ZP AG Pellets

Usage and Application Guide

Must follow the directions for use on the container label.

FRUIT AND NUT TREE ORCHARDS (DORMANT)

SPECIES: VOLES and WHITE FOOTED MICE

USE RESTRICTIONS: For control of Meadow, Prairie, Pine, California, Oregon, Mountain, and Townsend's Voles (Microtus spp) and White-footed Mouse (Peromyscus leucopus) in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated areas.

Place bait near bases of each infested tree at 2-4 locations, either on surface trails or at mouth of holes leading to underground burrow systems. Cover bait artificially (e.g., mats, boards) or by pulling overhanging grass over bait. Do not allow bait to be exposed on bare ground. Do not disturb the runway system. Apply teaspoon amount (4 grams) per placement, 2 - 3 lb/A (0.04 - 0.06 lb ai/A).

Set equipment to drop one teaspoon quantity of bait (4 grams) 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 lb/A (0.04 - 0.06 lb ai/A.

Broadcast evenly by cyclone seeder or by hand. Concentrate in areas with heaviest vegetative cover. Do not broadcast on bare ground. Apply at the rate of 6 - 10 lb/A (0.12 - 0.2 lb ai/A)

AERIAL BROADCAST:

Do not broadcast on bare ground. Apply at the rate of 6 - 10 lb/A (0.12 - 0.2 lb ai/A)

USE RESTRICTIONS: For control of California ground squirrels (Spermophilus beecheyi) and Richardson's ground squirrels (S. richardii) in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated areas.

PREBAITING (Mandatory): Prebait with a 50/50 mixture of ground corn and wheat to enhance acceptance by California and Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 1-2 days prior to using

HANDBAITING: Apply 4 grams (one teaspoon) of bait on the ground near active burrows.

BAITING: Treat once during treatment period. Broadcast bait using hand or ground-driven dispensing devices not to exceed 6 lbs per acre (0.12 lb ai/A). Dispose of excess bait from application equipment by burial.

to decreased resistance from soil.

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.) pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Bait must be applied directly into pocket applier's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above ground. Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated greas.

HAND BAITING: Follow the directions indicated below to locate and treat pocket gophers' burrow systems. <u>Locating Underground Runways:</u> Use a specially designed gopher probe, a metal rod, a strong smooth stick, or other suitable implement to probe the ground 10 to 15 inches away from fan-shaped gopher mounds. Begin probing on the flat side of the fan. When the main runway has been entered, the probe will drop about 2 inches due

Applying Bait to Runways: Using a long-handled spoon or mechanical probe, drop one teaspoon (4 grams) of bait into the main runway at each baited point. Cover the opening with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Depending upon mound density, make two to five bait placements per burrow system. Recover and bury all spilled bait. Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow systems present.

BURROW BUILDER: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre (0.04 - 06 lb ai/A). Pick up and disposal of all spilled bait according to "Pesticide Disposal" instructions.

MACADAMIA NUT ORCHARDS AND ADJACENT NONCROP AREAS

USE RESTRICTIONS: For control of roof rats (Rattus rattus) in macadamia nut orchards and adjacent noncrop areas. Do not graze animals in treated areas.

SPOT TREATMENT: Bait must be placed in bait stations 1) on the ground at tree bases or 2) or in trees. Place 1-2 teaspoons (48 grams) of bait per bait station. 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 a harvesting round.

BURROW TREATMENT: Place 1-2 teaspoons (48 grams) 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 (0.1 lb ai/A) in orchard using a ground device or by hand. Aircraft may be used to treat adjacent noncrop areas if the Hawaii Dept of Health recommends and supervises such applications. The number of applications shall not exceed four (4) per year. The total amount of bait applied shall not exceed 20 pounds per acre (0.4 lb ai/A) per year.

NONBEARING NURSERY STOCK, CONIFER/CHRISTMAS TREE. POPLAR/COTTONWOOD, ORNAMENTAL, AND NONBEARING FRUIT TREE PLANTATIONS

USE RESTRICTIONS: For control of meadow voles, prairie voles, pine voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp.) in nursery stock, and conifer/Christmas tree, poplar/cottonwood. ornamental, and non-bearing fruit tree plantations. Do not apply by air.

