

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 15, 2017

Molly Hickman Agent for OR-CAL, Inc 29454 Meadowview Rd Junction City, OR 97448

Subject: PRIA Label and CSF Amendment – Adding Alternate CSF #2 dated 3/20/17, expanding use sites and pests Product Name: Zinc Phosphide in Oat Pellets EPA Registration Number: 71096-14 Application Date: 9/1/2016 Decision Number: 522386

Dear Ms. Hickman:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSFs:

- Basic CSF dated 02/07/2007
- Alternate CSF 1 dated 02/07/2007
- Alternate CSF 2 dated 03/20/2017

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process.

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Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Marianne Lewis by phone at (703) 308-8043 or via email at lewis.marianne@epa.gov.

Sincerely,

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Elyssa Arnold, Acting Product Manager 01 Invertebrate & Vertebrate Branch 3 Registration Division (7505P) Office of Pesticide Programs

Enclosure

# RESTRICTED USE PESTICIDE DUE TO HAZARD TO NONTARGET ORGANISMS

For retail sale to and use by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicators certification

# ZINC PHOSPHIDE IN OAT PELLETS

For control of voles (*Microtus spp.*) and deer mice (*Peromyscus maniculatus*) in alfalfa, timothy, bushberries and caneberries, barley, potatoes, sugar beets, wheat, dry beans, listed cucurbits, tillage and no-till corn, orchards and groves, grape vineyards, nursery stock, ornamental and non-bearing fruit trees, conifer and hardwood seedling plantations, windbreaks, around agricultural commercial and industrial buildings, macadamia nut orchards and sugarcane.

For control of pocket gophers (*Geomys spp., Pappageomys spp.*, and *Thomomys spp.*) in industrial and commercial landscape areas, golf courses, forest areas, parks, nurseries, rangelands, cropland, pastures, non-crop areas, grain fields, forage crops, hay and alfalfa crops, vineyards, orchards, tree/Christmas tree plantations and vegetable crops.

ACTIVE INGREDIENT: Zinc Phosphide	2.00%
OTHER INGREDIENTS	<u>98.00%</u>
TOTAL	100.00%



71096-14

pesticide registered under

EPA Reg. No.

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

See side/back/inside panel for additional precautionary statements.

FIRST AID					
Have label with you when obtaining treatment advice.					
Any person applying zinc phosphide products and experiencing signs and symptoms such as nausea, abdominal pain,					
tightness in the chest, or weakness, should be seen by a physician immediately.					
If swallowed	Immediately call a Poison Control Center or doctor or transport the person to the				
	nearest hospital.				
	DO NOT DRINK WATER.				
	• Do not administer anything by mouth or make the person vomit unless advised to do so				
	by a doctor.				
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 ambulance, then give artificial respiration,				
	preferably mouth-to-mouth, if possible.				
	Call a poison control center or doctor for further treatment advice.				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>				
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.				
	Call a poison control center or doctor for treatment advice.				
TREATMENT FOR PET POISONING: If animal eats bait, call veterinarian at once.					

#### NOTE TO PHYSICIAN OR VETERINARIAN

Contains the phosphine-producing active, Zinc Phosphide. Probable mucosal damage may contraindicate the use of gastric lavage. For animals ingesting bait and/or showing poisoning signs, induce vomiting by using hydrogen peroxide. Sodium bicarbonate can be given orally to neutralize stomach acidity. The stomach and intestinal tract can be evacuated, oxygen administered and cardiac and circulatory stimulants given. See side/back/inside panel for additional precautionary statements.

For non-emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 (NPIC Web site: www.npic.orst.edu).

NET CONTENTS 25 LBS

OR-CAL, Inc. 29454 Meadowview Road Junction City, OR 97448 EPA Reg. No. 71096-14 EPA Est. 66876-OR-1

# **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

# **Personal Protective Equipment (PPE)**

All handlers, including loaders and applicators, must wear:

- long sleeve shirt and long pants,
- shoes plus socks, and
- waterproof gloves.

In addition, persons loading the baits into aircraft or mechanical ground equipment and persons loading/applying with hand-pushed or hand-held equipment, such as a push-type spreader or cyclone spreader, must wear:

 Wear a minimum of a NIOSH approved particulate filtering facepiece respirator with any N, R, or P filter (TC-84A); OR a NIOSH approved elastomeric half face or full face respirator with any N, R, or P filter OR a NIOSH approved powered air purifying respirator with an HE filter and protective eyewear.

