

Crop Biostimulant

STIMPLEX®

For Maximizing Crop Yield and Quality

Active Ingredient:

Cytokinin (as kinetin)*.....0.01%
Other ingredients.....99.99%
TOTAL.....100.00%

*100 ppm of Kinetin activity

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants; waterproof gloves; shoes plus socks.

User Safety Requirements: Follow manufacturer's instructions for cleaning and maintaining PPE. IF no such instructions for washables, use detergents 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. Users should 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.

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 IN EYES:
- 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.

Have the product container label with you when calling a poison control center. For spill, leak, fire, or exposure assistance call Acadian Agritech 1-902-468-2840 (8:30 AM – 5:00 PM EST Monday – Friday)

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 when disposing of equipment washwater or rinsate.

NET CONTENTS: 2.5 U.S. Gal.

PRODUCT OF CANADA

Manufactured By:

Acadian Agritech

30 Brown Avenue

Dartmouth, Nova Scotia

Canada, B3B 1X8

EPA REG. NO.: 67016-1

EPA EST. NO.: 67016-CAN-002

Lot Number: _____

Revision: 11.01

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read, understand and follow the precautions and directions on the labeling before using.

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 Protective 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.

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

GENERAL INFORMATION

STIMPLEX[®] is a plant growth regulator extracted from specially selected marine plants which simulates plant growth and development, promoting:

- Increased yields
- Increased fruit set
- Improved resistance to Environmental stress
- Earlier maturity
- Improved crop quality*

RECOMMENDED CROPS

STIMPLEX® is recommended for use on:

FIELD CROPS:

ALFALFA (Includes Alfalfa, Birdsfoot Trefoil, Clover, Esparcet, Holy Clover, Lucerne, Sainfoin and varieties and/or hybrids of these), CORN (Includes Field Corn and Popcorn), COTTON, LUPINE, PEANUTS, RICE, SORGHUM (Includes Milo), SOYBEANS, SUGAR BEETS, TRITICALE, WHEAT

FRUITS:

APPLES, AVOCADO, BANANAS, BLUEBERRIES, CANE FRUIT (Includes Blackberries, Currants, Gooseberries and Raspberries), CITRUS (Includes Grapefruit, Lemon, Lime, Oranges, Tangelos and Tangerines), GRAPES, PEARS, PLANTAINS, STONE FRUIT (Includes Apricots, Cherries, Nectarines, Peaches and Plums), STRAWBERRIES

TREE NUTS:

ALMONDS, CASHEWS, CHESTNUTS, COCONUTS, HAZELNUTS, MACADAMIA, PECANS, PISTACHIOS, WALNUTS

VEGETABLES:

ASPARAGUS, BEANS (Includes Asparagus Beans, Blackeyed Peas, Broad Beans, Catjang, Chickpeas, Cowpeas, Crowder Peas, Fava Beans, Garbanzo Beans, Kidney Beans, Lima Beans, Mung Beans, Navy Beans, Pinto Beans, Snap Beans, Southern Peas and Wax Beans), BROCCOLI, (Includes Chinese Broccoli), BRUSSELS SPROUTS, CABBAGE, CARROTS, CAULIFLOWER, CELERY, CORN (Sweet), CUCUMBER, EGGPLANT, GARLIC, GINSENG, LETTUCE, MELONS, OKRA, ONIONS, PEAS (Includes Lentils), PEPPERS, POTATOES, PUMPKINS, RADISHES, SHALLOTS, SPINACH, SQUASH, SWEET POTATOES, TOMATOES (Includes Tomatillos), YAMS

HERBS & SPICES:

BASIL, CHIVE, CILANTRO, CORIANDER, DILL, FENNEL, MARJORAM, NUTMEG, PARSLEY, PEPPER (Includes Black Pepper and White Pepper), ROSEMARY, SAFFRON, SAGE, SAVORY, SWEET BAY, TARRAGON

NON-FOOD CROPS:

HOLLY, JOJOBA, ORNAMENTALS, TREES, TURF

GRASS FORAGE:

(Includes all pasture and range grasses)

MIXING INSTRUCTIONS:

STIMPLEX® is water soluble and suitable for use in conventional liquid application systems. Acidic dilution water (pH less than 5) should be adjusted to neutral pH (6.5 to 8.0) prior to the addition of STIMPLEX®. Agitate the tank mixture during application and use within 24 hours after dilution.