BROADCASTING 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 per acre (0.12 - 0.2 lb ai/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 (4 grams) 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 over bait. Do not allow bait to be exposed on bare ground. Do not disturb the runway system. Bait at a rate of 2-3 lbs. per acre (0.04 - 0.06 lb ai/A) of infested stock.

NON-RESIDENTIAL LAWNS, ORNAMENTALS, GOLF COURSES, AND PARKS

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 lawns, ornamentals, golf courses, parks, and nurseries. Bait must not be applied on roads, over water or where plants are grown for food or feed.

HAND BAITING: For voles, place teaspoonful quantities (4 grams) of bait, 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 over bait. Allow bait to fall through to the ground surface but do not apply bait to bare ground. Do not

BAIT STATIONS: Place bait in tamper-resistance bait stations if children, pets, or nontarget mammals or birds may access the bait

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 non-residential lawns, ornamentals, golf courses, and parks. Bait must be applied directly into pocket gopher's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above ground.

HAND BAITING: Follow the directions indicated below to locate and treat pocket gophers' burrow systems.

Locating Underground Runways: Use a specially designed gopher probe, a metal rod, a strong smooth stick, or other suitable implement to probe the ground 10 to 15 inches away from fan-shaped gopher mounds. Begin probing on the flat side of the fan. When the main runway has been entered, the probe will drop about 2 inches due to decreased resistance from soil.

Applying Bait to Runways: Using a long-handled spoon or mechanical probe, drop one teaspoon (4 grams) of bait into the main runway at each baited point. Cover the opening with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Depending upon mound density, make two to five bait placements per burrow system. Recover and bury all spilled bait, Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow systems present.

BURROW BUILDER: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre (0.04 - 06 lb ai/A). Pick up and disposal of all spilled bait according to "Pesticide Disposal" instructions.

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (Microtus spp.) in alfalfa. All applications must occur shortly after a cutting of the hay, and/or prior to the next growth's attaining a length of 2 inches. Alfalfa forage from treated areas must not be harvested until it reaches maturity. This use is restricted to Montana, California, Idaho, Oregon, and Washington. BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply at a rate of up to 10 lbs. per acre (0.2 lb. ai/A). For voles, make two applications per year separated by a minimum interval of 25 days. A maximum of 20 lbs per acre (0.24 lb ai/A) may be applied per year. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment.

TIMOTHY AND TIMOTHY / ALFALFA and MIXTURES PRODUCED FOR HAY

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp) in timothy and timothy/alfalfa mixtures. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa mixtures. This use is restricted to California, Idaho, Oregon and Washington. Do not apply to timothy or timothy/alfalfa mixtures within 60 days of harvest. Do not graze animals in treated areas.

BROADCAST BAITING: Broadcast bait using by hand, cyclone seeder, or ground-driven dispensing devices. A maximum of 2 applications by ground may be made at the rate of 5 to 10 lbs. per acre (0.1-0.2 lb ai/A), one in the fall after the last cutting and one in the spring when timothy and timothy-legume mixtures are still dormant. Do not apply in piles or permit piles to be formed by equipment. A maximum of 20 lbs (0.4 lb ai/A) per acre may be applied annually.

TIMOTHY PRODUCED FOR SEED

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp.) 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 of ZP Ag Pellets and any livestock foraging activity. This use is restricted to Idaho, Oregon and the state of Washington. Do not graze

BROADCAST BAITING: This product may be broadcast by hand, cyclone seeder, or ground-driven dispensing devices at rates of up to 10 lbs (0.2 lb active ingredient) per acre during crop dormancy. A maximum of 20 lbs per acre (0.4 lb ai/A) may be applied annually.

GRAPE VINEYARDS

USE RESTRICTIONS: For control of deer mice (Peromyscus maniculatus), white-footed mice (P. leucopus), oldfield mice (P polionotus, except for threatened or endangered subspecies), meadow voles, prairie voles and pine voles (Microtus spp.), and meadow jumping mice (Zapus hudsonius) in grape vineyards. 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 graze animals in treated areas.

BROADCAST BAITING: Broadcast bait evenly on the ground between the rows by cyclone seeder or by hand. Wear rubber gloves during hand-broadcast operations. Apply bait at a rate of 6-10 lbs. per acre (0.12-0.2 lb ai/A). Do not apply by air.

