

PP  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 30 1989

Ms. Juli Jessen  
Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366

Dear Ms. Jessen:

Subject: Revised Labeling to Reduce the Preharvest Interval  
for Almonds  
Gowan Azinphos-M 50 WP  
EPA Registration No. 10163-78  
Your Submission Dated December 29, 1988

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit five (5) copies of your final printed labeling before you release the product for shipment.
3. Revise the use direction for almonds to include the following restriction.

"Do not graze live stock in treated groves for 21 days after treatment."

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 constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

Dennis H. Edwards, Jr.  
Product Manager (12)  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

Enclosure

**RESTRICTED USE PESTICIDE**

Due to acute toxicity

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

# GOWAN AZINPHOS-M 50 WP

ACTIVE INGREDIENT	BY WT
O,O-Dimethyl S-(4-oxo-1,2,3-benzotriazin-3(4H-yl)) methyl phosphorodithioate	50.0%
INERT INGREDIENTS	50.0%
<b>TOTAL</b>	<b>100.0%</b>

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - POISON  
PELIGRO**



Red

**SEE BACK PANEL FOR ADDITIONAL PRECAUTIONS**

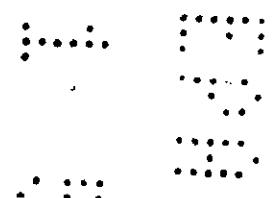
PRECAUCION AL USO: Contiene ingrediente tóxico. No use este producto hasta que el operador haya sido entrenado y certificado.

**STATEMENT OF PRACTICAL TREATMENT**

**HOW TO USE:** Call a physician or Poison Control Center immediately. Drink plenty of water and induce vomiting by touching back of throat with finger. Repeat until vomit is clear. Do not give anything by mouth to an unconscious person.

**SYMPTOMS:** Keep victim at rest. Apply artificial respiration if indicated. If necessary, flush eyes with plenty of water for at least 15 minutes, and continue until irritation has subsided.

**FIRST AID:** Remove contaminated clothing and wash thoroughly with soap and water.



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**NOTE TO PHYSICIAN**

**ANTIDOTE**—Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine. Azinphos-M inhibits cholinesterase, resulting in stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema which may develop in serious cases of poisoning, after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

**BEST AVAILABLE COPY**

NET WEIGHT \_\_\_\_\_ POUNDS

*Contains 10 one-pound water soluble packages*

*Gowan Company*

EPH Reg. No. 10163-76  
EPH Est. No. 10163-AZ

P.O. Box 5696  
Yuma, AZ 85364

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER--POISON

Fatal if swallowed, inhaled or absorbed through the skin. Do not breathe vapor, dust or spray mist. Do not get in eyes, on skin, or on clothing. Wash hands, arms and face thoroughly with soap and warm water before eating or smoking. Keep out of reach of children and domestic animals. Do not contaminate feed or foodstuffs. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Work Safety Rules: If handled indoors provide mechanical exhaust ventilation. Keep all unprotected persons, children, livestock, and pets away from treated areas or where there is danger of drift.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See First Aid section of the label.

For questions regarding further treatment, or information about the product, call the National Pesticide Telecommunications Network at 800-858-7378.

HANDLE THE CONCENTRATE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT: Wear a protective suit of one or two pieces that covers all parts of the body except the head, hands, and feet. Wear chemical resistant gloves, chemical resistant apron, and chemical resistant shoes, shoe coverings, or boots. Wear goggles or a face shield and a pesticide respirator approved by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part II.

WEAR THE FOLLOWING PROTECTIVE CLOTHING DURING APPLICATION, EQUIPMENT REPAIR, EQUIPMENT CLEANING, DURING REENTRY TO TREATED AREAS, AND DISPOSAL OF THE PESTICIDE: Wear a protective suit of one or two pieces that covers all parts of the body except the head, hands, and feet. Wear chemical resistant gloves and chemical resistant shoes, shoe coverings, or boots. Wear a chemical resistant hat during airblast application.