COMPATIBILITY:

STIMPLEX[®] can be tank mixed (unless prohibited) with foliar fertilizers. Test the compatibility of the intended tank mixture before use. Add the proportionate amounts of each diluted ingredient to a jar. Cover, shake and let stand 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture.

APPLICATION RATES AND TIMING

Seed Treatment: To coat seeds prior to planting, apply STIMPLEX[®] at the rate of 4 ounces per 5 gallons of water and coat seeds briefly before planting; or, apply 2 ounces per 5 gallons of water directly on peat pots, planting mixture or seed bed immediately before planting.

Nursery/Container Use: Apply STIMPLEX[®] as a fine mist spray to container-grown plants at the rate of 2 ounces per 5 gallons of water, every 2 to 4 weeks. Mist leaves thoroughly but not to the point of excessive run off.

Rooting and Transplant Solution: Dip cuttings in a STIMPLEX[®] solution of 8 ounces per 5 gallons of water before rooting. For use as a rooting medium, set cuttings in a solution of 2 ounces per 5 gallons of water. Immediately before transplanting, dip roots in a 4 ounces per 5 gallons of water solution.

Chemigation: Refer to supplemental labeling entitled "Supplemental Chemigation Labeling for STIMPLEX[®]" for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

Foliar Spray: STIMPLEX[®] is most effective when used as part of a regular foliar nutritional spray program and can be applied with any standard fertilizer or crop protection spray system. Apply the foliar spray mixture as a fine mist, with low fluid velocity until the foliage is wet. Where common, a biodegradable surfactant can be used.

Do not spray just prior to and after rainfall. Apply in calm weather conditions, preferably in early morning or in the evening. A foliar spray mixture of 25 to 100 gallons of water per acre is generally sufficient. The volume of water varies depending on equipment used, area to be covered and size of plants.

For large areas where aircraft or power driven sprayers are used to apply the spray, follow the specific crop use rates below. Apply with sufficient water to get thorough foliage coverage, 3 to 10 gallons of water per acre for aircraft sprayers and 10 to 50 gallons of water per acre for ground driven spray equipment.

Crop Foliar Applications: Adjust the suggested rates and dosages for foliar applications of STIMPLEX[®] depending on the climatic region, soil type and fertility. For best results increase the frequency of applications rather than the concentration of the spraying solution. Additional applications can be made as

required, and/or immediately prior or following stress periods such as frost or drought.

CROP	APPLICATION STAGES	DOSAGE/ APPLICATION
VEGETABLES:		
ASPARAGUS	1. For newly established plants, make 1 application to new flush or fern growth in spring 2. For mature crops, make 1 application to new fern growth after cuttings have stopped	1½ to 2 pints per acre
BEANS PEAS	1. At 2 to 3 trifoliate leaf stage 2. At first bloom 3. At pod initiation	1½ to 2½ pints per acre
CARROTS GARLIC ONIONS RADISHES SHALLOTS	1. 2 to 3 weeks after emergence 2. At root enlargement	2 to 2½ pints per acre
BROCCOLI BRUSSELS SPROUTS CABBAGE CAULIFLOWER	1. At 4 to 6 true leaf stage 2. 10 to 14 days later 3. At head initiation	2 to 2½ pints per acre
SWEET CORN & POPCORN	1. At 2 to 6 leaf stage 2. At 20 to 30 inch growth stage 3. Just prior to tasseling	2 to 2½ pints per acre
CELERY	1. Within 7 days of transplanting or 2 to 3 weeks after emergence 2. 10 to 14 days later 3. 10 to 14 days later	2 to 2½ pints per acre
CUCUMBERS	1. At first 4 true leaves from seed 2. At first pre-bloom 3. 7 to 14 days later 4. Every 7 to 14 days until harvest 5. Within 48 hours of each picking	2 to 3 pints per acre
EGGPLANTS MELONS PEPPERS PUMPKINS SQUASH	1. At 6 to 8 inch growth stage 2. At pre-bloom stage 3. At fruit set 4. Within 48 hours of each picking	2½ to 3 pints per acre
LETTUCE SPINACH	1. At 4 leaf stage 2. Followed by regular applications at 14 day intervals	1½ to 2 pints per acre