RANGELAND, PASTURES, and ADJACENT NONCROP AREAS

KANGAROO RATS

USE RESTRICTIONS: This product may only be used to control Ord's kanaaroo rat (Dipodomys ordii). Banner-tailed kanaaroo rat (D. spectabilis) and Merriam's kangaroo rat (D. merriami) in rangleland, pastures and adjacent noncrop areas. BAITING: Place one tablespoon (12 grams) of bait at 2 locations on opposite sides of mounds in feeding runs within 3 ft of active burrow entrances.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (Spermophilus beecheyi) and Richardson's ground squirrels (S. richardii) in rangeland, pastures and adjacent noncrop areas. Product must not be applied on roads, near residential areas, POTATOES over water or where plants are grown for food or feed.

PREBAITING (Mandatory): Prebait with a 50/50 mixture of ground corn and wheat to enhance bait acceptance by California and Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Ag Pellets. BAITING: Treat only once during treatment period. Broadcast bait in a 10-15 foot swath using hand or ground-driven dispens-

ing devices not to exceed 6 lbs per acre (0.12 lb ai/A). Dispose of excess bait from application equipment by burial.

BUSHBERRIES AND CANEBERRIES

USE RESTRICTIONS: For control of meadow voles, prairie voles, and pine voles (Microtus spp.) in bushberries (highbush and lowbush blueberries, currants, elderberries, aooseberries 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 cyclone seeder, or by hand. When applying by hand, throw tablespoon amounts (12 grams) into heavy cover along bushes, rock outcrops, and fence lines. Make up to 2 applications at a minimum interval of 21 days, at the rate of 6 to 10 lbs per acre (0.12-0.2 lb ai/A) per application. Maximum application per growing season is 20 lbs per acre (0.4 lb gi/A).

CUCURBITS, REDUCED TILLAGE AND NO-TILL CORN

USE RESTRICTIONS: For control of prairie voles (Microtus ochrogaster), meadow voles (M. pennsylvanicus), house mice (Mus musculus), deer mice (Peromyscus maniculatus) white-footed mice (P. leucopus), thirteen-lined ground squirrels (Spermophilus tridecemlineatus), Ord's kangaroo rats (Dipodomys ordii), banner-tailed kangaroo rats (D. spectabilis), Merriam's kangaroo rats (D. merriami), 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 to 6 lbs. of bait per acre (0.08-0.12 lb/A). Collect and remove excessive quantities of bait deposited on surface soil or crop residues during spills or equipment malfunctions.

CALIBRATION / ROW

PACES INCHES	4 LBS/A RATE OZ. PER 1000 FT	5 LBS / A RATE OZ. PER 1000 FT	6 LBS / A RATE 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

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilis richardsonii) in growing-season and preplant applications in barley. Do not apply this product to barley within 50 days of harvest. This use is restricted to Montana, Idaho, Oregon and Washington. Do not graze animals in treated greas.

PREBAITING (Mandatory): Prebait with a 50/50 mixture of ground corn and wheat to enhance bait acceptance by Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Ag Pellets.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs. (0.12 lb active ingredient) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second bait application may be made after a minimum interval of 25 days. A maximum of 12 lbs per acre (0.24 lb ai/A) may be applied per year. All applications must be made prior to the boot stage.

USE RESTRICTIONS: For control of prairie voles (Microtus ochrogaster), meadow voles (M. pennsylvanicus), house mice (Mus musculus): deer mice (Peromyscus maniculatus), white-footed mice (P. leucopus), Ord's kanagroo rats (Dipodomys ordii), in dry beans during the growing season. Do not apply by air. Do not apply this product to dry beans within 30 days of harvest. This use is restricted to Idaho, Oregon and Washington.

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

SUGAR BEETS

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (Microtus spp.) in growing-season and preplant applications in sugar beets. 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 rates up to 10 lbs. per acre (0.2 lbs. ai/A) at planting. A second application may be made at the same rate. The maximum annual application rate is 20 lbs per acre (0.4 lb. ai/A).

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp.) in growing-season and pre-plant applications in potatoes. Do not apply this product to potatoes 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 once at a rate up to 10 lbs per acre (0.2 lb gi/A), or make two separate applications at rates of up to 5 lbs per acre (0.1 lb gi/A). The maximum annual application rate is 10 lbs per acre (0.2 lb ai/A).