During application from an enclosed tractor cab or airplane cockpit, or other suitable vehicle in which the windows are rolled up, long sleeved shirt and long pants may be worn in place of the above protective clothing. Chemical resistant gloves must be worn while exiting. This clothing is inadequate to protect you during equipment repair, equipment cleaning, re-entry, or during pesticide disposal.

IMPORTANT! BEFORE REMOVING GLOVES, WASH THEM WITH SOAP AND WATER. ALWAYS WASH HANDS, FACE, AND ARMS WITH SOAP AND WATER BEFORE SMOKING, DRINKING, EATING OR TOILETING. After work take off all clothing and shoes. Shower using soap and water. Do not wear contaminated clothing. Wash protective clothing and protective equipment with soap and water after each use. Respirators must be cleaned and filters replaced according to instructions included with respirators. Personal clothing worn during use must be laundered separately from household articles. Clothing and protective equipment heavily contaminated or drenched with azinphos-methyl must be destroyed according to state and local regulations. HEAVILY CONTAMINATED OR DRENCHED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

During aerial application, human flaggers are prohibited unless in totally enclosed vehicle.

Symptoms of Poisoning: A sense of "lightness" in the chest. Sweating. Contracted pupils. Stomach pains. Vomiting and diarrhea. TREATMENT: In case of poisoning, call a physician immediately (See Statement of Practical Treatment section, also)

Back panel  
right column

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and wildlife. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

This product is highly toxic to bees exposed to direct treatment or residues on crops or blooming weeds. Do not apply this product or allow it to drift to crops or weeds when bees are actively visiting the treatment area. Time applications to provide the maximum possible interval between treatment and the next period of bee activity. Protective information may be obtained from your Cooperative Agricultural Extension Service.

### DIRECTIONS FOR USE

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

### RE-ENTRY STATEMENT

Do not enter treated areas for 24 hours after application unless protective clothing is worn, as described in the product labeling.

Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written and oral warnings must include the following information: DANGER—Area treated with Azinphos-M on (date of application). Do not enter without appropriate protective clothing for 24 hours. In case of accidental exposure, follow instructions under Statement of Practical Treatment section.

### STORAGE AND DISPOSAL

STORE IN a cool, dry place below 120 F. Do not store next to herbicides.

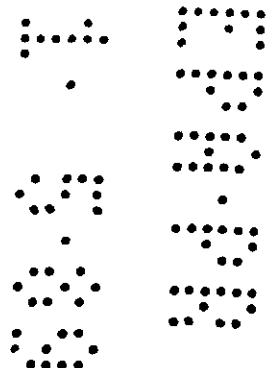
DO NOT CONTAMINATE water, food or feed by storage or disposal. Open dumping is prohibited.

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.

### CROP USE INSTRUCTIONS

See attached booklet/folder for application instructions



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# GOWAN AZINPHOS-M 50 WP

EPA Reg. No. 10163-78

IN WATER SOLUBLE BAGS

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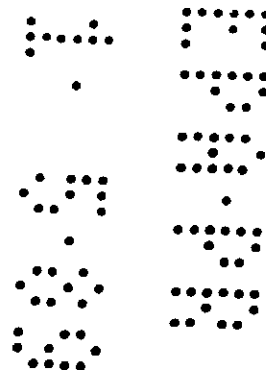
## Directions For Use

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GOWAN COMPANY  
P.O. Box 5690  
Yuma, AZ 85364

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

**DIRECTIONS FOR USE OF WATER SOLUBLE BAGS:** Packets containing Gowan Azinphos-M 50 WP are water soluble. Do not allow packet to become wet prior to adding to the spray tank. Do not handle with wet hands. Reseal outer bag to protect remaining packets. To prepare the spray mixture, drop the required number of unopened packets, as determined under "recommendations," into spray tank while filling with water to the desired level. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately 5 minutes from the time they were added to the water. Use the specified dosage of Gowan Azinphos-M 50 WP in the amount of water necessary to give complete coverage of foliage. Determine the total amount of wettable powder to be added to the spray tank based on the rates under "Recommendations." For each 1 pound of wettable powder to be added to the spray tank, use one 1 pound packet.



