

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Zuhal Tompkins
Regulatory Consultant
AgriHouse, Inc.
c/o Technology Sciences Group, Inc.
1150 18th Street, NW, Suite 1000
Washington, D.C. 20036

MAY 2 5 2011

Subject:

Application for Amendment to Pesticide Registration with Data Submission

Product Name: YEA!® Yield Enhancing Agent

EPA File Symbol: 83729-1

Your Application Dated January 12, 2011

Decision Number: 444246

Dear Ms. Tompkins:

The amendment referred to above submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has been received and reviewed, and the amendment is acceptable provided that you submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Should you have any questions, you may contact Gina Casciano directly at (703) 605-0513 or via email at casciano.gina@epa.gov.

Sincerely,

Linda A. Hollis, Chief

Biochemical Pesticides Branch

Biopesticides and Pollution

Prevention Division (7511P)

CONCURRENCES

SYMBOL > 75117

SURNAME > CASCI'CAN | COLET

DATE > 5727 | 5/24/11

EPA Form 1320-14 (1/90)

OFFICIAL FILE COPY

Master Label containing: Sublabel A: Agricultural Use

Sublabel B: Ornamental, Field, and Nursery Use

Sublabel C: Home & Garden Use

YEA!® Yield Enhancing Agent

Agricultural, Ornamental, Nursery and Home & Garden Use

Alternate brand Names: YEA!®, YEA!® for Seeds, YEA!® for Trees, YEA!® for crops, ODC Professional Foliar & Irrigation™, ECOSEED™, ODC Home & Garden™, YEA® Seed Coating: Corn, YEA® Seed Coating: Soybean, YEA® Seed Coating: Wheat, YEA® Seed Coating: Sugar beet, YEA® Seed Coating: Potato, YEA® Seed Coating: Vegetables

Active Ingredient:

	0.25%
Other Ingredients	99.75%
TOTAL	100.00%

Product contains 0.021 lb (0.01 kg) of chitosan / gallon

EPA Registration No. 83729-1

EPA Establishment No. 83729 CO-001

MANUFACTURED BY: AgriHouse Brands Ltd 4900 Xavier St. Denver, CO 80212 USA

ACCEPTED

MAY 2 5 2011

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

YEA!® Yield Enhancing Agent

Agricultural Use

Alternate brand Names: YEA!®, YEA!® for Seeds, YEA!® for Trees, YEA!® for crops, YEA® Seed Coating: Corn, YEA® Seed Coating: Soybean, YEA® Seed Coating: Wheat, YEA® Seed Coating: Sugar beet, YEA® Seed Coating: Potato, YEA® Seed Coating: Vegetables

When used as directed on this label, YEA!® can boost seed germination and vitality, stimulate emergence and sprouting, enhance plant vigor, promote root growth, promote foliar growth, increase crops yields, improve crop vigor and quality. suppress diseases and pathogens, activate plant resistances to environment stress, drought, and disease pressures, including the suppression of parasitic nematodes.

Systemic Induced Resistance and Innate Immunity Protection
YEA! ** Protects grasses, grains, cereals, legumes, sugar beets and vegetables against fungus, mosaic virus, stem wilt, damp-off, early blight, late blight and mold.

For use on, corn, canola, soybeans, rice, sugar beets, vegetables, herbs, sunflowers, wheat, grains, cereals, legumes, and flowers.

Active Ingredient:

Chitosan	0.25%
Other Ingredients	99.75%
TOTAL	100.00%

Product contains 0.021 lb (0.01 kg) of chitosan / gallon

KEEP OUT OF THE REACH OF CHILDREN CAUTION

SEE SIDE PANEL FOR PRECAUTIONARY STATEMENTS

MANUFACTU AgriHouse Bra 4900 Xavier S Denver, CO 8	ands Ltd t.	EPA Establishment No. 83729 CO-001 EPA Registration No. 83729-1
Net Contents	[] 1 oz [] 4 oz [] 8 oz [] 12 oz [] 16 oz	[] 500 ml [] 1 liter [] 1 gallon [] 2.5 gallons [] 5 gallons [] 55 gallons

	FIRST AID
If in eyes	 Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	 Move person to fresh air If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing or equipment wash waters.