Any person who retrieves carcasses or unused bait following application of this product must wear:

• Waterproof gloves.

# **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **User Safety Recommendations**

Users should:

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

# **Engineering Control Statements**

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.

# **ENVIRONMENTAL HAZARDS**

This product is extremely toxic to birds, fish and other wildlife. Wildlife feeding on treated bait may be killed. Dogs, cats, and other predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. 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 apply where runoff is likely to occur. Do not apply to areas inhabited by livestock, or where a hazard exists to rare or endangered species. Do not contaminate water by cleaning of equipment or disposal of wastes.

# PHYSICAL-CHEMICAL HAZARDS

Do not store with or use near oxidizing agents. Hazardous chemical reactions may occur. 71096-14 amendment 06132017

#### ENDANGERED SPECIES CONSIDERATIONS

NOTICE: It is a Federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. The use of this product may pose a hazard to Federally-designated endangered/threatened species. Suggested measures to protect endangered species in your area may exist in an EPA "Interim Measures" pamphlet. You may call EPA's Endangered Species Hotline, 844-447-3813, to find out if an "Interim Measures" pamphlet exists for your county and have one sent to you. You can also consult your local county extension office or pesticide lead agency to determine whether they have imposed any requirements in your area to protect endangered and threatened species.

**Whooping Crane** (*Grus americana*) Do not use this product 30 days prior to arrival and 30 days after the whooping crane leaves its known critical habitat.

**Black-footed Ferret** (*Mustela nigripes*). Do not use this product within 4.34 miles of any prairie dog town to limit risks to the black-footed ferret from exposure to Zinc Phosphide or destruction of its prey base, unless the colony is an isolated black-tailed prairie dog town less than 80 acres in size or an isolated white-tailed prairie dog town less than 200 acres in size, or unless the town had been appropriately surveyed, using methods acceptable to the U.S. Fish and Wildlife Service, and found by the FWS not to be a suitable site for ferret reintroductions.

**Attwater's Greater Prairie Chicken** (*Tympanuchus cupido attwateri*) Do not use this product in the present occupied range of the Attwater's Greater Prairie Chicken in the following Texas counties: Aransas, Austin, Brazoria, Colorado, DeWitt, Ft. Bend, Galveston, Goliad, Hams, Refugio, Victoria, Waller and Wharton.

Yellow-Shouldered Blackbird (Agelaius xanthomaus) and Puerto Rican Plain Pigeon (Columbia inornata wetmorei) Do not use in critical habitat except in tamperproof bait boxes; with 6.3 miles of Central Aquirre, Lago Cidra, Ceiba, San German; 9.4 miles of La Esperanza; south of Highway 2 from city of Mayaguez to the city of Ponce, and all of Mona Island, Puerto Rico.

Utah Prairie Dog (Cynomy parvidens) Do not use this product in critical habitat of the Utah prairie dog (Utah).

**Salt March Harvest Mouse** (*Reithrodontomys raviventris*) Do not use this product in critical habitat within 0.5 miles of salt marsh vegetation and/or brackish water wetlands which are located: 1) near or adjacent to San Pablo Bay and San Francisco Bay, or 2) in the Sacramento River below or adjacent to the confluence of the Sacramento River and the San Joaquin River (California).

**Morro Bay Kangaroo Rat** (*Dipodomys heermanni morroensis*) Do not use this product in critical habitat within 2.5 miles of Baywood Park which is located in Morro Bay (California).

**Giant Kangaroo Rat** (*Dipodomys ingrens*) Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: Fresno, Kern, Kings, Merced, Monterey, San Benito, San Luis Obispo, Santa Barbara, and Tulare (California).

**Tipton Kangaroo Rat** (*Dipodomys nitratoides nitratoides*) Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: Kern, Kings, and Tulare (California).

**Fresno Kangaroo Rat** (*Dipodomys nitratoides exilis*) Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: Fresno, Kern, Kings, Madera, and Merced (California).

**Stephan's Kangaroo Rat** (*Dipodomys stephens*) Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: San Bernardino, San Diego, and Riverside (California).