**BEST AVAILABLE COPY**

Booklet (2)

**SPRAYING**

Prepare water dilutions appropriate for type of equipment used as described in DILUTION DIRECTIONS. When applying, work to windward. Protect sprayer operators from drift or mist. When low volumes of spray are applied, complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service for specific use information in your area.

**DILUTION DIRECTIONS**

The rate required for thorough, uniform coverage varies with plant growth at time of application. Except as specified for certain uses, the following rates are therefore intended to cover a broad range of applications.

**Dilute Application**

Field and Row Crops: Apply specified rate in 20 to 75 gallons of water per acre.

Trees and Vines: Apply specified rate in 100 to 800 gallons of water per acre. For citrus, use up to 2,000 gallons of water per acre.

**Concentrate Application**

Ground Application: Apply specified rate in not less than 5 gallons of water per acre.

Trees and Vines: Apply specified rate in 20 to 100 gallons of water per acre. Special concentrate equipment is required for these applications.

**Air Application**

Field and Row Crops: Apply specified rate in a minimum of 3 gallons of water per acre.

Trees and Vines: Apply specified rate in a minimum of 10 gallons of water per acre. When tank mixing with other products, a premix is suggested to achieve a uniform suspension.

**ROTATIONAL CROPS**

Do not plant root crops other than those with registered azinphos-methyl uses in azinphos-methyl treated soil sooner than 6 months after the last application. Do not plant any other crop other than those with registered azinphos-methyl uses in treated soil sooner than 30 days after last application.

**GENERAL USE PRECAUTIONS AND RESTRICTIONS**

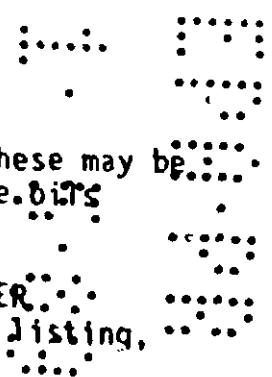
Do not use for any food or forage crop not listed on this labeling. Use only according to label directions. Application at rates above those shown may result in illegal crop residues.

Do not apply this product through any type of irrigation system.

Gowan Azinphos-M 50 WP is compatible with dormant and summer oils; these may be added to sprays in accordance with local recommendations. Do not use within 30 days of sulfur or lime sulfur treatment.

**DO NOT GRAZE LIVESTOCK IN TREATED ORCHARDS OR GROVES FOR 21 DAYS AFTER TREATMENT.** Where specific grazing restrictions are given for a crop listing, follow these specific directions.

Do not treat food crops grown in the greenhouse.





Bugs, Spittlebug—1 to 1½ lbs per acre. Apply using a minimum of 10 gallons of water per acre. 20 to 25 gallons of water per acre (with ground equipment) may be necessary on heavy growth for control of Alfalfa Weevil or Egyptian Alfalfa Weevil. DO NOT apply within 14 days of harvest at rates from ½ to ¾ lb per acre, or within 16 days of harvest at rates of 1 lb per acre. DO NOT apply rates above 1 lb per acre within 21 days of harvest. DO NOT apply more than once per cutting at any rate.

**BARLEY; OATS; RYE; WHEAT:** Cereal leaf Beetle—Apply ¾ to 1 lb per acre in sufficient water for complete coverage. DO NOT apply more than once per season. DO NOT harvest for food, feed, forage or graze within 30 days of treatment.

**COTTON:** Bollweevil—½ to ½ lb per acre. Pink Bollworm—1 to 2 lbs per acre. Brown Cotton Leafworm, Cotton Fleahopper, Cotton Leafworm, Thrips—½ lb per acre. Rapid Plant Bug, Tarnished Plant Bug—½ to 1 lb per acre. Apply by ground or air equipment in sufficient water for complete coverage, but not less than 5 gallons of water per acre. For early season control of Pink Bollworm, use 1 to 1½ lbs, and for mid- to late-season applications, use 1½ to 2 lbs. Repeat as necessary. DO NOT apply within 1 day of picking. Cotton receiving late-season applications should not be pastured.

**SOYBEANS:** Aphids, Bean Leaf Beetle, Green Cloverworm, Leafhoppers, Leaf Miners, Leaf Rollers, Stink Bugs, Velvet Bean Caterpillar—Apply ¾ to 1 lb per acre. Mexican Bean Beetle—Apply 1 to 1½ lbs per acre. Apply in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 45 days of harvest. DO NOT graze or feed treated vines to livestock.