[For 5 gallon product: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless in accordance with the requirements of National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer without previously notifying the sewage treatment plant authority. For guidance, contact your State Water board or regional Office of the EPA.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt, long pants, waterproof gloves, protective eyewear, and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

DIRECTIONS FOR USE

It is a violation of federal laws to use this product in a manner inconsistent with its labeling.

To prevent contamination of the dilute solution of YEA!® by possible pesticide or other chemical residues in the spraying equipment, use dedicated equipment, or be sure that the equipment is thoroughly clean before use.

For Agricultural Use:

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Only protected handlers may in the area during application. For any recements 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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not allow worker entry into treated areas until sprays have dried.

PPE requirements 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,
- protective eyewear, and
- shoes plus socks.

GENERAL INSTRUCTIONS

Shake before using. Follow specific crop instructions for dilution rates and application usage. Do not apply within three days of harvesting. For best results use pH neutral (pH 6.9 to 7.0) mix water.

Crops	Mixing and Application Instructions
Seed Treatment for True Seed Crops	 Mix 30 ml into 1.5 gallon Application treats: approximately 70 acres. Apply enough product to soak seeds Apply 80 ml of product per approximately 50 to 100 lbs seed/acre. Apply directly to seeds. Do not rinse. Allow to dry
	and/or plant soaked seeds.

Storage and Disposal

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

Pesticide Storage: Store in original container in a cool, dry place, away from sunlight and out of the reach of children and pets. Do not reuse container.

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. (For product less than 5 gallons) [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.] (For product greater than 5 gallons) [Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. An empty container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty contents into formulation equipment. Then offer for recycling or reconditioning or, dispose of container in a manner approved by state and local authorities.

WARRANTY

AgriHouse Inc. warrants that this product conforms to the chemical description on the label and is reasonable fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPPLICABLE LAW, NO OTHER EXPRESS WARRANTRY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MECHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Manufactured by:

AgriHouse Brands Ltd 4900 Xavier St. Denver, CO 80212 USA Tel 970 532-3554 Fax 970 532-9800

Batch code: XXX

YEA!® Yield Enhancing Agent

Ornamental, Field, and Nursery Use

Alternate brand Names: ODC Professional Foliar & Irrigation™

When used as directed on this label, ODC Professional Foliar & Irrigation™ can boost seed germination and vitality, stimulate emergence and sprouting, enhance plant vigor, promote root growth, promote foliar growth, increase crops yields, improve crop vigor and quality suppress diseases and pathogens, activate plant resistances to environment stress, drought, and disease pressures, including the suppression of parasitic nematodes..

Systemic Induced Resistance and Innate Immunity Protection

ODC Professional Foliar & Irrigation™ Protects pine trees against Pine Beetles, Mountain Pine

Beetle and Bark Beetles.

ODC Professional Foliar & Irrigation™ Protects field crops, ornamentals, trees, citrus, grasses, grains, legumes, fruits and vegetables against blue stain fungus, mosaic virus, stem wilt, damp-off, early blight, late blight and mold.

Protects ornamentals, fields, trees, grasses, grains, legumes, fruits, citrus, turf and sod, and vegetables

For use on cotton, tobacco, banana, tropical plants, grasses, pine and deciduous trees, grains, legumes, fruits, vegetables, sugar beet, shrubs, ground covers, bedding plants, house plants, turf and sod and flowers.

Active Ingredient:

Chitosan	0.25%
Other Ingredients	99.75%
TOTAL	100.00%

Product contains 0.021 lb (0.01 kg) of chitosan / gallon

KEEP OUT OF THE REACH OF CHILDREN CAUTION

SEE SIDE PANEL FOR A PRECAUTIONARY STATEMENT STATEMENTS

MANUFACT(AgriHouse Bra 4900 Xavier S Denver, CO 80	t.	EPA Establishment No. 29 CO-001 EPA Registration No. 83729-1
Net Contents	[] 1 oz [] 4 oz [] 8 oz [] 12 oz [] 16 oz	[] 500 ml [] 1 liter [] 1 gallon [] 2.5 gallons [] 5 gallons [] 55 gallons

	FIRST AID
If in eyes	 Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	 Move person to fresh air If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals – CAUTION: Causes moderate eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing or equipment wash waters.

