264-1065 (05-06-2011 (

1/14

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MAY - 6 2011

Mr. Larry Hodges
Bayer Cropscience
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Mr. Hodges:

Subject: Ultor
EPA Registration Number 264-1065
Your submissions dated 2/11/2009; 6/8/2010/; 12/8/2010; 12/15/2010 and 3/28/2011
New uses

The amendment referred to above is acceptable in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 3c(7), subject to the comments listed below:

1. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data.

2. Submit two copies of the revised final printed label for the record before you release the product for shipment. Note that this amendment is subject to the expiration date of 10/15/2013, as indicated in the Notice of Registration dated 10/15/2010.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions, please contact Rita Kumar at (703) 308-8291, or kumar.rita@epa.gov.

Sincerely,

Kimberly Nesci, Acting Chief
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

2
14

GROUP	23	INSECTICIDE

ULTOR®

For Agricultural Use Only: For control of listed insects on certain field, tree, vine and vegetable crops.

ACTIVE INGREDIENT:

spirotetramat: *cis*-3-(2,5-dimethlyphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate 14.5%

INERT INGREDIENTS: 85.5%

ULTOR contains 1.25 pounds of spirotetramat per US gallon, or 150 grams per liter. 100.0%

EPA Reg. No. 264-1065 **EPA Est. No. 264-MO-02**

STOP - Read the label before use
KEEP OUT OF REACH OF CHILDREN
CAUTION

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.)

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 five minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note To Physician: No specific antidote is available. Treat patient symptomatically.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through 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 contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Protective eyewear
- Long-sleeved shirt and long pants
- Chemical-resistant gloves (e.g., neoprene)
- Shoes plus socks

ACCEPTED
With COMMENTS
In EPA Letter Dated:
MAY - 6 2011
Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:
264-1065

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.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, or enclosed cabs 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.
- Remove Personal Protective Equipment 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

For Terrestrial Use: This pesticide is toxic to aquatic invertebrates and oysters. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. This product may contaminate water through drift of spray in wind. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This product is potentially toxic to honey bee larvae through residues in pollen and nectar, but not to adult honey bees. Exposure of adult bees to direct treatment or residues on blooming crops can lead to effects on honey bee larvae. See the "Directions for Use" section of this label for specific crop application instructions that minimize risk to honey bee larvae.

Spray Drift Reduction Management

Do not apply when wind speed favors drift beyond the area intended for treatment. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Importance of Droplet Size: An important factor influencing drift is droplet size. Select nozzles and pressure that deliver medium spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain crop coverage. For aerial application, spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided. Low humidity and high temperature increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Wind Speed Restrictions: Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Avoiding applications when wind direction is toward an aquatic area can reduce risk exposure to sensitive aquatic areas.

Restrictions During Temperature Inversions: Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. However, if fog is not present, the movement of smoke from a ground source can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Airblast (Air Assist) Specific Recommendations: Airblast sprayers carry droplets into the canopy of trees/vines via a radial, or lateral directed air stream. The following drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- For applications to the outside rows, only spray inward, toward the orchard/grove.

RUNOFF MANAGEMENT

This product may contaminate water through runoff or drift of spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

ENDANGERED SPECIES ADVISORY

The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law.

INSECT RESISTANCE STATEMENT

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. ULTOR® contains an active ingredient with a mode of action classified as a Group 23 insecticide – lipid biosynthesis inhibitor (LBI). Studies to determine cross-resistance of Group 23 insecticides with other chemical classes have demonstrated no cross-resistance. Bayer CropScience strongly encourages that ULTOR, applied alone or in tankmix combination with another Group 23 product, be applied in a block rotation or windowed approach with products from other chemical classes having a different mode of action before using additional applications of Group 23 insecticides against the same target pest. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to a given class of chemistry.

Contact your local extension specialist, certified crop advisor and/or Bayer CropScience representative for additional resistance management or IPM recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://irac-online.org.

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 (REI). 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 REI of **24 hours** following application.

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:

- Long-sleeved shirt and long pants
- Protective eyewear
- Chemical-resistant gloves (e.g., neoprene)
- Shoes plus socks

STORAGE AND DISPOSAL

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

Pesticide Storage: ULTOR is packaged in poly-ethylene containers. Do not allow product or containers to freeze. Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is (800) 334-7577, or contact Chemtrec at (800) 424-9300.