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilus richardsonii) in growing-season and preplant applications in wheat. Do not apply this product to wheat within 50 days of harvest. This use is restricted to Montana, Idaho, Oregon and the state of Washington.

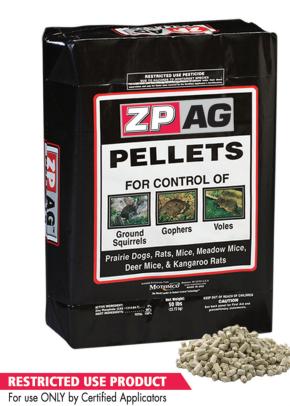
PREBAITING (Mandatory): Prebait with a 50/50 mixture of around corn and wheat to enhance bait acceptance by Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Ag Pellets.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate of up to 6 lbs. per acre (0.12 lb. ai/A) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second application may be made within 25 days. The maximum application rate per year is 12 lbs. per acre (0.24 lb. ai/A) per acre.

USE RESTRICTIONS: For control of Polynesian rats (Rattus exulans), Norway rats (R. norvegicus), roof rats (R. rattus), rice rats (Oryzomys palustris), Florida water rats (Neofiber alleni), and cotton rats (Sigmodon hispidus) in sugarcane fields. Do

PREBAITING (Strongly Recommended): Prebaiting with three pounds of untreated steamed crimped outs per acre one or two weeks prior to using toxic bait may enhance bait acceptance by rats.

BAITING: Broadcast bait by aircraft, ground-driven devices, or by hand at the rate of 5 lbs. of bait per acre (0.1 lb ai/A). For a 36 month cycle crop, the maximum number of applications is 4 per crop or 20 lbs per acre (0.4 lb ai/A) per crop, and the preharvest interval (PHI) is 30 days. For a 24 month cycle crop, the maximum number of applications is 4 per crop or 20 lbs per acre (0.4 lb ai/A) per crop, and the PHI is 90 days. For a 12 month cycle crop, the maximum number of application is 2 per crop or 10 lbs per acre (0.2 lb ai/A) per crop, and the PHI is 90 days. For all crop cycles, the retreatment interval is 30 days.





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ZP AG Oats

Usage and Application Guide

Must follow the directions for use on the container label.

NONCROP RIGHTS-OF-WAY

SPECIES: Ground Squirrels

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 early summer. This product must not be applied on roads, near residential areas, over water or where plants are grown for food or feed.

PREBAITING: Prebaiting with 6 lbs. of untreated steamed crimped oats per acre one or two days prior to using ZP RODENT OAT BAIT AG is likely to enhance bait acceptance by California ground squirrels.

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 6 lbs. per acre. Bait may be applied only to the canal right-of-way between the base of the levee and adjacent properties. The canal and levee may not be treated. Dispose of excess bait from application

RANGELAND AND ADJACENT NONCROP AREAS

SPECIES: Prairie Dogs and Kangaroo Rats

USE RESTRICTIONS: For control of black-tailed prairie dogs (*Cynomys ludovicianus*), white-tailed prairie dogs (*C. leucurus*) and Gunnison (*Zuni*) prairie dogs on rangeland in the western United States (North Dakota, South Dakota, Nebraska. Kansas. Oklahoma, Texas, New Mexico, Arizona, Colorado, Montana, Idaho, Utah and Wyoming).

PREBAITING: Prebait with 4 grams (one teaspoon) of untreated steamed crimped oats 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 adiacent feeding areas. Application rate should not exceed 4 grams (one teaspoon) per bait spot. Treat during mid-summer through midwinter period (July-January). Do not apply more than one bait application during this period. Dispose of spilled or unwanted bait by burial.

ΚΔΝGΔROO RΔΤΩ

USE RESTRICTIONS: For control of the Ord's kangaroo rats (Dipodomys ordii), banner-tailed kangaroo rats (D. spectabilis), and Merriam's kangaroo rats (D. merriami) in rangeland vegetation and noncrop areas. Do not apply this product within the occupied habitats of threatened or endangered species or subspecies of kangaroo rats.