**TOBACCO:** Aphids, Grasshoppers, Tobacco Hornworm, Tobacco Flea Beetle—1 to 1½ lbs per acre. Tobacco Budworm—½ to 1 lb per acre. Apply in sufficient water for complete coverage. Treat for Hornworms as soon as egg masses or worms are first found. Repeat as necessary. DO NOT apply within 6 days of harvest. Prime before treating.

**FRUIT**

**APPLES; CRABAPPLES; PEARS; QUINCES:** Aphids, Apple Maggot, Codling Moth, European Apple Sawfly, Eye-Spotted Bud Moth, Forbes Scale, Fruit Tree Leaf Roller, Green Fruitworm, Leafhoppers, Mealybugs, Mites, Orange Tortrix, Pear Psylla, Plum Curculio, Putnam Scale, Red-Banded Leaf Roller, San Jose Scale, Stink Bug, Tarnished Plant Bug—Apply ½ to ¾ lb in 100 gallons of water as a full coverage spray\* using not more than 1000 gallons of finished

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**BLACKBERRIES; RASPBERRIES:** 1 lb per acre

(Limited to states East of the Mississippi River)

**RECOMMENDATIONS  
FIELD CROPS**

**ALFALFA, CLOVER** (except in California): Leafhoppers, Mites—½ to 1 lb per acre. Alfalfa Weevil, Egyptian Alfalfa Weevil—½ to 1½ lbs per acre. Alfalfa Plant Bug, Fleahopper, Grasshoppers, Lygus

**GRAPES:** Grape Berry Moth, Grape Cane Girdlers, Grape Mealybug, Leafhoppers, Mites, Red-Banded Leaf Rollers, Thrips—Apply 1/2 to 1 lb. in 100 gallons of water as a full coverage spray\* using not more than 300 gallons of finished spray per acre. Repeat as necessary. DO NOT apply more than 3 times per season. Minimum dosage specified may be applied up to harvest. Rates up to 1/2 lb. require a 10 day interval to harvest, above 1/2 lb. a 28 day interval to harvest.

**STRAWBERRIES:** Aphids, Meadow Spittlebug, Oblique Banded Leaf Roller, Obscure Root Weevil, Omnivorous Leaf Tier, Peach Leaf Weevil, Small Black (Grass) Weevil, Strawberry Leaf Rollers, Whitefly—Apply 1 lb. in 200 gallons of water per acre as a full coverage spray\*. Repeat as necessary. DO NOT apply within 5 days of harvest.

**NUTS**

**ALMONDS:** Fruit Twig Borer—Apply 1/2 to 1 lb. in 100 gallons of water as a full coverage spray\* using not more than 500 gallons of finished spray per acre. DO NOT apply more than twice per season. DO NOT apply within 30 days of harvest. Allow 30 days between applications. Navel Orangeworm, Peach Twig Borer (in California)—Apply 3 to 4 lbs. per acre by concentrate sprayer or as a full coverage spray using not more than 400 gallons of finished spray per acre. If conditions dictate an aerial spray, apply specified dosage by aircraft is not less than 20 gallons of water per acre. Do not apply more than one dormant spray or two post-bloom sprays per season, nor within 14 days of harvest. Allow at least 120 days between the dormant and the first post-bloom spray, and at least 28 days between the post-bloom sprays.

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**FILBERTS (Pacific Northwest Only):** Apple Mealybug, Filbert Aphid, Filbert Leaf Roller, Filbertworm—Apply 1/2 to 1 lb. in 100 gallons of water as a full coverage spray\* using not more than 1000 gallons of finished spray per acre. Repeat as necessary. DO NOT apply within 30 days of harvest. DO NOT graze livestock in treated groves for 21 days after treatment.