Pesticide Disposal: Pesticide wastes are toxic. 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: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) 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 ¼ 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. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

APPLICATION INFORMATION

ULTOR is a suspension concentrate formulation and is active primarily by ingestion against immature target pest life stages. In addition, fertility of adult female target pests, such as aphids and whiteflies, may be reduced. ULTOR can be applied by air, ground equipment or through chemigation as a preventative treatment or timed to coincide with an early threshold level in developing insect populations.

ULTOR must be tank-mixed with a spray adjuvant / additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Bayer CropScience representative or PCA for specific recommendations by crop. However, the use of Induce® adjuvant in combination with ULTOR on grape, pome fruits and stone fruits is prohibited when fruit is present due to adverse plant compatibility on harvested commodities.

Sufficient leaf tissue must be present for uptake and translocation of this product; due to this requirement, do not apply prior to petal-fall on pome fruits, stone fruits, and tree nut crops. Following application to plant foliage, ULTOR is fully systemic, moving through phloem and xylem to all plant tissues including new shoot, leaf and root tissues; systemicity and efficacy may be hindered during periods of cold temperatures, under drought conditions, or when plants are not actively growing.

It is widely known that tankmixtures and/or sequential treatments of horticultural spray oil with Captan and/or sulfur may cause adverse plant compatibility in tree and vine crops; including ULTOR in this tankmix and/or sequential treatment scenario is not recommended.

Use in enclosed structures, such as greenhouses or planthouses, is not permitted.

APPLICATION INSTRUCTIONS

Foliar Spray Applications

Foliar applications must be made using properly calibrated ground sprayers, fixed- or rotary-winged aircraft or through properly designed, sprinkler-type, chemigation equipment (See Chemigation Application directions below). Sufficient spray volume, based on the size and density of the treated crop, must be utilized that allows for good coverage of both young and old foliage without runoff or collection of spray solution on leaf margins, fruit, or other plant tissues. Good coverage will help ensure maximum uptake by leaf surfaces and optimum systemicity within the plant.

Ground applications must be made in a minimum of **15 gallons of water per acre on tree, vine, potato and vegetable crops; 10 gallons of water per acre on field crops**.

Aerial applications must be made in a minimum of **10 gallons of water per acre in tree and vine crops, and 5 gallons of water per acre in field, vegetable and potato crops**. The higher dosage of ULTOR within the crop/pest-specific section may be necessary for optimum control for aerial applications.

Chemigation applications (See Chemigation Application directions below) should be made as concentrated as possible. For best results apply at 100% input/travel speed, for center pivots or 0.1 inch (2,716 gallons) up to 0.15 inch (4,073 gallons) of water/A, for other systems. The higher dosage of ULTOR within the crop-specific/pest section may be necessary for optimum control for chemigation applications.

Chemigation Application (Vegetable and Potato Crops only)

Types of Irrigation Systems: ULTOR may be applied through sprinkler type irrigation systems only. These types include: center pivot, lateral move, side roll, or overhead solid set irrigation systems. Do not apply ULTOR through any other type of irrigation system.

Injection for Chemigation: Inject the specified dosage of ULTOR into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water in ensured.

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of ULTOR treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop can result from non-uniform distribution. The system must be calibrated to uniformly distribute the rates specified for chemigation application to specific crops. If you have questions about calibration, contact your Cooperative Extension Service agent, equipment manufacturers, or other experts.

Chemigation Monitoring: 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.

Required Injection and Sprinkler System Safety Devices: 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. The pesticide pump injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor/engine stops; or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. Injection systems must use a metering pump or equivalent, such as a positive displacement injection pump (e.g., diaphragm pump, venture injection) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: 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. 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 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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. 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. 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.

Cleaning the Chemical Injection System: In order to apply pesticides accurately, the chemical injection system must be kept clean, free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

Flushing the Irrigation System: At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

Center-Pivot and Automatic-Move Linear Systems: Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT RECOMMENDED. End guns that provide uneven distribution of treated water can result in lack of effectiveness or illegal pesticide residues in or on the crop.

Solid Set and Manually Controlled Linear Systems: Injection should be during the last 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute applications not associated with a regular irrigation.

MIXING INSTRUCTIONS

COMPATIBILITY / MIXING / ORDER-OF-MIXING

Observe all cautions and limitations on labeling of all products used in mixtures.

