



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SEP 28 1998

Christine E. Benter
Bell Laboratories, Inc.
3699 Kinsman Blvd.
Madison, WI 53704

Subject: ZP Rodent Bait AG
EPA Reg. No. 12455-17
Your Letter and Revised Labeling dated November 15, 1996.

Dear Ms. Benter,

Your letter regarding EPA Reg. No. 12455-17 and submission of revised labeling dated November 15, 1996, have been reviewed. The conclusions of our review are discussed below.

1. Your letter of November 15, 1996, implies that you intend to develop field efficacy to support claims for control of California ground squirrels (Scarmorophilus beecheyi) and deer mice (Peromyscus maniculatus) and that you will use laboratory efficacy studies to "bridge" support for claims to control other Peromyscus spp. and "non-major ground squirrel pests". Referring to our letter of August 20, 1996, it becomes apparent that you have elected not to support claims for control of Columbian ground squirrels and Richardson's ground squirrels, two "major" types which are claimed on the current label for 12455-17. Claims for control of these species must be dropped from this product's label until such time as you commit to generating efficacy data (including field trials) to support such claims.

We suggest that you submit protocols for the deer mouse and California ground squirrel studies. As ground squirrel studies can only be done appropriately in the mid-to-late spring of the year, you will need to have something ready to go by the spring of 1999 if you are to be able to retain any ground squirrel claims on this product's label.

2. Assuming that the product works as claimed and the promised efficacy data are supplied and confirmatory, the proposed revised label would be acceptable from the standpoint of efficacy if the changes listed below were made.

a. In the second paragraph of the "USE RESTRICTIONS" for "NONCROP RIGHTS-OF-WAY", change "has been shown to provide consistent acceptance" with "may enhance acceptance". As the cracked-corn prebait probably has not been tested formally, it seems false to make positive statements concerning its appropriateness for this product's "new" pelleted formulation. Although we discussed this issue, we are sorry that we missed this needed change in our letter of August 20, 1996.

We think that it is important to suggest or require prebaiting because past studies have shown the procedure to be helpful-to-necessary for achieving effective control of rodent pests with Zinc Phosphide baits.

b. Under the directions for "RANGELAND", delete the second "USE RESTRICTIONS" paragraph (i.e., the one in which control of Columbian and Richardson's ground squirrels is claimed). As your letter of November 15, 1996, indicates that the California ground squirrel is the only "major" Spermophilus species for which you intend to develop efficacy data, the claims for these other two "major" species must be deleted.

(If you had decided to support the claims for Richardson's and Columbian ground squirrels, we would have required you to combine the two "USE RESTRICTIONS" paragraphs into one.)

c. In the directions for "SUGAR CANE", change the heading "SUGAR CANE" to "SUGARCANE" and "sugar cane" to "sugarcane" (under "USE RESTRICTIONS").

d. In the last sentence of the "USE RESTRICTIONS" for "GRAPE VINEYARDS", change to read "endangered species of the oldfield mouse" to endangered subspecies of the oldfield mouse". Note that Peromyscus polionotus is the species name and that the endangered subspecies (races) of the oldfield mouse include:

- (1) the Alabama beach mouse (Peromyscus polionotus ammobates) in Baldwin County, Alabama;
- (2) the Anastasia Island beach mouse (P. p. phasma) on Anastasia Island, St. John's County, Florida;
- (3) the Choctawhatchee beach mouse (P. p. allophrys) in Walton and Bay Counties, Florida;
- (4) the Perdido Key beach mouse (P. p. trissyllepsis) in Baldwin County, Alabama, and in Escambia County, Florida; and
- (5) the Southeastern beach mouse (P. p. niveiventris) in Volusia and St. Lucie Counties, Florida.

These organisms have been put at risk largely by habitat loss and competition from introduced rodents.

- e. Delete claims for control of Columbian ground squirrels and Richardson's ground squirrels from the directions for

**"HAND BAITING IN NONCROP AREAS
Such as Lawns, Ornamentals, Golf Courses,
Parks and Nurseries"**

Again, these species must be dropped because you have not committed to support claims for them with efficacy data.