**PECANS:** Aphids, Fall Webworm, Hickory Shuckworm, Leaf Miners, May Beetles, Mites, Pecan Casebearer, Southern Green Stink Bug, Spittlebugs, Twig Girdlers, Walnut Caterpillars—Apply 1/2 to 1 1/2 lbs. in 100 gallons of water as a full coverage spray\* using not more than 1800 gallons of finished spray per acre. Repeat as necessary. DO NOT apply after husks split. Where more than 1 1/2 lbs. of Gowan Azinphos-M 50 WP are applied per acre in a single application, DO NOT graze livestock in treated groves. Where 1 1/2 lbs. or less of Gowan Azinphos-M 50 WP are applied per acre, livestock may be grazed in treated groves after a 21 day post-treatment interval.

**NUTS:** Aphids, Codling Moth, European Red

Mite, Filbertworm, Navel Orangeworm—Apply 1/4 to 1 1/2 lbs. in 100 gallons of water as a full coverage spray\* using not more than 1100 gallons of finished spray per acre. Repeat as necessary. DO NOT apply after husks split. DO NOT graze livestock in treated groves for 21 days after treatment.

**VEGETABLES**

**ARTICHOKEs:** Plum Moth—Apply 3 lbs. per acre in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 30 days of harvest. DO NOT feed or ensile treated forage.

**BEANS (Dry and Snap):** Leaf Rollers, Mites—1/2 to 1 lb. per acre. Aphids, Bean Leaf Beetle, Green Clover worm, Leafhoppers, Leaf Miners, Stink Bugs, Velvet Bean Caterpillar—Apply 1/2 to 1 lb. per acre. Mexican Bean Beetle, Spotted Cucumber Beetle, Striped Cucumber Beetle, Tarnished Plant Bug, Western Striped Cucumber Beetle—1 lb. per acre. Apply in sufficient water for complete coverage. Repeat as necessary. DO NOT apply to Snap Beans within 7 days of harvest. DO NOT apply to Dry Beans within 30 days of harvest. DO NOT exceed 4 applications on Dry Beans. DO NOT feed or ensile treated forage.

**BLACKEYED PEAS (Southern Peas; Crowder Peas):** Corn Earworm, Cowpea Curculio—1 1/2 to 2 lbs. per acre. Leaf Miners, Stink Bugs—1/4 to 1 lb. per acre. Apply in sufficient water for complete coverage. DO NOT apply more than 4 times per season. DO NOT apply within 7 days of harvest. DO NOT use vines for feed or forage. DO NOT pasture treated areas.

**BROCCOLI; BRUSSELS SPROUTS; CABBAGE, CAULIFLOWER:** Aphids, Cabbage Looper, Diamondback Moth, Imported Cabbageworm—Apply 1 to 1 1/2 lbs. per acre in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 7 days of harvest for Brussels Sprouts, 15 days of harvest for Broccoli and Cauliflower, or within 21 days of harvest for Cabbage. Cabbage Maggot—Mix 1/2 to 1 lb. in 50 gallons of water. Apply 4 to 6 ounces of this emulsion per plant at, or immediately after transplanting.

**BROCCOLI; BRUSSELS SPROUTS; CABBAGE; CAULIFLOWER (Direct-Seeded Fields in California Only):** Cabbage Maggot—Apply 1 1/2 lbs. per acre in sufficient water for uniform distribution. Mix in upper 2 inches of soil prior to seeding, or spray in the seed row at planting time. Usually, 2 to 3 additional sprays are necessary during the growing season, depending on time of year and maggot population. DO NOT apply within 21 days of harvest.

**BROCCOLI; BRUSSELS SPROUTS; CABBAGE; CAULIFLOWER (Transplant Fields in California Only):** Cabbage Maggot—Apply 1 1/2 lbs. in 300 to 400 gallons of water per acre as a soil drench in rows when damage first appears. Additional applications may be necessary. DO NOT apply within 21 days of harvest.

**CELERY:** Aphids, Leaf Miners, Leafhoppers, Spittlebug, Tarnished Plant Bug—Apply 1 lb. in 100 gallons of water as a full coverage spray\* using not more than 200 gallons of finished spray per acre.

Repeat as necessary. DO NOT apply within 14 days of harvest.

**CUCUMBERS:** Spotted Cucumber Beetle, Striped Cucumber Beetle, Western-Striped Cucumber Beetle—Apply 1 lb. per acre in sufficient water for complete coverage. DO NOT apply within 1 day of harvest.

