

61842-9

02/01/2007

1/40



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:
 61842-9

Date of Issuance:
 FEB 1 2007

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance: **Conditional**

Name of Pesticide Product:
Linebacker

Name and Address of Registrant (include ZIP Code):

Tessenderlo Kerley Inc.
 2255 North 44th Street, Suite 300
 Phoenix, AZ 85008-3279

c/o Michael Kellog
 Pyxis Regulatory Consulting, Inc.
 4110 136th St. NW
 Gig Harbor, WA 98332

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA Section 4.
2. Before releasing the product for shipment revise the EPA Registration Number to read, "EPA Reg. No. 61842-9" to your label before you release the product for shipment.
3. Submit a GLP storage and stability study (830.6317) and corrosion characteristics study (830.6320) by March 1, 2008.

Signature of Approving Official:

Cynthia Giles-Parker
 Branch Chief
 Fungicide Branch
 Registration Division (7505P)

Date:

FEB 1 2007

4. Relocate the section "Conditions of Sale" from page 3, to the final page label or thereabout.
5. On page 5, subsection "Miscellaneous Crops", delete "Tobacco", as you will note this unsupported use site has been blacked out on the enclosed label.
6. Throughout the "Application Instructions" section, delete should and replace with "must", noted in two cases, the change in diction will ensure minimal language ambiguity.
7. The first requirement error of this sort appears in the second sentence of the section "General Precautions for Applications through Sprinkler Irrigation System". In the eighth sentence, insert "or", so that it precedes "when" upon each occurrence.
8. Throughout the label when referring to "Lbs" change this to the conventional usage of "lbs. of product" or "pounds of product". This requirement was initially observed in the table heading, on pages 8 through 29. Similarly the use of "Oz." is to appear as "oz." or "ounce", accordingly, its first appearance being, the table header, on page 35.
9. In the label section referring to "Citrus - Bearing" two sentences must be derived from "Do Not graze livestock in or feed forage from treated groves." This sentence is ambiguous as currently written, and must be revised to read separately as follows or a variation thereof:
 - Do NOT graze livestock in treated groves.
 - Do NOT feed forage from treated groves.
9. The section "Macadamia Nuts" and practically each section hereafter contains the sentence "Determine sensitivity...later." To ensure its legibility, complete the statement insert the appropriate use (as observed for citrus crops on your label) site or "crop".
10. "Pome Fruit - Bearing" table, "Application Instructions" contains incorrect application rates: "5.0 lbs/100 gals" and "2.5 lbs/100 gals" which must be changed to "5.0 lbs/Acre" and "2.5 lbs/Acre", respectively. These rates refer to the "Disease Controlled" Phytophthora.
11. The table referring to "Stone Fruit" and the "Disease Controlled: Almond pruning-wound canker", contains an incomplete set of instructions which must read: "Apply by spraying or painting the pruning wound area...surface."

EPA Registration No. 61842-9

Linebacker

Page 3 of 3

12. The heading for "Leafy Vegetables" must be accompanied by "***" or an equivalent indicating the use restriction for "Brassica vegetables". Most likely this was the intended use of "*" as it currently precedes: "* Leafy Vegetables" without any apparent significance. If it serves no purpose, delete, to ensure ambiguity is minimal.
13. Label section referring to "Onions (Dry Bulb) contains misspellings which are most likely attributed to incompatible font recognition by your printer or software application. For instance, note the first sentence, appearing with "Altermaria porn" opposed to the correct spelling "Altenaria porri." Again, a variation of the misspelling is noted beneath the heading "Disease Controlled" as "Altermana porn". Likewise, the section "Banana" contains a consistent typo for "DuomatIM" appearing in the table, "IM" is most likely intended to signify usage of "TM ". Also, in this label section, PHI incorrectly refers to the letter "O", rather than "0". Make the aforementioned corrections, accordingly, to ensure label legibility.
14. The table for "Tomato" requires its "Application Instructions" to be completed, the final sentence must conclude with or a variation thereof: "For moderate...shorter reapplication interval." This finding is consistent with equivalent label language in this regard.
15. On page 33, of the label refer to the subsection "Soil Incorporation", the final sentence must be revised by deleting "being sure to follow the instruction for foliar or drench applications above". In its place, append: "do NOT make more than one application every 30 days."
16. In the section "Tank Mixture for Turf Diseases", subsection "Summer Stress Complex/Summer Decline" insert the following as the final sentence "Be sure to follow the most restrictive of label limitations and precautions and do not exceed label dosage rates."
17. On pages 32, and 35, sections "Compatibility" contain restriction statements using "should", which must be changed to "must". Furthermore, this corrected restriction statement must, also, appear in the "Tank-Mix Mixing Instructions" section of the label, to read: "Linebacker is NOT physically compatible with flowable formulations of Daconil 2787...must NOT be used in tank mixes with Linebacker." On page 37, reference is made to "Griffin L.L.C., which is no longer current, this is to be replaced by "Dupont Company".

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

A copy of the label stamped "Accepted with Comments" is enclosed for your records.

4/40

Linebacker™

ACTIVE INGREDIENT:
 Aluminum tris (O-ethyl phosphonate) 80.0%
OTHER INGREDIENTS: 20.0%
TOTAL: 100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

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. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-877-1737 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through the skin or inhaled. Causes moderate eye injury. Avoid contact with skin, eyes or clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. Do not apply directly to water, 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.

EPA Reg. No. 61842-

**ACCEPTED
with COMMENTS
in EPA Letter Dated**

EPA Est. No.

Manufactured for:
Tessenderlo Kerley, Inc.
2255 North 44th Street, Suite 300
Phoenix, AZ 85008-3279
1-888-732-8246

FEB 1 2007
*(Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.*

61842-9

Net Weight:

User Safety Recommendations

Users should:

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. 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 agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

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.

Keep unprotected persons out of the treated areas until sprays have dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container and keep tightly closed. Store in a cool dry area.

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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Tessenderlo Kerley, Inc., or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. Tessenderlo Kerley, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use, subject to the factors noted above which are beyond the control of Tessenderlo Kerley, Inc. Except as warranted by this label, Tessenderlo Kerley, Inc. makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose. To the extent allowed by applicable law, the exclusive remedy against Tessenderlo Kerley, Inc. for any cause of action relating to the handling or use of this product is a claim of damage, and in no event shall damages or any other recovery of any kind against Tessenderlo Kerley, Inc. exceed the price of the product which causes the alleged loss, damage, injury, or other claim. To the extent allowed by applicable law, Tessenderlo Kerley, Inc. shall not be liable and any and all claims against Tessenderlo Kerley, Inc. are waived, for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income, whether or not based on the negligence of Tessenderlo Kerley, Inc. breach of warranty, strict liability in tort, or any other cause of action. Tessenderlo Kerley, Inc. and the seller offer this product, and the buyer and users accept it, subject to the foregoing conditions of sale and limitations of warranty, liability and remedies.

Linebacker™ is a trademark of Tessenderlo Kerley, Inc.

LABEL LANGUAGE FOR CROP USES

LANGUAGE BASED ON THAT OF SUBSTANTIALLY SIMILAR PRODUCT *Aliette WDG Fungicide* (EPA REG. NO. 264-516) EPA APPROVED LABEL DATED March 14, 2006.