OKRA	<ol style="list-style-type: none"> 1. 2 weeks after emergence 2. Regular applications at 1 week intervals until the end of blooming 	2 to 2½ pints per acre
POTATOES YAMS	<ol style="list-style-type: none"> 1. At tuber initiation (tuber set) or 3 to 5 weeks after emergence 2. 10 to 14 days later 3. At the start of blooming 	2 to 2½ pints per acre
TOMATOES	<ol style="list-style-type: none"> 1. At 6 to 8 inch growth stage 2. At pre-bloom stage 3. At fruit set 4. Approximately 14 days later 5. For fresh market varieties make extra applications within 48 hours of each picking 	2½ to 3 pints per acre
GINSENG	<ol style="list-style-type: none"> 1. 1st Year: At 4 to 6 weeks after emergence (at full leaf expansion). Apply monthly until first frost 2. 2nd Year: Apply monthly beginning at full leaf expansion until first frost 3. 3rd Year: Apply just prior to flowering. Apply monthly thereafter until first frost 4. 4th Year: Apply just prior to flowering. Apply monthly thereafter until first frost 	2 pints per acre
FRUIT:		
APPLES	<ol style="list-style-type: none"> 1. At green growth (tight cluster) 2. Pre-bloom / pink buds 3. Half-bloom 4. ¾ petal fall 5. Young fruit 6. Every 14 days until harvest 	2½ to 3 pints per acre
BANANAS PLANTAINS	<ol style="list-style-type: none"> 1. Just prior to flower bud formation <p>Or</p> <ol style="list-style-type: none"> 2. At start of new sucker growth 3. Every 4 to 8 weeks until harvest 	2-3 pints/A
GRAPES	<ol style="list-style-type: none"> 1. At start of spring growth 2. 18 to 24 inch growth 3. 50% bloom 4. Berry set / early shattering 5. 2 to 3 weeks later 	2 to 2½ pints per acre

AVOCADOS	<ol style="list-style-type: none"> 1. Pre-bloom (2 weeks prior to bloom) 2. 2 weeks following petal fall 3. Early fruit development (before summer fruit drop) 4. 30 to 45 days before harvest 	2 to 2½ pints per acre
GRAPEFRUIT	1. Pre-bloom / early bloom	3 to 3½ pints per acre
LEMON	2. Full bloom ⅔ petal fall	
LIME	3. With summer spray	
ORANGES	4. With fall spray	
TANGELOS TANGERINES	5. 6 to 8 weeks prior to harvest for fresh market varieties	
BLACKBERRIES	1. Pre-bloom (2 weeks prior to bloom)	2 to 2½ pints per acre
CURRANTS	2. 2 weeks following petal fall	
GOOSEBERRIES	3. 30 days after last application	
RASPBERRIES	4. 30 days before harvest	
	5. Optional application 1 to 2 weeks following harvest	
	6. Optional application 30 to 45 days following harvest (for winter hardiness)	
APRICOTS	1. Pre-bloom	2½ to 3 pints per acre
NECTARINES	2. 2 to 3 weeks following petal fall	
PEACHES	3. 30 days after last application	
PLUMS	4. 30 days after last application	
	5. Optional application 30 days before harvest	
CHERRIES	<ol style="list-style-type: none"> 1. At green growth (tight cluster) 2. Pre-bloom / pink buds 3. Half-bloom 4. ¾ petal fall 5. Young fruit 6. Every 14 days until harvest 	3 to 3½ pints per acre
STRAWBERRIES	<ol style="list-style-type: none"> 1. 10 to 14 days after emergence 2. At first bloom 3. Every 2 to 3 weeks through to picking 	1½ to 2 pints per acre