HAND BAITING: Place one tablespoon (12 grams) of bait at 2 locations in feeding runs near the entrances to kangaroo rat

MACADAMIA NUT ORCHARDS AND ADJACENT NONCROP AREAS

USE RESTRICTIONS: For control of roof rats (*Rattus rattus*) in macadamia nut orchards and adjacent noncrop areas. SPOT TREATMENT: Bait may be placed in bait stations on the ground or in stations in trees. Place 1-2 teaspoons (4-8 grams) of bait in bait stations at the base of each tree and in each station 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 a harvesting round.

BURROW TREATMENT: Place 1-2 teaspoons (4-8 grams) 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 or 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

ORCHARDS AND GROVES

SPECIES: Voles and White-Footed Mice

USE RESTRICTIONS: For control of meadow voles, prairie voles, pine voles, California voles, long-tailed voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and white-footed mice in orchards and groves. Apply bait after harvest while the orchard or grove is in a nonhearing 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 lbs. per acre of infested trees

TRAILBUILDER: Set equipment to drop one teaspoon quantity (4 grams) 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 bait at the rate of 2-3 pounds per acre of

BROADCAST BAITING: Under infested trees broadcast bait evenly by cyclone seeder or by hand. Wear rubber aloves during hand-broadcast operations. Concentrate baiting in the areas with the heaviest vegetative cover. Do not broadcast on bare ground or growing crops. Apply bait at rates from 6-10 lbs. per treated acre.

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

USE RESTRICTIONS: For control of California Ground Squirrels (Spermophilus beecheyi) and Richardson's Ground Squirrels (Spermophilus richardii) in orchards and groves. Apply bait after harvest while the orchard and grove is in a nonbearing

PREBAITING: Prebaiting with 6 lbs. of untreated steamed crimped oats per acre one or two days prior to using ZP RODENT OAT BAIT AG is likely to enhance bait acceptance by California and Richardson's ground squirrels. HANDBAITING: Apply one teaspoon (4 grams) of bait on the ground near active burrows.

BAITING: Treat only once during treatment period. Broadcast bait using hand or ground-driven dispensing devices not to exceed 6 lbs. per acre. Wear rubber gloves during hand-broadcast operations. Dispose of excess bait from application

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 orchards and groves. Bait must be applied directly into pocket gopher's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above around.

HAND BAITING: Follow the directions indicated below to locate and treat pocket apphers' burrow systems.

Locating Underground Runways: Use a specially designed gopher probe, a metal rod, a strong smooth stick, or other suitable implement to probe the ground 10 to 15 inches away from fan-shaped gopher mounds. Begin probing on the flat side of the fan. When the main runway has been entered, the probe will drop about 2 inches due to decreased resistance from soil. Applying Bait to Runways: Using a long-handled spoon or mechanical probe, drop one teaspoon (4 grams) of bait into the main runway at each baited point. Cover the opening with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Depending upon mound density, make two to five bait placements per burrow system. Recover and bury all spilled bait.

BURROW BUILDER: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre. Pick up and bury all spilled bait.

Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow

SUGARCANE

SPECIES: Rats

USE RESTRICTIONS: For control of Polynesian rats (*Rattus exulans*), Norway rats (*R. norvegicus*), roof (*R. rattus*), rice rats (Oryzomys palustris), Florida water rats (Neofiber alleni), and cotton rats (Sigmodon hispidus) in sugarcane fields.

PREBAITING: Prebaiting with three pounds of untreated steamed crimped oats per acre one or two weeks prior to using ZP RODENT OAT BAIT AG may enhance bait acceptance by rats.

BAITING: Broadcast bait by aircraft, ground-driven devices, or by hand at the rate of 5 lbs. of bait per acre. Wear rubber gloves during hand-broadcast operations. The number of applications shall not exceed 4 per crop. The total application shall not exceed 20 lbs. per acre. Do not apply within 30 days of harvest.

NURSERY STOCK, CONIFER/CHRISTMAS TREE, POPLAR/COTTONWOOD, ORNA-MENTAL AND NON-BEARING FRUIT TREE PLANTATIONS

SPECIES: Voles

USE RESTRICTIONS: For control of meadow voles, prairie voles, pine voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp.) in nursery stock, and conifer/Christmas tree, poplar/cottonwood, ornamental. and nonbearing fruit tree plantations. Do not apply by air.