[For 5 gallon product: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless in accordance with the requirements of National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer without previously notifying the sewage treatment plant authority. For guidance, contact your State Water board or regional Office of the EPA.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt, long pants, waterproof gloves, protective eyewear, and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

DIRECTIONS FOR USE

It is a violation of federal laws to use this product in a manner inconsistent with its labeling.

To prevent contamination of the dilute solution of ODC Professional Foliar & Irrigation™ by possible pesticide or other chemical residues in the spraying equipment, use dedicated equipment, or be sure that the equipment is thoroughly clean before use.

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 people and pets off treated areas until spray solution has dried to prevent transfer of this product onto desirable vegetation.

GENERAL INSTRUCTIONS

Shake before using. For best results use pH neutral (pH 6.9 to 7.0) mix water. Follow specific crop instructions for dilution rates and application usage. Do not apply within three days of harvesting.

Crops	Mixing and Application Instructions
Seeds	 Mix 1 ml into 5 gallons or more Apply enough product to wet the soil covering seeds. Apply by spray, furrow and/or irrigation Mix rate: 500 ml to 1500 ml into 10 to 50 gallons or more per acre
Minituber, seed potato, potato	 Mix rate: 500 ml into 10 to 50 gallons or more Pre-dip tubers prior to planting Apply enough product to wet tuber. Plant while tuber is wet or dry
Field crops including corn, soybean, wheat, alfalfa, small grains, grass, sugar beet, cotton, tobacco and legume,	 Mix rate: 500 ml into 50 to 500 gallons or more per acre Apply before and after emergence; apply every 30 days as needed. Divide product into thirds to apply enough product at planting, after emergence, and mid-season. Apply by foliar spray, in furrow and/or irrigation
Vegetables and Herbs	 Mix rate: 500 ml into 50 to 500 gallons or more per acre Apply before and after emergence; apply every 30 days as needed. Apply by foliar spray, in furrow and/or irrigation Divide product into thirds apply at planting, after emergence, and mid-season. Application rate: 150 ml or more per acre
Nursery Crops – Trees & Shrubs	 Mix rate: 500 ml to 1500 ml into 50 to 500 gallons or more Application rate: 500 ml to ml per acre Apply every 30 to 45 days as needed. Apply by foliar spray and/or irrigation

Fruit Trees and Citrus	 Mix rate: 500 ml to 1500 ml into 50 to 500 gallons or more Application rate: 500 ml to ml 1500 per acre Apply every 30 days as needed. Apply by foliar spray, in furrow and/or irrigation
Turf and Sod	 Mix rate: 500 ml into 1500 into 500 gallons or more Application rate: 500 ml to ml 1500 per acre Apply area apply every 30 to 45 days as needed Apply by irrigation or surface spray
Greenhouse & Horticultural Use – Ornamental Crops	 Mix rate: 1 ml to 100ml product / 5 gallon or more Apply area: 500 to 1000 sq ft; apply every two weeks as needed Apply to soil and/or spray plants May be applied by means of irrigation
Pellet	 Mix rate:1 ml to 30 ml product / gallon or more Apply enough product to wet the moisture absorbing materials Allow to dry or wet and spread evenly to soil or furrow Apply every two weeks as needed
Transplanting	 Mix 1 ml into 5 gallon or more Apply enough product to wet the soil covering transplant Apply every two weeks as needed
Compost	 Mix rate: 500 ml to 1500 ml into gallon or more Apply area: 1 acre; apply every two weeks as needed May be applied by means of irrigation
Field Applications	 Mix rate: 500 ml to 1500 ml into 50 to 500 gallons or more Apply at planting time and after emergence; apply every 30 days as needed. Application rate: 500 ml to 1500 ml per acre Apply by foliar spray, in furrow or irrigation

Storage and Disposal

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

Pesticide Storage: Store in original container in a cool, dry place, away from sunlight and out of the reach of children and pets. Do not reuse container.

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. (For product less than 5 gallons) 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.] (For product greater than 5 gallons) [Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. An empty container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty contents into formulation equipment. Then offer for recycling or reconditioning or, dispose of container in a manner approved by state and local authorities.