For control of diseases in the following crops:

Tree Fruits and Nuts	Small Fruits	Vegetables	Miscellaneous Crops
Avocado (Non-Bearing and Bearing)	Blueberries	Asparagus	Bananas
Citrus (Non-Bearing and Bearing)	Caneberry Subgroup	Brassica Crops	Ginseng
Macadamia Nuts	Cranberries	Cucurbit Crops	Hops
Pome Fruit (Non-Bearing and Bearing)	Grapes [†]	Leafy Vegetable Crops	Pineapple
Stone Fruit and Almond (Non-Bearing)	Strawberry	Onion (Dry Bulb)	Tobacco
		Tomato	

[†] East of the Rocky Mountains Only

**DIRECTIONS FOR APPLICATION THROUGH SPRINKLER IRRIGATION SYSTEMS
(CHEMIGATION)**

Use of Linebacker™ through chemigation is NOT allowed in California, except for Citrus.

Apply this product only through sprinkler irrigation systems including mini-sprinkler, drip, solid set and center pivot. Do not apply this product through any other type of irrigation system.

PREPARATION: Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

APPLICATION INSTRUCTIONS: Prepare a suspension of Linebacker™ in the mixing tank by filling the tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation and add the recommended amount of Linebacker™ and then the remaining volume of water. Set the sprinkler to deliver 0.1 to 0.3 inch of water per acre, start the sprinkler and uniformly inject the Linebacker™ suspension into the irrigation water line at the desired rate per acre. The suspension should be injected into the main line ahead of a right angle turn using a positive displacement pump to insure adequate mixing. You should contact a State Extension Service specialist, equipment manufacturer's representative or other expert if you have any questions regarding calibration.

When treating using a Mini-Sprinkler or Drip Irrigation System: Once the application is completed, further field irrigation of the treated area should be avoided for 24 to 48 hours.

When treating using a Solid Set or Center Pivot Irrigation Systems: Once the application is completed, further field irrigation over the treated area should be avoided until foliage is dry to prevent washing the chemical off the crop.

GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

- Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.
- 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 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 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 shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.
- 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.

- Do NOT apply when wind speed favors drift beyond the area intended for treatment, when system connection or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non uniform distribution of treated water.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.
- A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

GENERAL APPLICATION INSTRUCTIONS FOR FOLIAR APPLICATIONS

Linebacker™ provides effective systemic control of various diseases when used according to the label directions.

MIXING INSTRUCTIONS

1. Prior to adding Linebacker™, fill the spray tank with 1/4 - 1/2 of the required volume of water.
2. Add Linebacker™ slowly to the tank and agitate by hydraulic or mechanical means.

NOTE: Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds. Slowly add alkaline buffering agent (if needed).

CAUTION: When Potassium Carbonate is used as a buffer Carbon Dioxide (CO₂) gas is released during the buffering process. The spray tank must NOT be sealed until the CO₂ release associated with the reaction subsides (approximately 5 minutes).

3. Continue to fill the tank with water to the desired volume while maintaining agitation.
4. Maintain agitation while applying.

GENERAL APPLICATION INSTRUCTIONS FOR TRUNK SPRAYS AND PAINTS

1. Mix Linebacker™ with a small volume of water using the specific rates and gallonage specified in the citrus and stone fruit sections of this label.
2. Using sufficient volume to cover the entire area to be treated, apply the mixture to the wound area as a spray or paint on the limbs or trunk of citrus or stone fruit trees.

LINEBACKER™ COMPATIBILITY WITH OTHER PRODUCTS:

Linebacker™ has been found to be compatible with most agricultural products; however, crop sensitivity to mixtures may vary. In particular, foliar fertilizers and copper products combined with Linebacker™ may cause phytotoxicity in various crops. If these combinations or others have not been used before, do not tank mix without first testing the safety of the combination with respect to both compatibility and crop phytotoxicity.

Spray adjuvants such as stickers, spreaders and wetting agents are not recommended for use with Linebacker™. However, if an adjuvant will be mixed with Linebacker™, it should be tested prior to use for compatibility. Because of Linebacker's™ acidic nature, do not tank mix with acid-type compatibility spray adjuvants such as Buffit® Spray-aide or Triton AG-44M, or with adjuvants designed to enhance pesticide penetration such as Herbex® or Induce®.

Physical compatibility with Linebacker™ should be checked when mixing with soluble concentrate or "flowable" formulation pesticides such as Bravo® 720 and Rovral® 4F. To test compatibility, add the correct proportions of each product and water into a clear container, thoroughly mix and then let stand for 3-5 minutes. If the mixture

10/40

remains in suspension or can be easily remixed, the products are considered compatible. Buffering as described in the Mixing Instructions section may increase compatibility.

To determine if a combination is phytotoxic to a specific crop, apply the mixture to a few plants or trees and then evaluate 3-7 days later for visual effects.

APPLICATION INSTRUCTIONS:

Apply Linebacker™ with sufficient water volumes to obtain complete foliage coverage; the gallonage needed will vary by crop and growth stage. Do not apply Linebacker™ in less than 20 gals/Acre when applying to vegetables and small fruit by ground. Aerial applications for all labeled crop uses should not be made using less than 10 gallons per acre. To insure good coverage of tree fruit, spray to wet.

AVOCADO -- NON-BEARING

(Non-bearing trees are those that will not produce marketable fruit for 12 months after the last Linebacker™ application)

Linebacker™ will control avocado root rot caused by *Phytophthora cinnamomi* and avocado canker caused by *P. citricola* when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT allow livestock to graze on the floor of treated groves.
- Do NOT exceed 100 GPA for foliar applications.
- Do NOT cut cover crops for feed.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Canker (<i>Phytophthora citricola</i>)	Paint or Trunk Spray	2.5-5.0 / 5 gals	Mix the desired amount of Linebacker™ with 5 gallons of water and apply to the trunk lesion in a sufficient volume to thoroughly wet the entire lesion. If no lesion is present, the application should be made from the soil line up the trunk approximately two feet. <i>If trunk lesions are present, the higher rate should be used.</i> Nursery tree resets and new plantings should be treated at the time of planting.
Phytophthora Root Rot (<i>Phytophthora cinnamomi</i>)	Drench	5.0 oz / 10 gals	2-3 days prior to transplanting, apply 1 quart of solution to the sleeve or pot of each tree.
	Foliar	5.0 / 100 gals	Begin application at transplanting or the start of the growing season and continue for up to 4 applications per year at 60 day intervals. Spray to run-off.

AVOCADO – BEARING

Linebacker™ will control avocado root rot caused by *Phytophthora cinnamomi* and avocado canker caused by *P. citricola* when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within 12 hours or less of harvest.
- Do NOT exceed 500 GPA for foliar applications.
- Do NOT apply more than 5.0 lbs of Linebacker™ per acre per application.
- Do NOT exceed 20 lbs of Linebacker™ per acre per year.
- Do NOT allow livestock to graze on the floor of treated groves.
- Do NOT cut cover crops for feed.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Canker (<i>Phytophthora citricola</i>)	Paint or Trunk Spray	2.5-5.0 / 5 gals	Mix the desired amount of Linebacker™ with 5 gallons of water and apply to the trunk lesion in a sufficient volume to thoroughly wet the entire lesion. If no lesion is present, the application should be made from the soil line up the trunk approximately two feet. If trunk lesions are present, the higher rate should be used. <i>Nursery tree resets and new plantings should be treated at the time of planting.</i>
Phytophthora Root Rot (<i>Phytophthora cinnamomi</i>)	Foliar	5.0 / Acre	Begin application at the start of the growing season and repeat every 60 days. Spray to run-off.
		1.0 / 100 gals	Begin application at the start of the growing season and repeat every 60 days. Spray to run-off. This volumetric concentration is derived from a per acre foliar application rate of 5 lbs of Linebacker™ diluted in 500 gals of water.