BLUEBERRIES	<ol style="list-style-type: none"> 1. Pre-bloom (2 weeks prior to bloom) 2. 2 weeks following petal fall 3. 30 days after last application 4. 30 days after last application (or 14 to 30 days before harvest) 5. Optional application 1 to 2 weeks following harvest 6. Optional application 30 to 45 days following harvest (for winter hardiness) 	2 to 2½ pints per acre
PEARS	<ol style="list-style-type: none"> 1. At green growth (tight cluster) 2. Pre-bloom / pink buds 3. Half-bloom 4. ¾ petal fall 5. Young fruit 6. Every 14 days until harvest 	3 to 3½ pints per acre
FIELD CROPS:		
ALFALFA	<ol style="list-style-type: none"> 1. Start early spring, repeating 8 to 10 days after each cutting or heavy pasturing 	2 to 2½ pints per acre
COTTON	<ol style="list-style-type: none"> 1. At flower bud initiation 2. 7 to 10 days later 	2 to 2½ pints per acre
	<p>Or</p> <ol style="list-style-type: none"> 1. At pinhead square 2. 3 applications at 7 to 10 day intervals 	
CORN (FIELD)	<ol style="list-style-type: none"> 1. At 4 to 6 inch growth 2. At 10 to 14 inch growth 3. Just prior to tasseling 	2 to 2½ pints per acre
LUPINE	<ol style="list-style-type: none"> 1. 3 to 7 trifoliolate leaf stage 2. 2 to 3 weeks later 	2 to 2½ pints per acre
PEANUTS	<ol style="list-style-type: none"> 1. 3 weeks after emergence and three other applications every 1 to 2 weeks 	2 to 3 pints per acre
RICE	<ol style="list-style-type: none"> 1. 3 to 5 leaf stage 	2 to 2½ pints per acre
	<ol style="list-style-type: none"> 2. At panicle initiation 	1 to 1½ pints per acre
SOYBEANS	<ol style="list-style-type: none"> 1. When buds appear 2. During full-bloom 3. 1 or 2 other applications at 2 to 3 week intervals during the growing season 	2 to 2½ pints per acre

SUGAR BEETS	<ol style="list-style-type: none"> 1. Between 2 to 6 leaf stage 2. 7 to 10 days later (6 to 10 leaf stage) 3. 7 to 10 days later (10 to 14 leaf stage) 	2 to 2½ pints per acre
SORGHUM	<ol style="list-style-type: none"> 1. At 2 to 6 leaf stage 	2 to 2½ pints per acre
WHEAT		
TRITICALE	<ol style="list-style-type: none"> 1. At 4 to 8 inch stage 2. At flowering or seed head development 	2 to 2½ pints per acre
Summer Crop		
Winter Crop	<ol style="list-style-type: none"> 1. In fall, at 3 to 6 inch stage, provided plant growth has not entered dormancy period 2. As early as possible in the spring at beginning of new growth 3. Just prior to appearance of seed head 	2 to 2½ pints per acre
HERBS & SPICES:		
BASIL	<ol style="list-style-type: none"> 1. Pre-bloom (2 weeks prior to bloom) 	2 to 2½ pints per acre
CHIVE		
CILANTRO	<ol style="list-style-type: none"> 2. 2 weeks following petal fall 	
CORIANDER	<ol style="list-style-type: none"> 3. 30 days after last treatment 	
DILL	<ol style="list-style-type: none"> 4. 30 days after last treatment 	
FENNEL	<ol style="list-style-type: none"> 5. Optional application can continue up to 2 weeks before harvest 	
MARJORAM		
NUTMEG		
PARSLEY		
PEPPER		
ROSEMARY		
SAFFRON		
SAGE		
SAVORY		
SWEET BAY		
TARRAGON		
TREE NUTS:		
ALMOND	<ol style="list-style-type: none"> 1. Pre-bloom (2 weeks prior to bloom) 	2 to 2½ pints per acre
CASHEWS		
CHESTNUTS	<ol style="list-style-type: none"> 2. 2 weeks following petal fall 	
COCONUTS	<ol style="list-style-type: none"> 3. 30 days after last application 	
HAZELNUTS	<ol style="list-style-type: none"> 4. 30 days after last application 	
MACADAMIA	<ol style="list-style-type: none"> 5. Optional application 30 days before harvest 	
PECANS		
PISTACHIOS		
WALNUT		

NON-FOOD CROPS:

TURF: STIMPLEX[®] can be used in sod production, parks, golf courses, athletic fields and home lawns. A total of 6 to 7½ pints per acre should be applied over the growing season at the rate of 1½ to 2 pints per acre (1½ ounces per 2,200 square feet) per application. STIMPLEX[®] applications should begin at the initial growth stage and continue throughout the season at 2 to 4 week intervals. For seed production apply 1½ pints per acre just prior to spear formation. Additional applications can be made after periods of heavy use or high stress. Spray newly applied sod to help new root growth and root penetration of soil. A late season spray will help improve resistance to winter kill and frost damage.