WARRANTY

AgriHouse Inc. warrants that this product conforms to the chemical description on the label and is reasonable fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPPLICABLE LAW. NO OTHER EXPRESS WARRANTRY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MECHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Manufactured by:

AgriHouse Brands Ltd 4900 Xavier St. Denver, CO 80212 **USA** Tel 970 532-3554 Fax 970 532-9800

Batch code: XXX

YEA!® Yield Enhancing Agent

Home & Garden Use

Alternate brand Names: ODC Home & Garden™

When used as directed on this label, ODC Home & Garden™ can boost seed germination and vitality, stimulate emergence and sprouting, enhance plant vigor, promote root growth, promote foliar growth, increase crops yields, improve crop vigor and quality suppress diseases and pathogens, activate plant resistances to environment stress, drought, and disease pressures, including the suppression of parasitic nematodes.

Systemic Induced Resistance and Innate Immunity Protection

ODC Home & Garden™ Protects pine trees against Pine Beetles, Mountain Pine Beetle and Bark

Beetles.

ODC Home & Garden™ Protects ornamentals, trees, grasses, vegetables, fruits and vegetables against blue, stain fungus, mosaic virus, stem wilt, damp-off, early blight, late blight and mold.

Protects ornamentals, trees, grasses, shrubs, flowers, house plants, fruits, citrus, herbs, turf and sod, and vegetables

For use on tropical plants, grasses, pine and deciduous trees, shrubs, ground covers, bedding plants, house plants, herbs, vegetables, fruits, citrus, turf and sod and flowers

Active Ingredient:

Chitosan	0.25%
Other Ingredients	99.75%
TOTAL	100.00%

Product contains 0.021 lb (0.01 kg) of chitosan / gallon

CAUTION

SEE SIDE PANEL FOR A PRECAUTIONARY STATEMENT STATEMENTS

MANUFACT AgriHouse B 4900 Xavier Denver, CO	Brands Ltd St.	EPA Establishment No. 83729 CO-001 EPA Registration No. 83729-1
Net Contents	[] 1 oz [] 4 oz [] 8 oz [] 12 oz [] 16 oz	[] 500 ml [] 1 liter [] 1 gallon [] 2.5 gallons [] 5 gallons [] 55 gallons

4	FIRST AID	
If in eyes	 Hold e pen and rinse slowly and gently with wat or 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. 	PRE CAU TION ARY STA TEM
lf on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice. 	
If inhaled	 Move person to fresh air If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible Call a poison control center or doctor for further treatment advice. 	ENT S Hazar
	t container or label with you when calling a poison control center or doctor, or ent. You may also contact 1-800-222-1222 for emergency medical treatment	Huma ns and

Domestic Animals - CAUTION: Causes moderate eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches. gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treated area. Rinsing application equipment over treated area will help avoid run off to water bodies or drainage systems.

DIRECTIONS FOR USE

It is a violation of federal laws to use this product in a manner inconsistent with its labeling.

To prevent contamination of the dilute solution of ODC Home & Garden™ by possible pesticide or other chemical residues in the spraying equipment, use dedicated equipment, or be sure that the equipment is thoroughly clean before use.

GENERAL INSTRUCTIONS

Shake before using. For best results use pH neutral (pH 6.9 to 7.0) mix water. Follow specific crop instructions for dilution rates and application usage. Do not apply within three days of harvesting.

Crops	Mixing and Application Instructions
Seeds	Mix 1 ml to 5 ml into 5gallon
	 Apply enough product to wet the soil covering seeds. Apply every week as needed
Home & Garden - Bedding Plants, Vegetables, Flowers and Ornamentals:	 Mix rate: 1ml to 5ml product into 5 gallons or more Apply area 1000 sq ft or more apply every two weeks as needed Apply to soil and/or spray plants, apply additional water to soil as needed May be applied by means of irrigation or sprayer May be applied by means of sprayer

	· · · · · · · · · · · · · · · · · · ·
Compost	 Mix rate: 1 ml to 5 ml product in to 5 gallon or more Apply area: 10 to 100 sq ft; apply every two weeks as needed May be applied by means of irrigation or sprayer Apply every two weeks as needed
Turf and Sod	 Mix rate: 1ml to 5 ml product into 5 gallons or more Apply area 1000 sq ft or more; apply every 10 days as needed Water area and spray surface area May be applied by means of irrigation or sprayer Apply every 10 days as needed
Trees, shrubs	 Mix rate: 1 ml to 5 ml product into 5 to 10 gallon, apply every 30 to 45 days as needed to soil under the drip line May be applied by means of sprayer, apply additional water to soil as needed Apply every 30 to 45 days as needed to soil under the drip line

Storage and Disposal

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

Pesticide Storage: Store in original container in a cool, dry place, away from sunlight and out of the reach of children and pets. Do not reuse container.