Note: It is necessary to know the number of gallons of water needed to spray one acre of trees to the point of drip in order to apply the correct amount of product. Conduct a test if the gallonage is unknown and if you do not know how to conduct such a test with your specific equipment, you should seek assistance from your equipment dealer or Cooperative Extension Service.

CITRUS – NON-BEARING

(Non-bearing trees are those that will not produce marketable fruit for 12 months after the last Linebacker™ application)
 Linebacker™ will control foot rot, root rot and gummosis caused by *Phytophthora* spp. when applied in conjunction with good cultural management practices. Linebacker™ may be applied by ground, air, or chemigation.

Use Precautions:

- Any combination of labeled application methods can be used, however, do NOT exceed a total of four applications or 20 lbs/Acre per year.
- Do NOT exceed 100 GPA for foliar applications.
- Do NOT graze livestock in treated groves.
- Do NOT feed forage from treated groves.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine citrus sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Root Rot or Gummosis (<i>Phytophthora</i> spp.)	Paint or Trunk Spray	2.5-5.0 / 5 gals	Mix the desired amount of Linebacker™ with 5 gallons of water and apply to the trunk lesion in a sufficient volume to thoroughly wet the entire lesion. If no lesion is present, the application should be made from the soil line up the trunk approximately two feet. If trunk lesions are present, the higher rate should be used. Nursery tree resets and new plantings should be treated at the time of planting.
	Chemigation	5.0 / Acre	Start applications when conditions are favorable for disease development. Spray until wet for foliar applications.
	Foliar	5.0 / 100 gal.	For chemigation, during a scheduled irrigation continuously inject Linebacker™.
Phytophthora Foot and Root Rot (<i>Phytophthora</i> spp.)	Root Dip	3.0 / 100 gal.	Mix Linebacker™ thoroughly in the desired volume of water. Prior to planting in the field dip the entire root system for 30-60 minutes.

CITRUS – BEARING

When applied in conjunction with good cultural practices Linebacker™ will control foot rot, root rot, gummosis, and fruit brown rot caused by *Phytophthora* spp. as well as ice-nucleating bacteria (California only), and suppresses Alternaria Brown Spot (Florida only).

Note: Controlling ice-nucleating bacteria may provide some protection against light frost; however, Linebacker™ is not recommended for use in areas where severe frost may occur.

Use Precautions:

- Do NOT apply within 30 days of harvest.
- Do NOT exceed a total of four applications or 20 lbs/Acre per year.
- Do NOT exceed 500 GPA for foliar applications.
- Linebacker™ may be applied by ground, air, or chemigation.
- Do NOT graze livestock in or feed forage from treated groves.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine citrus sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.

Note: In order to apply the correct amount of Linebacker™, you must know the number of gallons of water needed to spray one acre of trees to the point of drip. If you do not know this gallonage you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment you should seek assistance from your equipment dealer or Cooperative Extension Service.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Foot Rot or Gummosis (<i>Phytophthora</i> spp.)	Trunk Spray or Paint	2.5-5.0 / 5 gals	Mix the desired amount of Linebacker™ with 5 gallons of water and apply to the trunk lesion in a sufficient volume to thoroughly wet the entire lesion. If no lesion is present, the application should be made from the soil line up the trunk approximately 2 feet. If trunk lesions are present the higher rate should be used.
Phytophthora Foot & Root Rot Brown Rot (<i>Phytophthora</i> spp.)	Foliar	5.0 / Acre	Apply as a spray to wet when conditions favor disease development. (If you are unsure about whether these conditions exist, check with your Cooperative Extension Service.)
		1.0 / 100 gals	Apply as instructed above. This volumetric concentration is derived from a per acre foliar application rate of 5 lbs of Linebacker™ diluted in 500 gals of water.
Phytophthora Foot & Root Rot (<i>Phytophthora</i> spp.)	Chemigation	5.0 / Acre	Begin application when conditions favor disease development. (If you are unsure about whether these conditions exist, check with your Cooperative Extension Service.) Inject Linebacker™ continuously during a scheduled irrigation.
Alternaria Brown Spot † (<i>Alternaria</i> spp.) Florida only	Foliar	5.0 / Acre	Linebacker™ suppresses <i>Alternaria</i> spp. that cause Brown Spot. The first application should be applied in the spring at the first sign of new growth. A second and third application should follow at 30-45 day intervals. Apply in sufficient water and direct spray to insure thorough coverage of the susceptible foliage and fruit.
		1.0 / 100 gals	Apply as instructed above. This volumetric concentration is derived from a per acre foliar application rate of 5 lbs of Linebacker™ diluted in 500 gals of water.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Ice-nucleating bacteria (<i>Pseudomonas syringae</i> , <i>P. fluorescens</i> , <i>Erwinia herbicola</i>) California only	Foliar	5.0 / Acre	Apply as a spray in mid November (this allows sufficient time for the ice-nucleating bacteria to decompose before frost conditions are likely). Thorough coverage is required. (See note under 'Restrictions and Limitations'.)
		1.0 / 100 gals	Apply as instructed above. This volumetric concentration is derived from a per acre foliar application rate of 5 lbs of Linebacker™ diluted in 500 gals of water.
† Suppression Only			

MACADAMIA NUTS[‡]

‡ Do NOT use on Macadamia Nuts in California, not registered for use.

Linebacker™ will control Phytophthora Raceme Blight in Macadamia Nuts, when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply more than 30 pounds of Linebacker™ per acre per growing season.
- Do not apply within 7 days of harvest.
- Do not allow livestock to graze on green forage or stubble.
- Do not utilize hay or straw for animal feed or bedding.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Raceme Blight	Foliar	7.5/Acre	Apply when first signs of disease appear using sufficient water to thoroughly wet the foliage. Apply as long as conditions favor disease development at 21 day intervals.

POME FRUIT (Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince) – NON-BEARING

(Non-bearing trees are those that will not produce marketable fruit for 12 months after the last Linebacker™ application)
 Linebacker™ controls collar and root rot caused by *Phytophthora* spp. and when used in a program with other registered bactericides and recommended sanitation measures, will aid in the control of Fire Blight caused by *Erwinia amylovora*.

Apply early in the season when treating for Fire Blight and Blister Spot control.

Delay until 30 days after the last Fire Blight or Blister Spot application when treating for *Phytophthora* spp.

NOTE: The use of Linebacker™ on Pome Fruit is restricted to protect endangered fresh water mollusks and their habitat.