BROADCASTING 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. Wear rubber gloves during handbroadcast operations. Concentrate in areas with the heaviest vegetative cover. Do not broadcast on bare ground. Apply at a rate of 6-10 lbs, per acre.

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 (4 grams) 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 lbs. per acre of infested stock.

GRAPE VINEYARDS

USE RESTRICTIONS: For control of deer mice (*Peromyscus maniculatus*), white-footed mice (*P. leucopus*), oldfield mice (*P.* polionotus, except for threatened or endangered subspecies), meadow voles, prairie voles and pine voles (Microtus spp.), and meadow jumping mice (Zapus hudsonius) in grape vineyards. Do not use this product in areas of Alabama and Florida that are occupied by threatened or endangered subspecies of the oldfield mouse.

BROADCAST BAITING: Broadcast bait evenly on the ground between the rows by cyclone seeder or by hand. Wear rubber gloves during hand-broadcast operations. Apply bait at a rate of 6-10 lbs. per acre. Do not apply by air.

CROPLAND, RANGELAND, AND NONCROP AREAS

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 cropland (including alfalfa), rangeland, reforestation areas, Christmas trees, conifer/poplar/cottonwood plantations and noncrop areas (including lawns, golf courses and parks). Bait must be applied directly into pocket gopher's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above around 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: Follow the directions indicated below to locate and treat pocket gophers' burrow systems.

Locating Underground Runways: Use a specially designed gopher probe, a metal rod, a strong smooth stick, or other suitable implement to probe the ground 10 to 15 inches away from fan-shaped gopher mounds. Begin probing on the flat side of the fan. When the main runway has been entered, the probe will drop about 2 inches due to decreased resistance from soil.

Applying Bait to Runways: Using a long-handled spoon or mechanical probe, drop one teaspoon (4 grams) of bait into the main runway at each baited point. Cover the opening with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Depending upon mound density, make two to five bait placements per burrow system. Recover and bury all spilled bait. Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow

BURROW BUILDER: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre. Pick up and bury all spilled bait.

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilus richardsonii) in alfalfa. All applications must occur shortly after a cutting of the hay, and/or prior to the next growth's attaining a length of 2 inches. Alfalfa forage from treated areas must not be harvested until it reaches maturity. This use is restricted to Montana, California, Idaho, Oregon,

PREBAITING: When bait is to be used to control Richardson's ground squirrels, prebaiting with untreated steamed crimped oats at a rate of 6 lbs. per acre 2-3 days before ZP RODENT OAT BAIT AG is applied is likely to enhance acceptance of the toxic bait.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply at a rate of up to | BUSHBERRIES AND CANEBERRIES 10 lbs. (0.2 lb. active ingredient) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second bait application may be made after 10 days. A maximum of 20 lbs. (0.4 lb. active ingredient) per acre may be applied per year. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment.

TIMOTHY AND TIMOTHY/ALFALFA MIXTURES PRODUCED FOR HAY SPECIES: Voles

not apply to timothy or timothy/alfalfa mixtures within 60 days of harvest.

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp) in timothy and timothy/alfalfa mixtures. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa mixtures. This use is restricted to California, Idaho, Oregon and the state of Washington. Do

BROADCAST BAITING: Broadcast bait using by hand, cyclone seeder, or ground-driven dispensing devices. Wear rubber gloves during hand-broadcast operations. A maximum of 2 applications by ground may be made at the rate of 5 to 10 lbs. per acre, one in the fall after the last cutting and one in the spring when timothy and timothy-legume mixtures are still dormant. Do not apply in piles or permit piles to be formed by equipment.

TIMOTHY PRODUCED FOR SEED

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (*Microtus spp.*) 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 of ZP RODENT OAT BAIT AG and any livestock foraging activity. This use is restricted to Idaho, Oregon and the state of Washington. BROADCAST BAITING: This product may be broadcast by hand, cyclone seeder, or ground-driven dispensing devices at rates of up to 10 lbs (0.2 lb active ingredient) per acre during crop dormancy. Wear rubber gloves during hand-broadcast operations. A maximum of 20 lbs (0.4 lb active ingredient) per acre may be applied annually.

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilis richardsonii) in growing-season and preplant applications in barley. Do not apply this product to barley within 50 days of harvest. This use is restricted to Montana, Idaho, Oregon and the state of Washington.