ULTOR is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. However, it is known that many components, including crop protection products, fertilizers, micronutrients, and spray adjuvants, may be present in a tankmix combination that creates very unique and adverse chemical reactions, resulting in high risk circumstances. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered and because of this reason, **it is recommended that potential users determine the chemical, physical, biological and plant compatibility of such mixes prior to applications on a broad commercial scale.**

When considering mixing ULTOR with other pesticides, or other additives, first contact your supplier for advice. For further information, contact your local Bayer representative. If your supplier and Bayer representative have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water, as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

The proper mixing procedure for ULTOR alone or in tank mix combinations with other pesticides is:

1) Fill the spray tank 1/4 to 1/3 full with clean water;
2) While recirculating and with the agitator running, add any products in Polyvinyl acetate (PVA) bags **(See Note)**. Allow time for thorough mixing;
3) Continue to fill spray tank with water until 1/2 full;
4) Add any other wettable powder (WP) or wettable granules (WG) products;
5) Add the required amount of ULTOR, and any other "flowable" (FL or SC) type products;
6) Allow enough time for thorough mixing of each product added to tank;
7) If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers, micronutrients, spray adjuvants.
8) Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

NOTE: Do not use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

CROP ROTATION STATEMENT

Do not plant or replant any crop not listed on this label within 30 days after the last application.

FIELD CROPS

CROP USE DIRECTIONS

Apply specified dosage of ULTOR as needed for control. Treatment must be made when insect populations begin to build and before a damaging population becomes established. Rate selected for use must depend on stage of pest development at application and infestation level of those pests.

ULTOR must be tank-mixed with a spray adjuvant / additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Bayer CropScience representative or PCA for specific recommendations by crop.

Apply in adequate water for uniform coverage; minimum 10 GPA by ground and 5 GPA by aerial application.

SOYBEAN

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Whiteflies	4.0 - 8.0	0.04 - 0.08
Notes and Restrictions Pre-Harvest Interval (PHI): **21 days** Minimum interval between applications: **7 days** Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A)**		

TREE AND VINE CROPS

CROP USE DIRECTIONS

Apply specified dosage of ULTOR early in the infestation as the population begins to develop or at early threshold for the target insect pest. Preventative applications are permitted where required for management of specific insect problems but generally require the higher dosage specified within the crop specific sections for optimal residual control. Degree of efficacy against labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests.

ULTOR must be tank-mixed with a spray adjuvant / additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Bayer CropScience representative or PCA for specific recommendations by crop. However, the use of Induce® adjuvant in combination with ULTOR on grape, pome fruits and stone fruits is prohibited when fruit is present due to adverse plant compatibility on harvested commodities. Sufficient leaf tissue must be present for uptake and translocation of this product; due to this requirement, do not apply prior to petal-fall on pome fruits, stone fruits, and tree nut crops.

It is widely known that tankmixtures and/or sequential treatments of horticultural spray oil with Captan and/or sulfur may cause adverse plant compatibility in tree and vine crops; including ULTOR in this tankmix and/or sequential treatment scenario is not recommended.

Application rates within this label are based on full-size mature trees and vines. Higher rates should be used for moderate to heavy insect pressure or where longer residual control is desired. Minimum application volumes of water: 50 GPA for conventional ground airblast sprayer, 30 GPA for high air velocity, low volume or air curtain sprayers, 10 GPA for aerial application.

CITRUS FRUITS

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (*Citrus spp.*, includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sweet and sour), Pummelo, Satsuma mandarin

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Asian citrus psyllid California red scale Citrus leafminer Citrus snow scale Citrus thrips Florida red scale Mealybugs Purple scale Whiteflies	12.0 – 16.0	0.12 – 0.16
PESTS SUPPRESSED		
Black scale Brown scale Citricola scale Cottony cushion scale		

Notes and Restrictions

Pre-Harvest Interval (PHI): **1 day.**

Minimum interval between applications: **21 days.**

Maximum ULTOR allowed per crop season: **32 fluid ounces/Acre (0.32 lb ai/A).**

Do not apply this product within 10 days prior to bloom, during bloom, or until petal fall is complete.

Do not apply non-ionic surfactants in tank mix combination with ULTOR on white grapefruit.