Use Precautions:

- Do NOT apply more than 5.0 lbs of Linebacker™ per acre per application.
- Do NOT apply more than 20 lbs per acre per season.
- Do NOT apply more than 3.75 pounds of product (3 lbs ai) per acre per application in the following counties:
 IL: Adams, Pike VA: Botetourt, Wise
 MN: Washington, Winowa VT: Windsor
 OH: Washington, Wayne WI: Crawford, Richland, Vernon
 TN: Cocke WV: Monroe
- Do NOT graze livestock on floor of treated orchards.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Fire Blight (<i>Erwinia amylovora</i>)	Foliar	2.5-5.0 /100 gals	Apply in the spring when conditions are favorable for disease development and reapply at 4-7 day intervals for as long as conditions favor disease development. Thorough coverage is required and for best results, adequate foliage should be available for absorption. To reduce inoculum in newly forming bud tissue, an additional application in the fall prior to leaf drop may be made.
Phytophthora Collar and Root Rot (<i>Phytophthora</i> spp.)	Root Dip	3.0/100 gals	Mix Linebacker™ in the desired volume of water and dip the entire root system for 30-60 minutes prior to planting in the field.
	Foliar	2.5-5.0/100 gals	Apply Linebacker™ when conditions favor disease development and reapply on a 30-60 day interval as necessary. Thorough coverage is required. For moderate disease pressure, apply Linebacker™ using either 3 - 4 times at a rate of 5.0 lbs/100 gals on a 60 day spray interval or 6-8 times at a rate of 2.5 lbs/100 gals on a 30 day interval. NOTE: Nursery tree resets and new plantings should be treated after leaf emergence.

POME FRUIT [Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince] - BEARING

Linebacker™ applied as part of a complete disease control program will provide effective control of collar and root rot caused by *Phytophthora* spp and Apple Blister Spot caused by *Pseudomonas syringae*. Linebacker™ used in a program with other registered bactericides and recommended sanitation measures aids in the control of Fire Blight caused by *Erwinia amylovora*.

Use Precautions:

- Do NOT apply within 14 days of harvest.
- Do NOT apply within 2-3 weeks of leaf senescence.
- Do NOT exceed 500 GPA.
- Do NOT apply more than 5.0 lbs of Linebacker™ per acre per application.
- Do NOT apply more than 20 lbs per acre per season.
- Do NOT apply more than 3.75 pounds of product (3 lbs ai) per acre per application in the following counties:
 - IL: Adams, Pike
 - MN: Washington, Winowa
 - OH: Washington, Wayne
 - TN: Cocke
 - VA: Botetourt, Wise
 - VT: Windsor
 - WI: Crawford, Richland, Vernon
 - WV: Monroe
- Do NOT graze livestock on floor of treated orchards.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Fire Blight (<i>Erwinia amylovora</i>)	Foliar	2.5-5.0/Acre	Apply in the spring when conditions are favorable for disease development and reapply at 4-7 day intervals for as long as conditions favor disease development. Thorough coverage is required and for best results, adequate foliage should be available for absorption. To reduce inoculum in newly forming bud tissue, an additional application in the fall prior to leaf drop may be made.
		0.5-1.0/100 gals	Follow the application instructions above. NOTE: This is the same concentration as 2.5-5 lbs of Linebacker™ diluted in 500 gals of water.
Apple Blister Spot (<i>Pseudomonas syringae</i>)	Foliar	2.5-5.0/Acre	Begin applications when blossoms are at the pink stage and make additional applications at 7 day intervals as long as conditions favor Blister Spot development.
		0.5-1.0/100 gals	Follow the application instructions above. NOTE: This is the same concentration as 2.5-5 lbs of Linebacker™ diluted in 500 gals of water.
Phytophthora Collar and Root Rot (<i>Phytophthora</i> spp.)	Foliar	2.5-5.0/Acre	Apply Linebacker™ when conditions favor disease development and reapply on a 30-60 day interval as necessary. Thorough coverage is required. For moderate disease pressure, apply Linebacker™ using either 3 - 4 times at a rate of 5.0 lbs/100 gals on a 60 day spray interval or 6-8 times at a rate of 2.5 lbs/100 gals on a 30 day interval.
		0.5-1.0/100 gals	Follow the application instructions above. NOTE: This is the same concentration as 2.5-5 lbs of Linebacker™ diluted in 500 gals of water.

STONE FRUIT [Apricot, Cherry (sour and sweet), Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot and Prune (Fresh)] – NON-BEARING

ALMONDS – NON-BEARING

(Non-bearing trees are those that will not produce marketable fruit for 12 months after the last Linebacker™ application)

Linebacker™ controls collar and root rot caused by *Phytophthora* spp. and Almond pruning-wound canker caused by *Phytophthora syringae* when applied in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply more than 5.0 lbs of Linebacker™ per acre per application.
- Do NOT exceed 20 lbs per acre per year.
- Do NOT exceed four applications per year.
- Do NOT exceed 100 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Collar and Root Rot (<i>Phytophthora</i> spp.)	Foliar	5.0/100 gals	Apply when conditions favor disease development and reapply on a 60 day interval as necessary. NOTE: Nursery tree resets and new plantings should be treated after leaf emergence.
Almond pruning-wound canker (<i>Phytophthora syringae</i>)	Spray or Paint	3.0-5.0/100 gals	Apply to the pruning wound area in a sufficient volume to thoroughly wet the entire wound surface. Use the higher rates listed for severe disease conditions such as active canker lesion. For small volume applications, mix 0.5-0.8 oz (3.0-4.5 level tablespoons) of product per gallon of water (equivalent to 3-5 lbs per 100 gals).

BLUEBERRY[†]

† Do NOT use on Blueberries in California, not registered for use.

Linebacker™ will control *Phytophthora* root rot (*Phytophthora* spp.) of blueberries when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within 12 hours of harvest.
- Do NOT exceed 20 lbs per acre per year.
- Do NOT exceed four applications per year.
- Do NOT apply in less than 10 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Root Rot (<i>Phytophthora</i> spp.) Anthracnose Fruit Rot (<i>Colletotrichum gloeosporioides</i>) Alternaria Fruit Rot [†] (<i>Alternaria tenuissima</i>) Phomopsis Canker [†] (<i>Phomopsis</i> spp.)	Foliar	5.0/Acre	Apply at the pink bud stage in the spring and reapply on a 14-21 day interval being sure to use a sufficient volume of water for good coverage.
† Suppression Only			

**CANE BERRIES [Blackberry, Loganberry, Red and Black Raspberry and cultivars and / or hybrids]
(*Rubus* spp.)**

Linebacker™ will control Phytophthora root rot (*Phytophthora* spp.) of caneberries when used in conjunction with good cultural management practices.

Use Pesticides:

- Do NOT apply within 60 days of harvest.
- Make four applications per year when severe disease pressure is present (check with your Cooperative Extension Service if you are unsure about whether these conditions exist).
- The last application in the fall should be made at least 30 days prior to leaf drop.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Root Rot (<i>Phytophthora</i> spp.)	Foliar	5.0/Acre	<p>Linebacker™ applications should begin when plants produce 1-3 inches of new growth when applying to new plantings.</p> <p>For established plantings, start applications when conditions favor disease development and be sure to use sufficient water to thoroughly wet the foliage.</p> <p><u>West of the Rocky Mountains</u></p> <p>Fall Application: Begin applications when conditions favor disease development and repeat on a 3-4 week schedule as necessary.</p> <p>Spring Application: Apply after bud break (1-3 inches of new growth) followed by a second spray in 3-4 weeks.</p> <p><u>East of the Rocky Mountains</u></p> <p>Apply after bud break (1-3 inches new growth) in the spring and continue applications on a 45-60 day schedule (up to a maximum of four sprays during the growing season).</p>

STRAWBERRY

Linebacker™ will control Red Stele caused by *Phytophthora fragariae* and Leather Rot caused by *P. cactorum* when used in conjunction with good cultural management practices.

NOTE: The use of Linebacker™ on Strawberries is restricted to protect endangered fresh water mollusks and their habitat.