PREBAITING: When bait is used to control Richardson's ground squirrels, prebaiting with untreated steamed crimped oats at a rate of 6 lbs. per acre 2-3 days before ZP RODENT OAT BAIT AG is applied is likely to enhance acceptance of the toxic bait. BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs. (0.12 lb active ingredient) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second bait application may be made after a minimum interval of 25 days. A maximum of 12 lbs (0.24 lb active ingredient) per acre may be applied per year. All applications must be made prior to the boot

POTATOES

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus sap.) in growing-season and pre-plant applications in potatoes. Do not apply this product to potatoes within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait once at a rate up to 10 lbs (0.2 lb active ingredient) per acre, or make two separate applications at rates of up to 5 lbs (0.1 lb active ingredient) per acre. The maximum application rate per year is 10 lbs (0.2 lb active ingredient).

SUGAR BEETS

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (Microtus spp.) in growing-season and preplant applications in sugar beets. Do not apply this product to sugar beets within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

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

WHEAT

SPECIES: Voles

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain vole Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilus richardsonii) in growing-season and preplant applications in wheat. Do not apply this product to wheat within 50 days of harvest. This use is restricted to Montana. Idaho, Oregon and the state of Washington.

PREBAITING: When bait is used to control Richardson's ground squirrels, prebaiting with untreated steam crimped oats at a rate of 6 lbs. per acre 2-3 days before ZP RODENT OAT BAIT AG is applied is likely to enhance acceptance of the toxic bait. BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate of up to 6 lbs. (0.12 lb. active ingredient) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second application may be made within 25 days. The maximum application rate per year is 12 lbs. (0.24 lb. active ingredient) per acre.

BEANS (DRY)

SPECIES: Voles, Mice and Rats

USE RESTRICTIONS: For control of prairie voles (Microtus ochrogaster), meadow voles (M. pennsylvanicus), house mice (Mus musculus); deer mice (Peromyscus maniculatus), white-footed mice (P. leucopus), and Ord's kangaroo rats (Dipodomys ordii), in dry beans during the growing season. Do not apply by air. Do not apply this product to dry beans within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

BROADCAST BAITING: This product may be broadcast by hand or ground-driven dispensing devices at a rate of 6 lbs. (0.12 lb. active ingredient) per acre. Wear rubber gloves during hand-broadcast operations. No more than one application per growing season is permitted.

SPECIES: Voles

USE RESTRICTIONS: For control of meadow voles, prairie voles, and pine voles (*Microtus spp.*) 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 cyclone seeder, or by hand. Wear rubber aloves during handbroadcast operations. When applying by hand, throw tablespoon amounts (12 grams) into heavy cover along bushes, rock outcrops, and fence lines. Make up to 2 applications at a minimum interval of 21 days, at the rate of 6 to 10 lbs. per acre per

CUCURBITS, REDUCED TILLAGE AND NO-TILL CORN

SPECIES: Voles, Mice and Rats

USE RESTRICTIONS: For control of prairie voles (Microtus ochrogaster), meadow voles (M. pennsylvanicus), house mice (Mus musculus), deer mice (Peromyscus maniculatus) white-footed mice (P. leucopus), thirteen-lined ground squirrels (Spermophilus tridecemlineatus), Ord's kangaroo rats (Dipodomys ordii), banner-tailed kangaroo rats (D. spectabilis), Merriam's kangaroo rats (D. merriami), 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 to 6 lbs. of bait per acre. Collect and remove excessive quantities of bait deposited on surface soil or crop residues during spills or equipment mal-

CALIBRATION / ROW

Row spaces Inches	4 lbs / A Rate oz. Per 1000 ft	5 lbs / A rate oz. Per 1000 ft	6 lbs / A rate of 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	

LAWNS, ORNAMENTALS, GOLF COURSES, PARKS AND NURSERIES

SPECIES: Voles and Ground Squirrel

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.), Columbian ground squirrels (S. columbianus), Richardson's ground squirrels (S. richardsonii), Thirteen-lined ground squirrels (Spermophilus tridecemlineatus), and California ground squirrels (Spermophilus beecheyi) in lawns, ornamentals, golf courses, parks and nurseries. Bait must not be applied on roads. over water or where plants are grown for food or feed.