SMALL FRUIT VINE CLIMBING SUBGROUP (Except Fuzzy Kiwifruit)

Crops of Crop Subgroup 13-07F Including: Amur river grape, Gooseberry, Grape, Kiwifruit (hardy), Maypop, Schisandra berry)

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Mealybugs Phylloxera Whiteflies	8.0 – 12.0	0.08 – 0.12
PESTS SUPPRESSED		
European fruit lecanium scale Nematodes		

Notes and Restrictions

Pre-Harvest Interval (PHI): **7 days.**

Minimum interval between applications: **30 days.**

Maximum ULTOR allowed per crop season: **20 fluid ounces/Acre (0.2 lb ai/A)**

Some adjuvants that may be used with ULTOR have caused intolerable damage to grape berries / clusters when applied alone or in mixes after the initiation of bloom. Testing has shown that ULTOR does not increase the potential for damage when used in combination with such adjuvants; however, not all adjuvants have been tested. It is recommended that a high quality spreading-penetrating adjuvant be used at a rate that is known to be safe to the crop.

POME FRUITS

Crops of Crop Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental pear, Quince

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids (including Wooly Apple Aphid) 'Mealybugs Pear psylla San Jose scale Whiteflies	8.0 – 14.0	0.08 – 0.14
PESTS SUPPRESSED		
Apple gall midge Codling moth Micro-lepidoptera leafminers Pear leaf midge White apple leafhopper		

Notes and Restrictions

Pre-Harvest Interval (PHI): **7 days.**

Minimum interval between applications: **14 days.**

Maximum ULTOR allowed per crop season: **40 fluid ounces/Acre (0.4 lb ai/A).**

Do not apply until after petal fall.

For control of San Jose scale west of the Rocky Mountains [including all of MT, WY, CO, and NM],, apply immediately after petal fall, followed by a second application 14 – 21 days later. For control of San Jose scale east of the Rocky Mountains, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary.

STONE FRUITS

Crops of Crop Group 12 Including: Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (includes Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Mealybugs San Jose scale White peach scale Whiteflies	8.0 – 14.0	0.08 – 0.14
PESTS SUPPRESSED		
Black scale Cherry fruit fly European fruit lecanium scale Nematodes		

Notes and Restrictions

Pre-Harvest Interval (PHI): **7 days.**

Minimum interval between applications: **14 days.**

Maximum ULTOR allowed per crop season: **24 fluid ounces/Acre (0.24 lb ai/A).**

Do not apply until after petal fall.

For control of San Jose scale, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary.

TREE NUTS

Crops of Crop Group 14 plus Pistachio Including: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut [black and English (Persian)]

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Mealybugs Phylloxera San Jose scale Walnut scale Whiteflies	8.0 – 14.0	0.08 – 0.14
PESTS SUPPRESSED		
European fruit lecanium scale Nematodes Olive scale		

Notes and Restrictions

Pre-Harvest Interval (PHI): **7 days.**

Minimum interval between applications: **14 days.**

Maximum ULTOR allowed per crop season: **34 fluid ounces/Acre (0.34 lb ai/A).**

Do not apply until after petal fall.

For control of San Jose scale, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary.

TROPICAL FRUIT

Acerola, Avocado, Black sapote, Canistel, Feijoa, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Spanish lime, Star apple, Starfruit, Wax jambu, White sapote (*Casimiroa* spp.)

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Mealybugs Scales Whiteflies	13.0 – 16.0	0.13 – 0.16
Notes and Restrictions Pre-Harvest Interval (PHI): **1 day** Minimum interval between applications: **14 days** Maximum ULTOR allowed per crop season: **40 fluid ounces/Acre (0.4 lb ai/A)**		

HOPS

PEST CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Hop aphid	8.0 – 10.0	0.08 – 0.10
Notes and Restrictions Pre-Harvest Interval (PHI): **7 days.** Minimum interval between applications: **14 days.** Maximum ULTOR allowed per crop season: **20 fluid ounces/Acre (0.2 lb ai/A).**		

CHRISTMAS TREE PLANTATIONS

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids (including root aphids and Adelgids) Scales	8.0 – 16.0	0.08 – 0.16
Notes and Restrictions Minimum interval between applications: **14 days.** Maximum ULTOR allowed per season: **32 fluid ounces/Acre (0.32 lb ai/A).**		

VEGETABLE AND POTATO CROPS

CROP USE DIRECTIONS

For all crops, apply specified dosage of ULTOR as needed for control. Treatment must be made when insect populations begin to build and before a damaging population becomes established. Rate selected for use must depend on stage of pest development at application and infestation level of those pests.