Use Precautions:

- Do NOT apply within 12 hours of harvest.
- Do NOT apply by fixed wing or rotary aircraft.
- Do NOT exceed 30 lbs product per acre per season.
- Do NOT apply more than 3.75 pounds of product (3 lbs ai) per acre per application in the following counties:

AR: White	MN: Houston, Washington
IL: Whiteside	MS: Monroe
IA: Scott	MO: Franklin, Jefferson
IN: Knox	NH: Cheshire, Sullivan
KY: Campbell, Marshall, Rockcastle, Todd, Warren	NC: Granville, Johnston
LA: Livingston, Rapides	OH: Washington
MD: Caroline, St. Mary's	WI: Iowa, St. Croix, Trempealeau
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Red Stele (<i>Phytophthora fragariae</i>)	Dip	2.5/100 gals	Apply to roots and crowns for 15-30 minutes and plant within 24 hours after dipping. Dip applications may be used for both annual and perennial varieties of strawberries.
	Foliar	2.5-5.0/Acre	Annuals: Apply 14-21 days after planting and repeat applications on a 30-60 day interval for as long as conditions favor disease development. Perennials: Apply in the spring when the plants start to grow actively. Make additional applications at a 30-60 day interval if disease conditions persist or reoccur. Use the higher rates, shorter reapplication intervals and maximum number of reapplications if growing Red Stele susceptible varieties or if disease pressure is heavy.
Leather Rot (<i>Phytophthora cactorum</i>)	Foliar	2.5-5.0/Acre	Apply between 10% bloom and early fruit set and reapply on a 7-14 day interval for as long as conditions favor disease development. When disease pressure is heavy use the shorter time interval, higher rates, and maximum number of applications.

ASPARAGUS (CALIFORNIA ONLY)

Linebacker™ controls Asparagus Spear Slime and Crown Rot caused by *Phytophthora* spp.

Use Precautions:

- Do NOT apply within 110 days of harvest.
- Do NOT exceed 50 GPA.
- Do not apply to ferns that are beginning to senesce

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Asparagus Spear Slime and Crown Rot (<i>Phytophthora</i> spp.)	Foliar	5.0/Acre	Apply Linebacker™ once per season to fully expanded asparagus ferns. Thorough coverage is required.

***BRASSICA CROPS [Broccoli, Broccoli Raab (rapini), Brussels Sprouts, Cabbage, Chinese Broccoli (gai ion), Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens]**

Linebacker™ controls Downy Mildew caused by *Peronospora parasitica* when applied in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within three days of harvest.
- Do NOT exceed seven applications per season.
- Do NOT apply in less than 10 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Downy Mildew (<i>Peronospora parasitica</i>)	Foliar	2.0-5.0/Acre	Apply Linebacker™ when conditions favor disease development and reapply on a 7-21 day interval as necessary. Be sure to use a sufficient volume of water for good coverage. The lower rates listed may be used when tank mixed with another fungicide labeled for downy mildew control (other than copper, see use precaution above). When used alone, apply 3.0-5.0 lbs/Acre. For moderate to high disease pressure, use the higher rates and shorter reapplication interval.

CUCURBIT CROPS [Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (Edible), *Momordica* spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash, Watermelon]

Linebacker™ controls Downy Mildew (*Pseudoperonospora cubensis*) and Phytophthora Root and Fruit Rot (*Phytophthora* spp.) when applied in conjunction with good cultural management practices.

Linebacker™ applied for Downy Mildew or Phytophthora Root and Fruit Rot control will provide moderate suppression of whitefly (*Bemisia* spp.) populations. *Linebacker™ will only suppress whitefly populations*; in most locations where whiteflies are a problem, insecticide applications will also be required to minimize whitefly damage.

NOTE: Linebacker™ use on Cucurbits is restricted to protect endangered fresh water mollusks and their habitat.

Use Precautions:

- Do NOT apply within 12 hours of harvest.
- Do NOT exceed seven applications per season.
- Do NOT apply more than 3.75 pounds of product (3 lbs ai) per acre per application in the following counties:
 AL: Hale, Jackson, Lauderdale, Marshall, Morgan, Washington MN: Chisago, Washington
 AR: Clay, Craighead, Lawrence, Mississippi, St. Francis, MS: Monroe
 Saline, Sharp, White, Woodruff MO: Butler, Cedar, Dunklin, Franklin, Jefferson,
 Gallatin, Mercer, Whiteside Ripley, St. Louis
 IA: Allamakee, Louisa, Muscatine NC: Franklin, Granville, Johnston, Nash, Pitt
 IN: Knox OH: Williams, Washington
 KY: Hart, Logan, Marshall, Warren TN: Blount, Lincoln
 LA: Rapides, St. Helena VA: Botetourt
 MD: Caroline VT: Windsor
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Downy Mildew (<i>Pseudoperonospora cubensis</i>) Phytophthora Root and Fruit Rot (<i>Phytophthora</i> spp.)	Foliar	2.0-5.0/Acre	Apply when conditions favor disease development and repeat applications on a 7-14 day interval. Be sure to use a sufficient volume of water for good coverage. The lower rates listed may be used when tank mixed with another fungicide labeled for downy mildew control (other than copper, see use precaution above). When used alone, apply 3.0-5.0 lbs/Acre. For moderate to high disease pressure, use the higher rates and shorter reapplication interval.

*** LEAFY VEGETABLES [Amaranth, Arugula (Roquette), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved, Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden, Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine), Swiss Chard]**

Linebacker™ controls Downy Mildew (*Bremia lactucae*, *Peronospora* spp.) on leafy vegetables and White Rust (*Albugo occidentalis*) on spinach when applied in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within three days of harvest.
- Do NOT exceed seven applications per season.
- Do NOT apply in less than 10 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenferlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Downy Mildew (<i>Bremia lactucae</i> , <i>Peronospora</i> spp.) White Rust (Spinach Only) (<i>Albugo occidentalis</i>)	Foliar	2.0-5.0/Acre	Apply Linebacker™ when conditions favor disease development and repeat applications on a 7-21 day interval as necessary. Be sure to use a sufficient volume of water for good coverage. The lower rates listed may be used when tank mixed with another fungicide labeled for downy mildew control (other than copper, see use precaution above). When used alone, apply 3.0-5.0 lbs/Acre. For moderate to high disease pressure, use the higher rates and shorter reapplication interval.

ONIONS (DRY BULB):

When applied in a preventive program in conjunction with good cultural management practices, Linebacker™ controls Downy Mildew (*Peronospora destructor*) and suppress Purple Blotch (*Alternaria pom*) on onion.

Physical compatibility with Linebacker™ should be checked when mixing with soluble concentrate or "flowable" formulation pesticides such as Bravo® 720 and Rovral® 4F. To test for compatibility, add the correct proportions of each product to be mixed and water to a clear container and thoroughly mix. Let stand for 3-5 minutes and then check; if the mixture remains in suspension or can be readily remixed, the products are considered compatible. Buffering as described in the use precaution for copper compounds below may increase compatibility.

Use Precautions:

- Do NOT apply within seven days of harvest.
- Do NOT exceed seven applications per crop season.
- Applications by air should be in a minimum of 10 GPA
- Applications by ground should be in a minimum of 20 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Downy Mildew (<i>Peronospora destructor</i>) Purple Blotch (<i>Alternaria pom</i>)	Foliar	2.0-3.0/Acre	Linebacker™ should be used in a preventive disease control program for best results. Apply when conditions favor disease development and reapply on a 7-14 day interval as necessary. If disease is already present, apply Linebacker™ at the 3.0 lbs/Acre rate and the seven day time interval.