Please submit one copy of your revised final printed labeling before you release the product for shipment. We caution you to refrain from adding any claims or directions to the final printed labeling that were not part of the stamped accepted labeling. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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A stamped copy of your label is enclosed for your records. If you have any questions regarding this letter, please call me at (703) 305-5417 or (703) 305-5404.

Sincerely yours,



Peg Perreault
Chemical Manager, Team 4
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure (1)



595

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Keep away from humans, domestic animals and pets. May be fatal or harmful if swallowed. Do not breathe dust. Avoid eye or skin contact. Use rubber gloves if contact with skin may occur when placing baits. Avoid contamination of feed or foodstuffs. Avoid contact of bait with acids. Wash hands and all utensils, spoons, or measuring devices thoroughly after use.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife and fish. Birds and other wildlife feeding on treated bait may be killed. Do not apply where runoff is likely to occur. Do not apply this product 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 by cleaning of equipment or disposal of wastes.

ENDANGERED SPECIES CONSIDERATIONS

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

UTAH

Utah Prairie Dog (*Cynomys ludovicianus*). Do not use this product in the range of the Utah prairie dog.

CALIFORNIA

Salt marsh harvest mouse (*Reithrodontomys raviventris*). Do not use this product within 1/2 mile of salt marsh vegetation and/or brackish water wetlands which are located near or adjacent to San Pablo Bay and San Francisco Bay. Do not use this product within 1/2 mile of salt marsh vegetation and/or brackish water wetlands which are located in the Sacramento River below or adjacent to the confluence of the Sacramento River and the San Joaquin River.

Morro Bay Kangaroo Rats (*Dipodomys heermanni*). Do not use this product within 2 1/2 miles of Bay Wood Park which is located on Morro Bay. Aleutian Canada goose (*Branta canadensis leucoparia*). Do not use this product from October to March in the Federally closed goose hunting areas in the State of California. See current Duck and Goose Hunting game laws for a current map.

TEXAS

Asteraster's greater prairie chicken (*Tympanuchus cupido attenuatus*). Do not use this product in the present occupied range of the Asteraster's prairie chicken in the following Texas counties: Arkansas, Austin, Brazoria, Colorado, DeWitt, Fort Bend, Galveston, Goliad, Harris, Refugio, Victoria, Waller, and Wharton.

PUERTO RICO

Yellow-shouldered Black Bird (*Agelaius phoeniceus*) and Puerto Rican Plain Pigeon (*Columba carolinensis martinicensis*). This product must not be used in the following areas except in tamper proof bait boxes (within 10 kilometers of Central Aquira, Lago Cidra, Coiba, San German; 15 kilometers of La Esperanza; south of Highway 2 from city of Mayaguez to the city of Ponce and all Mona Island).

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 county may exist in an EPA "Interim Measures" pamphlet. You may call EPA's Endangered Species Hotline, 1-800-447-3813, 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 state lead agency to determine whether they have imposed any requirements in your area to protect endangered and threatened species.

DIRECTIONS FOR USE

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

NONCROP RIGHTS-OF-WAY

USE RESTRICTIONS: For control of California Ground Squirrels (*Spermophilus beecheyi*) on noncrop rights-of-way adjacent to canal and ditch banks and other noncrop borders during late spring and summer. ZP RODENT BAIT AG must not be applied on roads, near residential areas, over water or where plants are grown for food or feed.

Preparing with 5 pounds of untreated cracked corn per acre, 2-3 days prior to applying toxic bait has been shown to provide consistent acceptance by target species when baiting with acute toxicants.

BAITING: Treat only once during treatment period. Broadcast bait in a 10-15 foot swath along right-of-way, using hand or ground-driven dispensing devices not to exceed 5 pounds per acre. Bait will be applied only to the canal right-of-way between the base of the levee and adjacent properties. The canal and levee will not be treated. Discard excess bait from application equipment by burial.

RANGELAND

USE RESTRICTIONS: For control of prairie dogs Blacktailed (*Cynomys ludovicianus*), Whitesided (*C. leucurus*) and Gunnison (*Cynomys*) in rangeland in Western United States (North Dakota, Nebraska, Kansas, Oklahoma, Texas; New Mexico, Arizona, Colorado, Montana, Utah and Wyoming).