San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: San Berbardino and Riverside (California).

**Northern Idaho Ground Squirrel** (Spermophilis brunneus brunneus). Do not use this product within 0.5 miles in critical habitat of the Northern Idaho Ground Squirrel in Adams and Valley counties, Idaho. 71096-14 amendment 06132017

# **DIRECTIONS FOR USE**

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

# **Use Restrictions:**

- Only apply this product for sites, pests, and application methods specified on this label.
- Do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- Only handlers may be in the area during application.
- Keep all other persons out of the treated area during application.
- Wear waterproof gloves while handling this product.
- <u>Use proper scooping device for bait placement, broadcasting, or mixing</u>. Do not use scooping device for any <u>other purpose</u>.
- This bait may NOT be applied on roads, near residential areas or over water.
- Do not broadcast over growing crops.
- Apply bait on warm, clear days.
- Do not graze animals in treated areas.
- Do not apply to bare ground and areas in which no vegetation occurs.
- Check for and dispose of excess or spoiled bait and carcasses daily until the baits are expended or removed.

# ALFALFA, TIMOTHY, AND ALFALFA/TIMOTHY MIXTURES

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in alfalfa, timothy, and alfalfa/timothy mixtures. All applications must occur shortly after a cutting of the hay, and/or prior to the next growth's attaining a height of 2 inches. Alfalfa forage from treated areas must not be harvested until it reaches maturity. <u>This use is restricted to Montana, California, Idaho, Oregon, Utah and Washington.</u>

**BROADCAST BAITING:** This product may be broadcast by air or ground-driven dispensing devices. Apply at a rate up to 10 lbs/A (0.2 lb a.i./A). A second application may be made after 10 days. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment. Apply bait at a maximum rate of 20 lbs/A (0.4 a.i./A) per year.

# TIMOTHY PRODUCED FOR SEED

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in timothy during the non-growing season. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa or timothy/clover mixtures. A minimum of 158 days must pass between an application and any livestock foraging activity. <u>This use is restricted to Idaho, Oregon and Washington</u>. Do not graze animals in treated areas.

**BROADCAST BAITING:** This product may be broadcast by hand, cyclone seeder, or ground-driven dispensing devices. Apply at a rate up to 10 lbs/A (0.2 lb a.i./A) during crop dormancy. Apply bait at a maximum rate of 20 lbs/A (0.4 a.i./A) per year.

# **BUSHBERRIES AND CANEBERRIES**

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in bushberries (Highbush and lowbush blueberries, currants, elderberries, gooseberries and huckleberries) and in caneberries (blackberries, red raspberries, black raspberries, loganberries, and cultivars or hybrids of these caneberries). Only apply this product in the dormant season: after final harvest and not later than the beginning of leaf emergence in the spring. Do not apply when ground is snow covered. Do not apply by air. Minimum preharvest interval is 70 days.

**BROADCAST BAITING:** This product may be broadcast by hand or cyclone seeder. When applying by hand, throw tablespoon amounts into heavy cover along bushes, rocky outcrops, and fence lines. Make up to2 applications at minimum interval of 21 days, at the rate of 6-10 lbs/A (0.12-0.2 lb a.i./A) per application. Apply bait at a maximum rate of 20 lbs/A (0.4 a.i./A) per growing season.

#### BARLEY

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in barley. Do not apply this product to barley within 50 days of harvest. <u>This use is restricted to Montana, Idaho, Oregon and Washington.</u>

**BROADCAST BAITING:** This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs/A (0.12 lb a.i./A). A second application may be made after 25 days. All applications must be made prior to the boot stage. Apply bait at a maximum rate of 12 lbs/A (0.24 a.i./A) per year.

#### POTATOES

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in potatoes. Do not apply this product to potatoes within 30 days of harvest. <u>This use is restricted to Idaho, Oregon and Washington.</u>

**BROADCAST BAITING:** This product may be broadcast by air or ground-driven dispensing devices. Apply bait once at a rate up to 10 lbs/A (0.2 lb a.i./A), or make two separate applications at a rate of up to 5 lbs/A (0.1 lb a.i./A). Apply bait at a maximum rate of 10 lbs/A (0.2 a.i./A) per year.