Pesticide Disposal and Container Handling: Nonrefilable container. If empty: Do not reuse or refill this container. Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

WARRANTY

AgriHouse Inc. warrants that this product conforms to the chemical description on the label and is reasonable fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPPLICABLE LAW, NO OTHER EXPRESS WARRANTRY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MECHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Manufactured by: AgriHouse Brands Ltd 4900 Xavier St. Denver, CO 80212 USA Tel 970 532-3554 Fax 970 532-9800

Batch code: XXX

Optional Marketing Claims

- Elicitor
- Elicitation of plant enzymes for plant vitality
- For Use Throughout the Growing Season
- Easy to Use
- Increases Yields
- Boost Your Production
- Enhance blooms and yields
- Promote Healthier Plants
- Healthier plants resist disease and pathogen attacks
- Improve plant vigor
- Fortifies plant defense mechanisms
- Elicit better crop performance
- Larger Flowers
- Robust Plant Growth Leads to Early Harvest
- Robust Plant Growth Leads to (Increased Yields) (Larger Fruit) (Larger Vegetables)
- Higher Pack-out equals more return per acre
- More large fruit
- Delays senescence
- Reduce bruising and blemishes
- Longer shelf life for crops
- Reduces ethylene production
- Elevate sugar content
- Overcomes environmental stress
- Healthier plants develop deeper roots and resist drought
- Elicit immune-like defense responses in the plant
- Healthier plants defend themselves better against nibblers
- Increases germination rates and seed vitality
- Improve sprouting
- Stronger emergence
- Increases bio-mass
- Better Stand Quality
- Induced Systemic Resistance against pathogens and disease
- Elevate innate immunity defense mechanisms in plants
- Elevate defense mechanisms in plants
- Activate chemical engines within plants
- Boost Plant Health
- Amendment for better crop performance
- Healthier Stand
- Proprietary Elicitor
- Crop and Yield Promoter
- Broad spectrum Biopesticide
- Allows plants to defend for themselves against pathogen, disease and pests
- Fast results
- Fast acting formula
- Guaranteed not harmful to crops
- Chitosan is one of the most common compounds in nature
- Boosts the ability of plants to defend against fungal infections
- [YEA!] provides protection against downy mildew, powdery mildew, early blight, late blight, gray mold, leaf spot, anthracnose, stem wilt, damp-off, stem cankering, and seed pieced decay
- [YEA!] able to bolster plant resistance against fungal diseases.
- Spray to plants throughout the growing season
- Mix and water plants throughout the growing season
- Indoor and outdoor use!
- [YEA!] Provides long lasting protection and innate immunity

pathogens, and pests

- [YEA!] Provides () lasting systemic protection against disea
- More vigorous plants
- · Results in healthier, more vigorous plants and increased yield
- [YEA!] Enhancement of soil microflora and beneficial microbes
- [YEA!] Shortens the time required for expression of mature plant resistance
- Fast results; mature plant resistance
- Stimulates growth
- Triggers the defensive mechanisms in plants for better production
- Use for bloom and fruit setting stimulation
- Protecting coating for fruits and vegetables
- Enhanced frost protection
- [YEA!] SIR in sunflower which increases antioxidant activity and vitamin C levels in plants
- Extends the shelf life of treated fruit and vegetables
- Increased resin-based defense capability
- Increased Harvest yields
- Help Trees protect against the pine beetle.
- ODC Protect trees all season
- Protect your trees against pine beetles and blue stain mold
- Love your trees stop pine beetles
- ODC Induced systemic resistance increases oleoresin flow and resinous lesion formation
- Pre-arm trees while they have a fighting chance
- Proven effective to boost plant resistance
- Proven effective to elicit defense responses in pine trees
- Proven effective to elicit defense responses in pine trees against pine beetles and blue stain fungus
- Increases pine resin pitch-out to stop pine beetles
- Protects plants from harmful nematodes
- Protects plants and beneficial nematodes
- ODC stop the pine beetle
- Activates Innate Immunity
- ODC increases pine resin pitch-out when applied to the soil and/or needles, induces blue stain mold control for Integrated Pest Management (IPM) programs
- [YEA!] has been shown effective to activate immune-like systems in plants against environmental stress, pests, disease and drought
- There have been over 20 years of ODC defense response tests on many plants including trees, shrubs, grasses and flowers.
- Cost effective colloidal chitosan solution made from shellfish.
- ODC Tree Protection Solution
- Inexpensive alternative to costly pesticides
- [YEA!] SIR & Innate Immunity Image