USE RESTRICTIONS: For control of Columbian (*Spermophilus columbianus*) and Richardson's (*Spermophilus richardsonii*) ground squirrels on rangeland.

PREBAITING: Prebait with 4 grams (one teaspoon) of untreated cracked corn per mound, one or two days prior to baiting, to increase acceptance of treated baits by prairie dogs.

BAITING: Apply bait only after all or most of prebait is eaten and only to areas where untreated bait was consumed. Establish observation period during prebaiting. Apply bait by hand as a six-inch bait spot on edge of each mound or in adjacent feeding areas. Application rate should not exceed 4 grams (one teaspoon) per bait spot. Treat during late summer or fall period (July-December). Do not apply more than one bait application during this period. Dispose of spilled or unwanted bait by burial.

SUGAR CANE

USE RESTRICTIONS: For control of Polynesian (*Rattus exulans*), Norway (*R. norvegicus*), Roof (*R. rattus*), Rice (*Oryzomys palustris*), Florida water (*Neotoma alata*), and Cotton rats (*Sitomodon hispidus*) in sugar cane fields.

PREBAITING: Prebaiting with three pounds untreated cracked corn per acre one or two weeks prior to baiting is usually desirable to enhance acceptance of the treated bait by rats.

BAITING: Broadcast bait aircraft, ground-driven devices, or by hand at the rate of five (5) pounds of bait per acre. The number of applications shall not exceed four (4) per crop. The total application shall not exceed 20 pounds per acre. Do not apply within 30 days of harvest.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. STORAGE: Store only in original container, in a dry acid-free place inaccessible to children and pets.

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.

RESTRICTED USE PESTICIDE DUE TO HAZARDS TO NONTARGET SPECIES

For retail sale and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.



FOR CONTROL OF GROUND SQUIRRELS (NONCROP AREAS), PRAIRIE DOGS (RANGELAND), RATS, (SUGAR CANE, MACADAMIA NUT ORCHARDS), MEADOW MICE - PINE MICE, VOLES (ORCHARDS, GROVES, LAWNS, ORNAMENTALS, GOLF COURSES, PARKS & NURSERIES) GOPHERS (BELOW GROUND USE).

ACTIVE INGREDIENT.....Zinc Phosphide.....2%
INERT INGREDIENTS.....98%
TOTAL 100%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

STATEMENT OF PRACTICAL TREATMENT

Any persons 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 physician, or transport the patient to the nearest hospital. Do not drink water. Do not administer anything by mouth or make the patient vomit unless advised to do so by a physician.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN: Remove contaminated clothing and wash affected areas with soap and water.

ALERTED with COMMENTS

The EPA Letter Dated:

Sept. 28, 1998

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 12455-17 was deleted.

NET CONTENTS: 50 lb. (22.72 Kilos)

EPA EST. NO. 12455-WI-1

EPA REG. NO. 12455-17

Mfg. by:



Bell Laboratories, Inc.
Madison, WI 53704 U.S.A.

MACADAMIA NUT ORCHARDS

USE RESTRICTIONS: For control of roof rats (*R. rattus*) in Macadamia Nut orchards.

SPOT TREATMENT: Bait may be placed in bait stations on the ground or in stations in trees. Place 4-8 grams (1-2 teaspoons) of bait in stations at the base of each tree and in each station in trees. Unbaited 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 a harvesting round.

BURROW TREATMENT: Place 4-8 grams (1-2 tablespoons) of bait in each burrow. No preharvest interval is required, provided nuts are not retrieved from burrows.

BROADCAST BAITING: Broadcast at the rate of five (5) pounds of bait per acre in orchard using a ground device by hand. 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 four (4) per year. The total amount of bait applied shall not exceed 20 pounds per acre per year.

ORCHARDS AND GROVES

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.) in orchards and groves. Apply bait after harvest while the orchard or grove is in a nonbearing phase.