TOMATO

Linebacker™ controls damping off caused by *Pythium* spp. and root rots caused by *Phytophthora* spp. in tomatoes when used in conjunction with good cultural management practices.

NOTE: Linebacker™ use on tomato is restricted to protect endangered fresh water mollusks and their habitat.

Use Precautions:

- Do NOT apply Linebacker™ on tomatoes in the following counties:

AL: Jackson, St. Clair	LA: Rapides
CA: Sonoma	MD: Caroline, Queen Anne's, St. Mary's, Talbot
IA: Louisa, Muscatine, Scott	MO: Butler, Jefferson, St. Louis
IL: Mercer, Rock Island, White, Whiteside	NC: Granville, Johnston
IN: Knox	OH: Williams
KY: Campbell, Green, Kenton, Wayne	TN: Cocke, Davidson, Grainger, Gundy, Hamilton, Knox, Meigs, Rhea, Sumner
- Do NOT apply within 14 days of harvest.
- Do NOT exceed 20 lbs product per acre per season.
- Do NOT apply in less than 10 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessengerlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Root Rot (<i>Phytophthora</i> spp.) Damping Off (<i>Pythium</i> spp.)	Foliar	2.5-5.0/Acre	For direct seeded tomatoes, apply at the 2-4 leaf stage of growth or immediately after transplanting to the field and reapply on a 7-14 day interval if conditions are favorable for disease development. Be sure to apply in a sufficient volume of water to wet the entire plant canopy. For moderate disease pressure, use the higher rates and shorter

BANANA[‡]

‡ Do NOT use on Banana in California, not registered for use.

Linebacker™ will control the root disease complex of Banana when used in conjunction with good cultural management practices

Use Precautions:

- Foliar applications should be made in a minimum of 5 gallons/Acre.
- The preharvest interval is 0 days (PHI=0) for foliar applications.
- The preharvest interval is 1 day (PHI=1) for pseudostem injections.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Root Disease Complex	Foliar	6.0/Acre per application	Using a minimum application interval of three months, make a maximum of four applications spread throughout the year.
	Pre-flowering pseudostem injection	6.0/Acre per year	Determine the per-tree dosage by dividing the per acre rate by the number of trees per year. Dissolve the per-tree dosage in water and inject into the pseudostem of plants about to flower. NOTE: Using a self-refilling injector such as a DuomatIM Injector is recommended.
	Post harvest pseudostem (stump) injection	6.0/Acre per year	Determine the per-tree dosage by dividing the per acre rate by the number of trees per year. Dissolve the per-tree dosage in water and inject into the pseudostem of plants left after harvesting the banana bunch. Injections should be made approximately 3 feet above ground and within one week after harvest. NOTE: Using a self-refilling injector such as a DuomatIM Injector is recommended.

GINSENG

Linebacker™ controls Phytophthora Foliar and Root Rot (*Phytophthora cactorum*) and suppresses Alternaria Leaf Blight (*Alternaria panax*) when applied in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within 31 days of harvest.
- Do NOT exceed nine applications per season.
- Do NOT apply in less than 100 GPA.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Phytophthora Foliar and Root Rot (<i>Phytophthora cactorum</i>) Alternaria Leaf Blight † (<i>Alternaria panax</i>)	Foliar	5.0/100 gals	Apply in the spring when conditions become favorable for disease development and repeat applications on a seven day interval as necessary.
† Suppression Only.			

HOPS[‡]

[‡] Do NOT use on Hops in California, not registered for use.

Linebacker™ will control Hop Downy Mildew (*Pseudoperonospora humuli*), when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within 24 days of harvest.
- Do NOT apply more than 10 lbs/Acre per growing season.
- Do NOT feed hop refuse to animals.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessenderlo Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Hop Downy Mildew (<i>Pseudoperonospora humili</i>)	Foliar	2.5/Acre	When conditions are favorable for disease development, apply as a directed foliar spray using ground equipment only, being sure to use a sufficient volume of water to completely cover the foliage. Applications should be made on the following schedule: 1 - When shoots are 6-12 inches high; 2 - After training when vines are 5-6 feet tall; 3 - Approximately three weeks after the second application; and, 4 - During bloom.

PINEAPPLE

Linebacker™ controls Heart Rot (*Phytophthora parasitica*) in pineapple when used in conjunction with good cultural management practices.

Use Precautions:

- Do NOT apply within three months of harvest.
- Do NOT exceed six foliar applications.
- Do NOT exceed 400 GPA for foliar applications.
- Do NOT tank-mix with copper compounds. If products containing copper are tank-mixed with Linebacker™, or if unbuffered Linebacker™ is applied to foliage with copper residues, Tessengerio Kerley, Inc. has determined that phytotoxicity from solubilized copper may occur. The pH of Linebacker™ should be raised to 6.0 or above with the addition of an alkaline buffer such as Potassium Carbonate (3 lbs Potassium Carbonate to 5 lbs Linebacker™) or DiAmmonium Phosphate (5 lbs DiAmmonium Phosphate to 5 lbs Linebacker™) when applying prior to or after copper compounds.
- Adjuvants that enhance pesticide penetration may cause phytotoxicity when mixed with Linebacker™.
- Mixing Linebacker™ with surfactants or foliar fertilizers is NOT recommended. Determine sensitivity to a particular combination by spraying a small area of foliage and fruit and evaluating for adverse effects 3-7 days later.

Disease Controlled	Application Method	Application Rate (Lbs.)	Application Instructions
Heart Rot (<i>Phytophthora parasitica</i>)	Dip	2.5/100 gals	Apply as a pre-plant dip immediately prior to planting. NOTE: 100 gallons is intended to treat the number of slips required to plant one acre.
	Foliar	3.75/100 gals	Apply to established plants when environmental conditions favor disease development or are anticipated and repeat applications at three month intervals. Be sure to apply in sufficient water for thorough coverage.

**LABEL LANGUAGE FOR TURF AND ORNAMENTAL
USES**

LANGUAGE BASED ON THAT OF SUBSTANTIALLY SIMILAR PRODUCT *Aliette WDG Fungicide* (EPA REG. NO. 432-890) EPA APPROVED LABEL DATED December 15, 2004

Not for use on home or residential lawns.

DIRECTIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Apply this product only through sprinkler irrigation systems including microjet, drip, solid set and center pivot. Do not apply this product through any other type of irrigation system.

SPRAY PREPARATION: Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

APPLICATION INSTRUCTIONS: First prepare a suspension of Linebacker™ in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of Linebacker™, and then the remaining volume of water. Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of Linebacker™ into the irrigation water line so as to deliver the desired rate per acre. The suspension of Linebacker™ should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

NOTE: For Microjet and Drip Irrigation Systems: When treatment with Linebacker™ has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours.

For Solid Set and Center Pivot Irrigation Systems: When treatment with Linebacker™ has been completed, further field irrigation over the treated area should be avoided until foliage is dry to prevent washing the chemical off the plants.

GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension. 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 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 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 shutdown. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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. 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.

Do not apply when wind speed favors drift, when system connection or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from nonuniform distribution of treated water. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

This product may cause staining. Avoid off-target sites such as side-walks, patios, driveways, pavers, or similar materials. Rinse spray equipment thoroughly with warm water and detergent.