Efficacy Summary by Crop

Chitosan is a ß-1,4-linked of glucosamine (2-amino- 2-deoxy-ß-D-glucose) and lesser amounts of *N* acetylglucosamine. It is formed by the deacetylation of chitin (poly-*N*-acetylglucosamine), an abundant byproduct of shellfish. Chitosan is biodegradable. The active ingredients, chitin/chitosan, are found in the shells of crustaceans, such as lobsters, crabs, and shrimp, and many other organisms, including insects and fungi. It is one of the most abundant biodegradable materials in the world. The active ingredient of chitosan 0.25%, EPA Reg. No 83729-1, has been tested on a wide array of crops.

Horticultural applications of chitosan increases blooms and extend the life of cut flowers and Christmas trees. The active agent, chitosan, has been tested on wide vary of conifers including loblolly pine, lodgepole pine, fir, spruce, Scotch pine, Austrian pine and ponderosa pine (Knutson 2010) to induce a systemic response against pine beetles and innate immunity against blue stain mold. Forest researchers using EPA Reg. No 83729-1 to control pathogens in pine trees. The presence of the chitosan induced a systemic response that elicits 40% increase in pine resin pitch which traps the pine beetle and prevents infecting the pine trees. At this elevated level the elicitation of the pine resin pitch-out would result in a 37% reduction in pine beetle eggs. EPA Reg. No 83729-1 was applied at rate of 1 ml into 5 to 10 gallons of water as a foliar spray (P =0.10%) and soil treatment (P=0.01%) under the drip ring of the trees. Other forestry researchers have identified the active agent to induce mono-terpenes and di-terpenes levels responsible for increased pine resin pitchout. They have identified the gene expression of chitosan responsible for disease resistance in Slash and a reduction of blue stain mold in southern pines.

In agriculture, chitosan is used primarily as a seed treatment and plant growth enhancer, biopesticide substance that boosts the innate ability of plants to defend themselves against disease, fungal infections, pathogens and pests. Degraded molecules of chitin/chitosan exist in soil and water. Chitosan increases photosynthesis, promotes and enhances plant growth, stimulates nutrient uptake, increases germination and sprouting, and boosts plant vigor.

Researchers have identified systemic induced resistance (SIR) and innate immunity as shown in the following list.

Crop Name	Name of disease, pathogen, pest
Apple	Penicillium expansum
Apple	Botrytis cinerea and Penicillium expansum
Barley	F. culmorum
Carrot	Sclerotinia sclerotiorum
Celery	Fusarium oxysporum
Citrus	Penicillium digitatum
Conifers	Ophiostoma minus
Grand fir	Bark Beetle
Grapes	Gray Mold
Grasses	Gray Mold
loblolly pine	Ophiostoma clavigerum
lodgepole pine	Ophiostoma minus
Lodgepole Pine	Ceratocystis clavigera
Norway spruce	Ceratocystis polonica (the bark beetle-associated blue stain fungus)
Oranges Lemons	Botrytis cinerea and Penicillium expansum
Peach	Botrytis cinerea,
Peanuts	Penicillum
Peas	Nectria haematocca
Peas	Fusarium solani
	Dendroctonus ponderosae (Mountain pine beetle (MPB)) associated
Pine	blue stain fungus

Pinus Nigra Sphaeropsis sapinea and Diplodia scrobiculata

Potato Penicillum
Potato Verticillium
Potato Fusarium, solani
Potato Rhizoctonia
Potato Erwinia
Potato Nematode
Potato Late Blight

Slash Pine Fusarium subglutinans f. sp. pini

Soybeans Cyst Nematode Soybeans White Mold

Strawberry Phytophthora cactorum Tomato Cucumber mosaic virus

Tomato Fusarium oxysporum f. sp. radicis-lycopersici

Tomato Cladosporium fulvum

Tomato Nematode

Western Pines Ophiostoma minus

Wheat F. culmorum