PREBAITING: Prebait by placing one teaspoon (4 grams) of untreated steamed crimped outs ground each active burrow opening or in each active runway 2 or 3 days prior to using ZP RODENT OAT BAIT AG to enhance acceptance by ground squirrels or voles. HAND BAITING: Place 4 grams (one teaspoon) of bait around each active burrow opening or in each active runway. Allow bait to fall through to the ground surface but do not apply bait to bare ground. Do not place bait in heaps or piles.

AROUND AGRICULTURAL AND INDUSTRIAL STRUCTURES

SPECIES: Voles

USE RESTRICTIONS: This product may be used to control meadow voles (*Microtus pennsylvanicus*), prairie voles (*M. ochrogaster*), California voles (M. californicus), mountain voles (M. montanus), and pine voles (M. pinetis) around (within 15 feet of) agricultural, commercial and industrial buildings. Do not apply bait inside of structures.

Bait must be placed in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and by children under 6 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 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 or other potentially destructive animals, or in areas prone to vandalism. SELECTION OF TREATMENT AREAS: Determine where voles will most likely find and consume the bait. Look for runways near

buildings as well as signs of vole activity oriented toward the structures. PREBAITING: Prebaiting with untreated steamed crimped oats may improve acceptance of this product and encourage voles to enter bait stations. Apply a teaspoon amount (4 grams) of prebait to each bait station at least 2 days before the scheduled application of ZP RODENT OAT BAIT AG. Check bait stations for evidence of prebait consumption. Delay use of treated bait until

more than half of the prebait offered has been consumed. Remove remaining prebait from bait stations before loading them

BAITING: Apply a teaspoon (4 grams) of bait in each bait station. Space bait stations at intervals of 8-12 feet in infested areas. Maintain bait in stations for 3 days. Extend the baiting period only if there is continued evidence of feeding from the stations by voles.

AIRPORTS

SPECIES: Voles and Mice

USE RESTRICTIONS: This product may be used at airports to control meadow voles (*Microtus pennsylvanicus*), prairie voles (M. ochrogaster), California voles (M. californicus), mountain voles (M. montanus), pine voles (M. pinetis), and white-footed mice (Peromyscus leucopus). Do not apply bait to bare ground. Do not apply bait by air.

PREBAITING: Prebaiting with untreated steamed crimped oats may improve acceptance of this product. Apply prebait at the same rate and using the same procedures that are to be used for applying the toxic bait. Apply prebait 2 or 3 days before the scheduled application of ZP RODENT OAT BAIT AG.

Hand Baiting: Place a teaspoon (4 grams) of bait in surface runways or at the mouths of holes leading to underground bur-

Ground-Broadcast Baiting: Broadcast bait evenly by hand, by cyclone seeder, or by mechanical spreader mounted on a tractor or 4-wheel drive all-terrain vehicle (ATV). Wear rubber gloves during hand-broadcast operations. Apply treated bait at rates from 6 to 10 lbs. per acre. Do not broadcast bait on any area at an airport more than once per year.

ZINC PHOSPHIDE BAIT FROM THE WORLD LEADER IN RODENT CONTROL TECHNOLOGY



PELLETS • OATS





- Can be used on various crops for control of specific species of gophers, ground squirrels, prairie dogs and voles
- Broad label allows for broadcasting in orchards, grass grown for seed, vineyards, alfalfa, nurseries, sugar cane and others.
- Uniquely formulated to compete with natural food sources
- Proven effective with active ingredient uniformly incorporated throughout pellets or oats
- Durable pellet structure to minimize crumbling and dust
- Supported nationwide by a team of Motomco Territory Managers and Distributors
- Restricted Use Pesticide see product label for full application instructions
- Available in 50lb Pellets, 50 lb "Short" Pellets and 1450 lb Totes
- Squirrel Oats for Ground Squirrel Control available in 45lb Bags

40

40

■ Crimped Oats for Prairie Dog Control available in 33lb Bags

36095 ZP Ag 50lb Bag Pellets

36098 ZP Ag 1450lb. Tote Pellets

36081 ZP Ag 45lb. Squirrel Oats

36087 ZP Ag 33lb. Crimped Oats

36096 ZP Ag 50lb. Bag Short Pellets

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