ORNAMENTALS AND BEDDING PLANTS

Linebacker™ may be applied to ornamentals and bedding plants grown in field nurseries, greenhouses, and landscaping and conifer nurseries to control of diseases caused by *Pythium* and *Phytophthora*. Linebacker™ may also be applied to ornamentals to control downy mildew and fire blight and for to suppress bacterial blight caused

by certain pathovars of *Xanthomonas campestris*.

Applications should be made prior to disease development and in conjunction with good cultural management practices. Use the higher rates listed below when disease pressure is severe; however, do not exceed recommended rates or apply more frequently than at specified intervals or plant injury may occur.

PLANT TOLERANCE

Plant tolerances to Linebacker™ have been found to be acceptable in the specific genera and species listed on this label. It is not possible to evaluate every species or variety of ornamental plant for its tolerance to Linebacker™. The user should test for possible phytotoxic responses in other plants on a small areas basis using recommended rates prior to commercial use.

ORNAMENTAL AND BEDDING PLANT TANK MIXTURES

Additional Disease Control: If ornamentals are threatened by additional diseases, Linebacker™ is compatible with most commonly used fungicides. For control of diseases such as Aerial Web Blight, Alternaria Leaf Blight, Botrytis Blight, Fusarium Leaf Spot, Helminthosporium Leaf Spot, and Ray Blight, Linebacker™ can be tank-mixed with Chipco® 26019 brand fungicide.

Consult the Chipco® 26019 label for a complete listing of diseases controlled and for application rates.

If a tank-mix with other fungicides is used, follow label directions for the use of that product and apply at the recommended rate for control of the target disease organism. Linebacker™ is not compatible with the flowable formulation of Daconil® 2787. These products should not be combined for application.

COMPATIBILITY

Linebacker™ may not be compatible with foliar fertilizers or with copper based fungicides. To avoid undesirable copper phytotoxicity, do not apply Linebacker™ and copper-based compounds at less than 14-day intervals. Also, if copper based products and Linebacker™ are included in the same foliar spray program, it is advised to avoid application with air blast equipment.

Do not mix Linebacker™ with any sticker, extender or wetting agent.

To determine the physical compatibility of Linebacker™ with any other product, use a small container to mix a small amount (e.g. 1 pint) of spray solution, containing all ingredients in the same order and ratio as the anticipated use. If any indication of physical incompatibility develops, do not use this mixture for spraying. Indication of incompatibility usually appears within 5-15 minutes after mixing. Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

Linebacker™ is not physically compatible with flowable formulations of Daconil® 2787 or Fore® fungicides as a tank mixture. These products should not be combined for application.

ORNAMENTALS

FOLIAR APPLICATIONS to Aglaonema, Aphelandra, Azalea, Bougainvillea, Boxwood, *Cattelya skinneri*, Cissus, Dieffenbachia, Hibiscus, Juniper, Leather-leaf Fern, Pittosporum, Philodendron, Pothos, Rhododendron, Spathiphyllum and Taxus media.

Use Precautions:

- Do NOT exceed 400 gallons of spray solution per acre.
- Do NOT make more than one application every 30 days.

Application Instructions: Mix 2.5 - 5.0 lbs. of Linebacker™ with 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, apply 2.5 - 5.0 lbs. of Linebacker™ per acre. Make repeat applications as necessary but do NOT make more than on application every 30 days.

DRENCH APPLICATIONS to Aphelandra, Azalea, Boxwood, Cissus, Dieffenbachia, Japanese Holly, Juniper, Monterey Pine, Philodendron, Pieris, Pittosporum, Rhododendron, Schefflera, Spathiphyllum, and Taxus media.

Use Precautions:

- Do NOT make more than one application every 30 days.

Application Instructions: Mix 0.4 - 0.8 lbs. (6.4 - 12.8 oz.) of Linebacker™ with 100 gallons of water and apply to 400 sq. ft. (2 pints of solution per sq. ft.). Repeat as necessary but do NOT make more than one application every 30 days.

SOIL INCORPORATION to Rhododendron, Azalea, or Pieris for control of Phytophthora species *only*.

Use Precautions:

- Make soil incorporation applications to well-rooted plants only.

Application Instructions: Immediately before potting, mix 0.5 - 0.8 lbs. (8 - 12.8 oz.) of Linebacker™ per cubic yard of soil mix. If conditions are favorable for disease development, follow-up applications as a foliar spray or drench may be made as needed being sure to follow the instructions for foliar or drench applications above.

BEDDING PLANTS

FOLIAR APPLICATIONS to Begonia, Pansy, Vinca, Marigold, Zinnia, Petunia, Geranium, and Impatiens.

Use Precautions:

- Do NOT apply more than 400 gallons spray per acre.
- Do NOT make more than one application every 14 days.

Application Instructions: Mix 1.25 - 4 lbs. of Linebacker™ with 100 gallons of water and spray to wet. Repeat as necessary but do NOT make more than one application every fourteen days.

PHYTOPHTHORA ROOT ROT PREVENTION FOR CONIFERS IN NURSERIES

NOTE: This type of application is NOT registered for use in California.

DIP TREATMENTS to conifers such as Douglas fir, spruce, and pines.

Use Precautions: Be sure to wear chemical/water resistant gloves, goggles or face shield, long pants (coveralls), long sleeved shirt, shoes, and socks when making dip applications.

Application Instructions: Immediately before transplanting, thoroughly wet plant and root mass by dipping transplants in 2.5 lbs. of Linebacker™ per 100 gallons of water.

FOLIAR APPLICATIONS to conifers such as Douglas fir, spruce, and pines.

Application Instructions: Mix 2.5 - 5.0 lbs. of Linebacker™ with 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, apply 2.5 - 5.0 lbs. of Linebacker™ per acre. Make repeat applications as necessary but do NOT make more than one application every thirty days.

DOWNY MILDEW CONTROL IN ROSES

FOLIAR APPLICATIONS to field, container, landscape and mini varieties to control downy mildew (*Peronospora sparsa*). NOTE: Applications should be made in conjunction with a disease sanitation program to reduce the spread of the disease to uninfected plants.

Use Precautions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.

Application Instructions: Mix 2.5 lbs. of Linebacker™ with 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, then apply 2.5 - 5.0 lbs. of Linebacker™ per acre. Repeat as necessary but do NOT make more than one application every seven days.

FIRE BLIGHT SUPPRESSION

FOLIAR APPLICATIONS to ornamental pear, pyracantha, and hawthorn. Linebacker™ works solely as a

preventive treatment in this type of application. NOTE: Applications should be made in conjunction with a disease sanitation program to reduce the spread of the disease to uninfected plants.

Use Precautions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.

Application Instructions: Mix 2.5 lbs. of Linebacker™ in 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, then apply 2.5 - 5.0 lbs. of Linebacker™ per acre. Start spray treatments at the pre-bloom stage and reapply at 7-day intervals until the bloom period ends.

BACTERIAL BLIGHT SUPPRESSION

NOTE: This type of application is NOT registered for use in California.

FOLIAR APPLICATIONS to English ivy, schefflera, anthurium, dieffenbachia, spathiphyllum, syngonium, and ficus to suppress *Xanthomonas campestris* pathovars *hederae*, *dieffenbachiae*, *syngonii*, and *fici*. NOTE: Applications should be made in conjunction with a disease sanitation program to reduce the spread of the disease to uninfected plants.

Use Precautions:

- Do NOT apply more than 400 gallons of spray solution per acre.
- Do NOT make more than one application every seven days.