#### **SUGAR BEETS**

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*). Do not apply this product to sugar beets within 30 days of harvest. This use is restricted to Idaho, Oregon and Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 10 lbs/A (0.2 lb a.i./A) at planting. A second application may be made at the same rate. The maximum annual application rate per year is 20 lbs/A (0.4 lb a.i./A) per year.

#### WHEAT

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*). Do not apply this product to wheat within 50 days of harvest. <u>This use is restricted to Montana, Idaho, Oregon and Washington.</u>

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**BROADCAST BAITING:** This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs/A (0.12 lb a.i./A). A second application at the same rate made after 25 days. The maximum annual application rate per year is 12 lbs/A (0.24 lb a.i./A) per year.

# **BEANS (DRY)**

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in dry beans. Do not apply by air. Do not apply this product to dry beans within 30 days of harvest. <u>This use is restricted to Idaho, Oregon and Washington.</u>

**BROADCAST BAITING:** This product may be broadcast by hand or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs/A (0.12 lb a.i./A). No more than one application per growing season is permitted.

# CUCURBITS, REDUCED TILLAGE AND NO-TILL CORN

**USE RESTRICTIONS:** For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*), Ord's kangaroo rats, banner-tailed rats, Merriam's kangaroo rats (*Dipodomys spp.*), and cotton rats (*Sigmodon hispidus*) in reduced tillage and no-till corn and in cucurbits, including and limited to chayote, Chinese waxgourd, citron melon, cucumber, gherkin, edible gourd, *Momordica spp.*, muskmelon, pumpkin, squash (summer and winter), and watermelon. Only in-furrow treatments are permitted for these crops. Do not broadcast bait. Do not apply this product within the occupied habitats of the endangered species or subspecies of kangaroo rats.

**IN-FURROW APPLICATION ONLY:** Equipment designed for in-furrow treatments must be used to apply this product in cucurbits, reduced tillage and no-till corn. Make one application pre-planting, or at-planting, at a rate of 4-6 lbs/A (0.08-0.12 lb a.i./A). Collect and remove excessive quantities of bait deposited on surface soil or crops residues during spills or equipment malfunctions.

CALIBRATION/ROW					
Row spaces	4 lbs/A rate	5 lbs/A rate	6 lbs/A rate		
Inches	Oz per 1000 ft	Oz per 1000 ft	Oz per 1000 ft		
20	2.5	3.1	3.7		
30	3.7	4.6	5.5		
36	4.4	5.5	6.6		
38	4.7	5.8	6.9		

# **ORCHARDS AND GROVES**

**USE RESTRICTIONS:** For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in orchards and groves. Apply bait after harvest or anytime during the dormant season, but before tree growth begins in the spring. Do not apply on bare ground or growing crops. Wear rubber gloves when handling bait. Do not broadcast over non-orchard/non-grove crops. Do not graze animals on treated areas.

# **APPLICATION DIRECTIONS:**

**TRAILBUILDER:** Drop teaspoonful quantities of bait at 4-5 foot intervals in the artificial trail made by the machine just inside the drip line on both sides of the trees. Apply at the rate of 2-3 pounds per acre.

**AERIAL APPLICATION:** Broadcast bait at a rate of 6-10 pounds per acre or make 2 applications of 5 lbs each per acre. 71096-14 amendment 06132017

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**HAND BAITING:** Near the base of each infested tree, place teaspoonful quantities of bait at 2-4 locations, either on surface or at mouth of holes leading to underground burrow systems. Cover bait artificially (e.g. mats, boards) or by puling overhanging grass back into place. Do not disturb the runway system. Bait at the rate of 3-5 pounds per acre of infested trees.

**BROADCAST BAITING:** under infested trees, broadcast evenly by cyclone seeder or by hand. Place teaspoon amounts into heavy cover along tree rows, rock outcrops, and fence lines. Apply at the rate of 6-10 pounds per acre.

# **GRAPE VINEYARDS**

**USE RESTRICTIONS:** For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*), oldfield mice, (*P. polionotus*, except for threatened or endangered subspecies), and meadow jumping mice (*Zapus spp.*). Do not use this product in areas of Alabama and Florida that are occupied by threatened or endangered subspecies of the oldfield mouse. Do not broadcast bait over growing crops when bait may lodge on the plant. Do not graze animals in treated areas. Do not apply to bare ground.

