumption. Treatments are to be made for seed production only.

Hybrid Seed Production In Pumpkins

Amounts to Use: Apply 15.8 fluid ounces of COLLATE per acre in 40 to 100 gallons of water (300 to 750 ppm of ethephon in spray solution) per acre. Apply no more than 6 spray applications per year at 7 to 10 day intervals beginning at 2 to 4 leaf stage. Do not harvest within 42 days of last application.

DO NOT harvest any treated pumpkins for human or animal consumption. Treatments are to be made for seed production only.

COLLATE Dilution Guide:

Milliliters Per 1 Gallon	Fluid Ounces Per 10 Gallons	PPM Ethephon
4.7	1.6	300
7.8	2.6	500
11.7	4.0	750
15.6	5.3	1000
23.5	8.0	1500
39.3	13.5	2500
79.4	26.8	5000

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

Store in a cool, dry place and away from food, feed and other pesticides. IF SPILLED: If container is broken or contents have spilled, follow all precautions indicated above and clean up immediately. Before cleaning up, put on full-length trousers, long-sleeved shirt, protective gloves and goggles or face shield. Soak up spill with absorbent media such as sand, earth or other suitable material and dispose of waste at an approved waste disposal facility.

PESTICIDE DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. 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 container is burned, stay out of smoke.

WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY

Fine Americas Inc. ("FINE") warrants that this Product conforms to the specifications on this label. To the extent consistent with applicable law, FINE makes no other warranties and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for a particular purpose. No agent of FINE or any other person is authorized to make any representation or warranty beyond those contained herein.

It is impossible to eliminate all risks associated with this Product. Plant injury, lack of performance, or other unintended consequences may result because of factors such as abnormal weather conditions, use of the Product other than in strict accordance with this label's instructions, presence of other materials, the manner of application or other factors, all of which are beyond the control of FINE or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

To the extent consistent with applicable law: 1) FINE disclaims any liability whatsoever for special, incidental or consequential damages resulting from the handling or use of this Product and 2) FINE's liability under this label shall be limited to the amount of the purchase price or, at the election of FINE, the free replacement of the Product.



collate™

PEEL HERE ↑

**FOR COMMERCIAL USE OR
AGRICULTURAL USE ONLY**

**NOT INTENDED FOR
RESIDENTIAL USE**

**For Increased Lateral Branching in
Ornamentals and for Fruit Elimination in
Ornamental Trees and Shrubs; For Use
in Production of Cantaloupe, Cucumber,
Squash and Pumpkin Hybrid Seed;
For Inducing Flowering of Ornamental
Bromeliads; For Reducing Plant Height of
Potted Daffodils and Stem Topple of Potted
Hyacinths; For Removal of Mistletoe from
Ornamental Trees and Shrubs**



fine

Distributed by:
Fine Americas, Inc.
1850 Mt. Diablo Blvd.
Suite 405
Walnut Creek, CA 94596
USA

Tel. 1-888-474-3463
info@fine-americas.com
www.fine-americas.com

Active Ingredient:	
Ethephon (2-chloroethyl)	
phosphonic acid*	21.7%
Other Ingredients:	78.3%
Total	100.0%

*Contains 2 pounds ethephon per gallon

**KEEP OUT OF REACH
OF CHILDREN
DANGER PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Net contents:
1 Gallon (3.78 L)

EPA Reg. No. 85678-9-82917
EPA Est. No. 39578-TX-001

Refer to booklet for
additional
precautionary, handling
and use statements.

Collate™ is a trademark of
Fine Agrochemicals Ltd.

COL/US/1G/13