Application Instructions: Mix 2 - 4 lbs. of Linebacker™ with 100 gallons of water and spray to wet. If applying less than 100 gallons of spray solution per acre, then apply 2.5 - 5.0 lbs. of Linebacker™ per acre. Make repeat applications as necessary but do NOT make more than one application every 7 days.

If tank mixing Linebacker™ with coppers or other compounds, be sure to refer to compatibility statements at the beginning of this section.

TURF

NOTE: DO NOT apply to home or residential lawns.

Linebacker™ is a systemic fungicide for use in a seasonal program for the control of Pythium diseases (such as blight and root rot, and yellow tuft) on turfgrass in golf courses, sod farms and other commercial turf areas. A maintenance program that includes Linebacker™ encourages the development of thick, vigorous turf that is better able to tolerate various stresses (heat, humidity, drying winds, traffic, etc) that can negatively impact turf health. A thick vigorous Linebacker™ treated turf is better able to resist disease development and suppress the development of other pests such as weeds and algae.

Use Precautions:

- Do not graze animals on treated turf.
- Do not feed clippings from treated turf to livestock and poultry.
- Do not mow and/or water treated areas until foliage is completely dry.

Application Instructions: Start preventive applications when conditions first favor disease and repeat at the interval recommended in the table below. Apply as a foliar spray using a properly calibrated sprayer at the rate recommended below in 1 - 5 gallons of water per 1,000 sq. ft. Be sure to maintain agitation while mixing and spraying.

Application Interval	Application Rate (Oz. per 1,000 Sq. Ft.)
14 days	4.0
21 days	8.0

COMPATIBILITY

NOTE: Do NOT mix Linebacker™ with any sticker, extender or wetting agent.

Linebacker™ may not be chemically compatible with foliar fertilizers or copper based fungicides. Mixing with these products may result in phytotoxicity. Linebacker™ is NOT physically compatible with flowable formulations of Daconil 2787® or Fore® fungicides, Bayleton® 50W, Rubigan™ A.S. and Spectro™ 90 WDG and these products should NOT be used in tank mixes with Linebacker™.

To determine the physical compatibility of Linebacker™ with another product, use a small container to mix a small amount (for example, 1 pint) of spray solution, containing all of the desired ingredients in the same order and ratios as the anticipated use. If any indication of physical incompatibility develops within 5 to 15 minutes of mixing (such as separation, clumping, etc.), do not use this mixture for spraying. Be sure to read and follow all directions and precautions on this label and on the labels of any tank mix partner products.

TANK MIXTURES FOR TURF DISEASES

Summer Stress Complex / Summer Decline: Tank mix Linebacker™ with the products listed below to control Summer Stress Complex / Summer Decline caused by a complex of *Pythium* and *Rhizoctonia* diseases on common turfgrass on golf courses, sod farms, industrial or municipal turf areas. Do NOT mix Linebacker™ with any product containing a label prohibition against such mixing.

Anthracnose: Tank-mix Linebacker™ with the products listed for use on common turfgrass on golf courses, sod farms, and industrial or municipal turf areas for improved control of anthracnose. A preventative, multi-application (repeat every 14 days) program must be started prior to the appearance of the disease and the conditions favorable to anthracnose development. Be sure to follow the most restrictive of label limitations and precautions and do not exceed label dosage rates.

Bentgrass Deadspot: Tank-mix Linebacker™ with either Fore® Rainshield™ or Daconil Ultrex® to control bentgrass deadspot in common turfgrass on golf courses, sod farms, and industrial or municipal turf areas. A preventative, multi-application (repeat every 14 days) program must be started prior to the appearance of the disease and the conditions favorable to bentgrass deadspot development. Be sure to follow the most restrictive of label limitations and precautions and do not exceed label dosage rates.

Disease Treated	Tank Mix Partner	Application Rate (Oz. / 1,000 FT ²)	Application Interval
Summer Stress Complex [‡] (Pythium, Anthracnose, and Rhizoctonia spp.) and/or Anthracnose (Colletotrichum graminicola)	Linebacker™	4.0 - 8.0	14 days
	+	+	
	26GT™	3.0 - 4.0	
	or	or	
	Daconil Ultrex®	3.3	
	or	or	
	Manicure™ DG	3.3	
	or	or	
	Dithane® T/O	8.0	
	or	or	
	Protect T/O	8.0	
	or	or	
	Mancozeb DG	8.0	
or	or		
Fore® WP	4.0 - 8.0		
or	or		
Heritage®	0.2 - 0.4		
or	or		
Banner® Maxx®	1.0 - 2.0		
or	or		
ProStar® 70 WP	1.5 - 3.0		
Bentgrass Deadspot (Ophiosphaerella agrostis)	Linebacker™	4.0	
	+	+	
	Fore® Rainshield™	8.0	
	or	or	
	Daconil Ultrex®	3.2	

[‡] The following fungicides are physically compatible with Linebacker™ and may be substituted for the partner products listed above for use with Linebacker™ in a Summer Stress Complex control program: Bayleton® 50[†], Cavalier™ 50 WSB, Cavalier™ Flowable, Chlorostar, Cleary's 3336™ WP[†], Cleary's 3336™ F[†], Compass™, Concorde™ SST, Concorde™ DF, Consyst, Curalan® EG, Daconil® Weather Stik[†], Daconil ZN®, Rainshield NT™, Eagle, Echo® 90 DF, Echo® Flowable, Endorse™, Fluid Fungicide, Fungo® Flo, Fungo® 50 WSB, MANhandle™, Manicure™ 6 Flowable, Manicure™ T/O Flowable, Manicure™ Ultrex®, Medallion®, Pentathlon® DF, Revere™ 4000, SysStar®, SysTec® 1998, SysTec® 1998 WDG, Systhane® WSP, Terrachlor® 75 WP and 400[†], Terraguard® 50W, Terrazole® 35% WP, Touche EG, Turfcide® 400, TwoSome™ Flowable Fungicide.

[†] These products must be added to the tank first and allowed to disperse prior to the addition of Linebacker™.

Tank-Mix Mixing Instructions

Because the order in which tank-mix products are added to the tank can affect this product's ability to go into the solution, it is generally best to add Linebacker™ to the tank prior to its tank-mix partner unless otherwise indicated in this label.

If tank-mixing with other fungicides, follow the label directions for the use of the tank-mix partner product and apply at the recommended rate for control of the target disease organism.

Bayleton® and Prostar® are registered trademarks of Bayer.

Compass™ is a trademark of Bayer.

Endorse™ is a trademark of Avesta.

Banner®, Maxx®, Heritage®, Daconil®, Daconil Ultrex®, Weather Stik®, Daconil Zn®, and Medallion® are registered trademarks of Syngenta.

Dithane®, Systhane® and Fore® are registered trademarks of Dow AgroSciences Company.

Cavalier™, Manicure™, MANhandle™, Revere™, TwoSome™ and Lesco™ are trademarks of Lesco, Inc.

Curalan® is a registered trademark of BASF Corporation.

3336™ and Spectro™ are trademarks of Cleary Chemical Company.

Systec® and Syster® are registered trademarks of Regal Chemical Company.

Echo® is a registered trademark of SIPCAM AGRO USA, Inc.

Fungo® is a registered trademark of the Scotts Company.
Terrachlor®, Terraguard®, Terrazole® and Turfcide® are registered trademarks of Uniroyal Chemical Company, Inc.
Concorde™ is a trademark and Pentathlon® is a registered trademark of Griffin L.L. C.