# **APPLICATION DIRECTIONS:**

**BROADCAST BAITING:** Apply evenly by cyclone seeder or by hand between the rows at a rate of 6-10 pounds per acre.

# NURSERY STOCK, ORNAMENTAL AND NON-BEARING FRUIT TREES

**USE RESTRICTIONS**: For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in nursery stock, conifer/Christmas trees, poplar/cottonwood, ornamental, and non-bearing fruit tree plantations. Only apply post-harvest or during dormancy. Do not apply by air. **PREBAITING:** None.

**BROADCAST BAITING:** Under infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, or non-bearing fruit trees, broadcast bait evenly by cyclone seeder or by hand. Concentrate in areas with the heaviest vegetative cover. Do not broadcast on bare ground. Apply at a rate of 6-10 lbs./A (0.12-0.2 lb a.i./A). **HAND BAITING:** Near the base of infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, or non-bearing fruit trees, place teaspoonful quantities of bait at 2-4 locations, either on surface trails or at mouth of holes leading to underground burrow systems. When practical cover bait artificially (e.g., mats, boards) or by pulling overhanging grass over bait.

# CONIFER AND HARDWOOD SEEDLING PLANTATIONS, WINDBREAKS

**USE RESTRICTIONS:** For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer mice (*Peromyscus maniculatus*) in conifer and hardwood seedling plantations, and windbreaks. Treatment at the rate of 5.5-9.0 lbs. per acre should occur in the fall before the seed fall of seeding efforts. Treatment may be necessary in spring to protect emergent seedlings. Do not apply in the areas where plants are being grown for food or feed or in areas inhabited by livestock.

**BAITING:** For hand baiting, place a teaspoonful of bait at surface runways or in burrow entrances. If a trail builder is used, apply at the rate of one teaspoonful of bait at 4-5 foot intervals. For broadcast baiting, apply in 20 foot swaths evenly by hand or with a cyclone seeder. For aerial application, broadcast bait at the rate of 5.5-9.0 pounds per acre.

# **NONCROP AREAS**

**USE RESTRICTIONS:** For control of meadow voles, prairie voles, pine voles, California voles, long-tailed voles, Oregon voles, mountain voles, and Townsend's voles (*Microtus spp.*) and white-footed mice (*Peromyscus leucopus*) and deer 71096-14 amendment 06132017

mice (Peromyscus maniculatus) in noncrop areas including rights-of-ways, nurseries, golf courses and airports (runways and grasses) when damage or heavy vole and/or mouse infestations occur. Prebaiting with 3-5 pounds per acre of untreated oats 2-3 days before applying toxic bait may provide more consistent toxic bait acceptance.

# **APPLICATION DIRECTIONS:**

HAND BAITING: Place teaspoonful quantities of bait, either in surface runways or at mouth of holes leading to underground burrow systems. Bait at the rate of 3-5 pounds per acre in infested areas.

**TRAILBUILDER:** Apply teaspoonful quantities of bait at 4-5 foot intervals in artificial runways around infested areas. **BROADCAST BAITING:** Apply evenly by cyclone seeder or by hand at the rate of 3-5 pounds per acre.

AERIAL APPLICATION (HELICOPTER): Make either a single application of 10 pounds per acre or make one 5 pounds per acre application followed two weeks later by a second 5 pounds per acre application.

# AROUND AGRICULTURAL, COMMERCIAL, AND INDUSTRIAL BUILDINGS

**USE RESTRICTIONS:** For control of meadow voles, pine voles, prairie voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and white-footed mice (Peromyscus leucopus) and deer mice (Peromyscus maniculatus) around agricultural, commercial, and industrial buildings. Do not apply farther than 50 feet from buildings. Do not apply bait inside buildings. Bait must be applied in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and by children under six years of age, and must be used in a manner that prevents such children from reaching into bait compartments and obtaining bait. If bait can be shaken from bait stations when they are lifted, units must be secured or otherwise immobilized. Even stronger bait stations are needed in areas open to hoofed livestock, raccoons, bears, other potentially destructive animals, or in areas prone to vandalism. SELECTION OF TREATMENT AREAS: Determine where voles and mice will most likely find and consume the bait. Look for runways near buildings and signs of vole and mouse activity toward the buildings. **PREBAITING:** Not required.