DECIDUOUS, CONIFEROUS TREES AND SHRUBS: Make the first STIMPLEX[®] application early in the season at the initiation of new growth, applying 3 to 5 pints per acre (4½ ounces per 2,200 square feet). Follow with two sprays of 2½ pints per acre (2 ounces per 2,200 square feet) at 14 to 21 day intervals during the growing season. A late season spray will help improve resistance to winter kill and frost damage, although it should not be substituted for standard winter protection. A late season application will help Christmas trees retain their dark green color after cutting.

FIELD ORNAMENTALS: Start the season by applying 2 pints per acre (2 ounces per 2,200 square feet) at the early leaf stage. Continue with applications of 2 to 2½ pints per acre (2 ounces per 2,200 square feet) in the regular spraying program. An additional application prior to lifting will help retain moisture and resist wilting.

GREENHOUSE ORNAMENTALS: Start by spraying the foliage to runoff point within 10 days of transplant or emergence at the rate of 1½ to 2½ pints per 100 gallons of water. Continue with regular applications every 2 weeks.

JOJOBA: Apply STIMPLEX[®] after the initiation of new growth in spring or autumn, at the rate of 1½ to 2½ pints per acre.

GRASS FORAGE:

STIMPLEX[®] can be used on fescue and all pasture and range grasses and grasses grown for hay or silage that will be fed to or grazed by livestock. A total of 3 to 3½ pints per acre should be applied at mid-spring and continue with monthly applications of 3½ pints per acre for the next 3 to 4 months.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool place and out of direct sunlight. Keep from freezing.

PESTICIDE DISPOSAL: Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If pesticide, spray mixture, or rinsate cannot be used according to label directions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Do not reuse empty container. Triple rinse (or equivalent), then offer for recycling, reconditioning or puncture and dispose of in a sanitary landfill, by incineration or by burning, if allowed by State and local authorities. If burned, stay out of smoke.

WARRANTY STATEMENT

Acadian Agritech warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. Crop injury, ineffectiveness or other unintended consequences may result because of such factors such as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of Acadian Agritech. In no case shall Acadian Agritech be liable for consequential, special or indirect damages resulting from the use or handling of this product, not in accordance with this label. Acadian Agritech makes no warranties of merchantability or fitness for a particular purpose nor any other express or implied warranty except as stated above.

SUPPLEMENTAL LABELING FOR STIMPLEX[®] CHEMIGATION

GENERAL

- 1) Apply STIMPLEX[®] only through drip (trickle), sprinkler (including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set or hand move), flood (basin), furrow or border irrigation system(s). Do not apply STIMPLEX[®] through any other type of irrigation system.
- 2) A pesticide supply tank is recommended. Dilute 1 part STIMPLEX[®] with at least 5 parts water before adding to the supply tank. Continuous agitation of supply tank is recommended during application or injection into the chemigation system. For mixing instructions and compatibility information, see general use on container label.
- 3) Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

- 4) Apply STIMPLEX continuously for the duration of the water application.
- 5) If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 6) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise.

SPECIAL INSTRUCTIONS FOR USE OF PUBLIC WATER SOURCES

- 1) 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 from public water systems are in place.
- 2) 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 regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 3) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow 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 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.
- 4) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 5) 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.
- 6) 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.
- 7) 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.

- 8) Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIAL INSTRUCTIONS FOR DRIP IRRIGATION (CHEMIGATION) SYSTEMS

- 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 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 control 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.

SPECIAL INSTRUCTION FOR FLOOD, FURROW AND BORDER IRRIGATION (CHEMIGATION) SYSTEMS

- 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 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.
- 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.