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

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

BROADCAST BAITING: Under infested trees broadcast evenly by cyclone seeder or by hand (wear rubber gloves during hand broadcast operations). Concentrate in areas with the heaviest vegetative cover. Do not broadcast on bare ground or growing crops. Apply at the rate of 6-10 pounds per acre.

AERIAL APPLICATION: Broadcast bait at a rate of 6-10 pounds per acre. Do not apply on bare ground or growing crops.

NURSERY STOCK - ORNAMENTAL AND NON-BEARING FRUIT TREES

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.) in ornamental and non-bearing nursery stock, ZP RODENT BAIT AG must not be applied on roads, over water or where plants are grown for food or feed.

BROADCASTING BAITING: Under infested nursery stock and/or non-bearing fruit trees broadcast 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 pounds per acre.

HAND BAITING: Near the base of infested stock, place teaspoonful quantities of bait at 2-4 locations, either on surface trails or at the mouth of holes leading to underground burrow systems. Do not allow bait to be exposed on bare ground. Do not disturb the runway system. Bait at a rate of 2-3 pounds per acre of infested stock.

GRAPE VINEYARDS

USE RESTRICTIONS: For control of deer mice, white-footed mice, and oldfield mice (*Peromyscus* spp.), meadow voles (*Microtus pennsylvanicus*), and meadow jumping mice (*Zapus hudsonicus*) in grape vineyards. Do not use this product in areas of Alabama and Florida occupied by endangered species of the oldfield mouse (*Peromyscus polionotus*).

BROADCAST BAITING: Broadcast bait evenly on the ground between the rows by cyclone seeder or by hand. Apply bait at a rate of 6-10 pounds per acre. Do not apply by air.

POCKET GOPHERS

USE RESTRICTIONS: For control of plains pocket gophers (*Geomys bursarius*), southeastern pocket gophers (*G. pinetis*), yellow-faced pocket gophers (*Pappogeomys castaneus*) and Thomomys spp. pocket gophers in rangelands, croplands, noncrop areas, lawns, golf courses, parks, forests, and restoration areas. Bait must be applied directly into pocket gopher's underground burrow systems. Do not apply bait above ground or directly to crops grown for food or feed. Do not apply by use of burrow-builders in lawns, golf courses, or municipal parks.

HAND BAITING: Place one teaspoon (4 grams) of bait at 2-4 locations using a mechanical probe or similar device into the underground runway. After bait is dropped into the probe hole, cover the hole. Pick up and bury all spilled bait.

BURROW BUILDER: Drop teaspoonful quantity of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 pounds per acre. Pick up and bury all spilled bait.

KANGAROO RATS

USE RESTRICTIONS: For control of the Ord's kangaroo rat (*Dipodomys ordii*), banner-tailed kangaroo rat (*Dipodomys spectabilis*), and Merriam's kangaroo rat (*Dipodomys merriami*) in rangeland vegetation and noncrop areas.

HAND BAITING: Place one tablespoon (12 grams) of bait at 2 locations on opposite sides of mounds. Attempt to place bait in burrows near the entrance to burrows.

APPLY BAITING IN NONCROP AREAS:

Such as Lawns, Golf courses, Parks and Nurseries
USE RESTRICTIONS: For control of meadow vole, prairie voles, pine voles, California voles, long-tailed voles, Oregon voles, mountain voles and Townsend's voles (*Microtus* spp.), thirteen-lined ground squirrels (*Spermophilus tridecemlineatus*), California ground squirrel (*Spermophilus beecheyi*), Columbian ground squirrels (*Spermophilus columbianus*) and Richardson's ground squirrels (*Spermophilus richardsonii*). ZP RODENT BAIT AG must not be applied on roads, over water or where plants are grown for food or feed.

Prebaiting with 6 pounds of untreated cracked corn per acre, 2-3 days prior to applying toxic bait has been shown to provide more consistent acceptance by target species when baiting with acute toxicants.

HAND BAITING: Place 4 grams (one teaspoon) of bait around each active burrow or runway, allow bait to fall through grass to ground surface but do not apply to bare ground. Do not place bait in heaps or piles.

WARRANTY: Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.