HANDBAITING: Apply one teaspoon of bait in each bait station. Space stations at intervals of 8-12 feet apart in infested areas. Maintain bait in stations for 3 days. Extend baiting period only if there is continued evidence of feeding from the stations by voles or mice.

# **MACADAMIA NUT ORCHARDS**

**USE RESTRICTIONS:** For control of roof rats (*Rattus rattus*).

# **APPLICATION DIRECTIONS:**

**SPOT TREATMENT:** Baits may be placed in bait stations or in stations in trees. Place 1-2 teaspoonful quantities of bait in bait stations at base of trees or in trees. Uneaten bait must be removed from trees prior to shaker harvest or from ground prior to mechanized harvest. Orchards may be treated up to 30 days prior to harvesting.

BURROW TREATMENT: Place 1-2 teaspoonful quantities of bait in each burrow. No preharvest interval is required, provided nuts are not retrieved from burrows.

BROADCAST BAITING: Apply evenly by cyclone seeder or by hand at the rate of 5 pounds per acre. Aircraft may be used to treat adjacent noncrop areas if recommended and supervised by the Hawaii Dept. of Health. The number of applications shall not exceed 4 per year. The total amount of bait applied shall not exceed 20 lbs/acre-year.

# **SUGARCANE**

**USE RESTRICTIONS:** For control of Polynesian (*Rattus exulans*), Norway (*R.norvegicus*), Rice (*Oryzomys palustris*), Florida water (Neofiber alleni), Cotton (Sigmodon hispidus) and Roof (R.Rattus) Rats in sugarcane fields Do not apply within 30 days of harvest. Do not apply to adjacent noncrop areas. The number of applications shall not exceed 4 per year. The total amount of bait applied shall not exceed 20 lbs/acre-year. **APPLICATION DIRECTIONS:** 

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**PRE-BAITING:** To increase acceptance of treated bait by rats, broadcast 3 pounds untreated oat groats per acre one or two weeks prior to using toxic bait.

**BROADCAST BAITING:** Apply 5 pounds of bait per acre per treatment. Bait may be broadcast by aircraft, ground driven equipment <u>or</u> by hand (wear rubber gloves during hand baiting).

# **POCKET GOPHERS**

**USE RESTRICTIONS**: For control of plains pocket gophers (*Geomys bursarius*), southeastern pocket gophers (*G.pinetis*), yellow-faced pocket gophers (*Pappogeomys castanops*) and pocket gophers (*Thomomys spp.*) in industrial and commercial landscaped areas, golf courses, forest areas (not for use in California), parks, nurseries, rangelands, cropland, pastures, non-crop areas, grain fields, forage crops, hay and alfalfa crops, vineyards, orchards, tree/Christmas tree plantations and vegetable crops. Bait must be applied directly into underground burrow systems. Do not broadcast bait or apply it above ground in any way.

# **BAITING DIRECTIONS:**

**HAND BAITING:** Bait must be placed into pocket gopher runways. Remove burrow plug from the flat side of the burrow fan. Using a long-handled spoon, insert one teaspoon of bait into the main runway system. Carefully cover the hole with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Place bait at 2-5 locations per burrow system. Recover and bury all spilled bait.

**BURROW BUILDER:** When treating extensive area, burrow builder method may be used. Follow manufacturer's instructions for the equipment used to apply gopher bait. Make sure that machine-built burrows intersect pocket gopher burrow at the depth at which gophers have been tunneling. For greater efficiency of treatment, machine-built burrows should intersect as many gopher tunnels as possible at right angles. Apply bait at a rate of 1-2 pounds per acre, using a 20' to 30' row spacing interval. Apply only when soil condition is proper to insure formation of a good artificial burrow. Recover and bury all spoiled bait.

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store only in original container, in a dry, cool place inaccessible to children, pets and domestic animals.

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

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Completely empty by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of bags in a sanitary landfill or by incineration if allowed by State and local authorities.

# WARRANTY

To the extent consistent with applicable law, seller warrants that this product conforms to the chemical description on the label and is reasonable for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS or MERCHANTABILITY. To the extent permitted by applicable law, the seller shall not be liable for consequential, special, or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is acceptable as such by the buyer.