ULTOR must be tank-mixed with a spray adjuvant / additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Bayer CropScience representative or PCA for specific recommendations by crop.

Apply in adequate water for uniform coverage; minimum 15 GPA by ground and 5 GPA by aerial application. ULTOR may also be applied through overhead irrigation systems as designated in the CHEMIGATION statement in the *Application Instructions* section of this label. If needed, repeat application at a 7- to 10-day interval.

FRUITING VEGETABLES

Crops of Crop Group 8 plus Okra including: Eggplant, Groundcherry, Okra ,Pepinos, Pepper (*Capsicum spp.*, including Bell, Chili, Cooking, Pimento and Sweet), Tomatillo, Tomato

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Psyllids Whiteflies	5.0 – 8.0	0.05 – 0.08
PEST SUPPRESSED		
Western flower thrips (larvae)		
Notes and Restrictions Pre-Harvest Interval (PHI): **1 day.** Minimum interval between applications: **7 days.** Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A).**		

LEAFY VEGETABLES (Except Brassica Vegetables)

Crops of Crop Group 4 Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Cardoon, Celery, Celtuce, Chervil, Chinese celery, Chrysanthemum (edible-leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Florence fennel (Finocchio), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach [including New Zealand and vine (Malabar spinach, Indian spinach)], Swiss chard

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Whiteflies	5.0 – 8.0	0.05 – 0.08
PESTS SUPPRESSED		
Diamondback moth Western flower thrips (larvae)		
Notes and Restrictions Pre-Harvest Interval (PHI): **3 days.** Minimum interval between applications: **7 days.** Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A).**		

LEGUME VEGETABLES

Crops of Crop Group 6 (except soybean, dry) including:
Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean
Bean (*Lupinus* spp., including grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean (*Phaseolus* spp., including field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean (*Vigna* spp., including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)
Pea (*Pisum* spp. including dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)
Other Beans and Peas (Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, soybean (immature seed), Sword bean)

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Whiteflies	5.0 - 8.0	0.05 – 0.08
Notes and Restrictions Pre-Harvest Interval (PHI): **1 day (edible podded and succulent beans and peas); 7 day (dry shelled beans and peas)** Minimum interval between applications: **7 days** Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A)**		

BRASSICA (COLE) LEAFY VEGETABLES

Crops of Crop Group 5 Including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (*gai lon*), Chinese cabbage (*bok choy*), Chinese cabbage (*napa*), Chinese mustard cabbage (*gai choy*), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Swede midge Whiteflies	5.0 – 8.0	0.05 – 0.08
PESTS SUPPRESSED		
Diamondback moth Onion thrips		
Notes and Restrictions Pre-Harvest Interval (PHI): **1 day.** Minimum interval between applications: **7 days.** Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A).** Certain nonionic and organosilicone adjuvants which may potentially be used with ULTOR have caused intolerable damage to bok choy, napa, mustard spinach, mizuna, and mustard greens when applied alone, in the absence of ULTOR. Testing has shown that ULTOR does not increase the potential for damage when used in combination with such adjuvants. Due to the wide variety and composition of spray adjuvants that may be used in combination with ULTOR, only use a spreading-penetrating adjuvant that is known to be safe to the target crop.		

POTATO and OTHER TUBEROUS AND CORM VEGETABLES

Crops of Crop Subgroup 1C Including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Potato, Sweetpotato, Tanier, Turmeric, Yam bean, Yam (true)

PESTS CONTROLLED	Rate fluid ounces/Acre	Rate lb ai/A
Aphids Psyllids Whiteflies	6.0 – 8.0	0.06 – 0.08

Notes and Restrictions

Pre-Harvest Interval (PHI): **7 days.**

Minimum interval between applications: **7 days.**

Maximum ULTOR allowed per crop season: **16 fluid ounces/Acre (0.16 lb ai/A).**

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

NET CONTENTS: 48 FL. OZ.

ULTOR is a registered trademark of Bayer CropScience

Induce® is a registered trademark of Helena Holding Company

PRODUCED FOR

Bayer CropScience

Bayer CropScience
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

ULTOR (PENDING) 03/23/2011