**EGGPLANT:** Leaf Miners—1/4 to 1 lb. per acre. European Corn Borer, Flea Beetles—1 lb. per acre. Apply in sufficient water for complete coverage. Repeat as necessary. DO NOT apply after fruit set.

**ONIONS (Green and Dry):** Thrips—Apply 1 to 1 1/2 lbs. per acre in sufficient water for complete coverage. DO NOT apply more than 3 times per season. DO NOT apply within 28 days of harvest on Dry Onions or within 7 days of harvest on Green Onions.

**PEPPERS:** Leaf Miners—1/4 to 1 lb. per acre. European Corn Borer, Flea Beetles—1 lb. per acre. Apply in sufficient water for complete coverage. A maximum of 4 treatments may be made up to within 3 days of harvest. Where more than 4 applications are required, DO NOT apply last spray within 14 days of harvest.

**POTATOES:** Colorado Potato Beetle—1/2 lb. per acre. Banded Cucumber Beetle, Leaf Miners—1/4 to 1 lb. per acre. European Corn Borer, Flea Beetle, Leafhoppers, Spittlebug, Tarnished Plant Bug—1 to 1 1/2 lbs. per acre. Tuberworm—1 1/2 to 1 1/2 lbs. per acre. Apply in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 7 days of harvest.

**SPINACH:** Aphids, Leaf Miners, Mites—Apply 1/4 to 1 lb. per acre in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 14 days of harvest.

**TOMATOES:** Colorado Potato Beetle—1/2 lb. per acre. Banded Cucumber Beetle, Drosophila, Green Stink Bug, Leaf Miners, Whitefly—1/4 to 1 lb. per acre. Aphids, European Corn Borer, Flea Beetles, Grasshoppers, Leafhoppers, Thrips—1 to 1 1/2 lbs. per acre. Tuberworms—1 1/2 to 1 1/2 lbs. per acre. Corn Earworm, Fruitworm, Pinworm, Yellow-Striped Armyworm, Hornworm—1 1/2 to 3 lbs. per acre. Apply in sufficient water for complete coverage. Repeat as necessary. The high rates should be used where heavy infestations of late-instar lepidopterous larvae (large worms) and pinworms are present. Rates of 1 1/2 lbs. per acre or less may be applied up to day of harvest. Rates above 1 1/2 lbs. per acre require an interval of 14 days between application and harvest.

**MELONS**

**MELONS (Honeydew Melons, Muskmelon (Cantaloupe), Watermelons, other Melons):** Leafhoppers; Leaf Miners—1/4 to 1 lb. per acre. Rindworms, Spotted Cucumber Beetle, Striped Cucumber Beetle, Western-Striped Cucumber Beetle—1 lb. per acre. Apply in sufficient water for complete coverage. Repeat as necessary up to day of harvest, but not more than 4 times per season.

**ORNAMENTALS**

**ORNAMENTALS; NURSERY PLANTS; SHADE TREES**

Aphids, Cerberid Scale, Eulonymus Scale, Juniper Scale, Lace Bugs, Leafhoppers, Mites, Olive Scale, Oystershell Scale, Pulvinaria Scale, Thrips—1/2 to 1 lb. Brown Soft Scale, Putnam Scale—2 lbs. Black Pine Leaf Scale, European Elm Scale—1 1/2 to 2 lbs. Apply per 100 gallons of water (2 level teaspoonfuls per gallon). Spray all foliage surfaces including the underside of leaves for complete coverage. For control of Black Pine Leaf, Brown Soft, European Elm, and Putnam Scales, use 4 level teaspoonfuls per gallon. Repeat as necessary.

For Cone Midge and Cone Moth, apply 4 to 8 lbs. per 100 gallons of water. Time applications to coincide with moth flight when cones are open for pollination. Thorough coverage of cones is necessary for maximum control. Repeat as necessary.

For European Pine Shoot Moth and Nantucket Pine Tip Moth, apply 1/2 to 1 1/2 lbs. per acre in sufficient water for good coverage. Time applications to coincide with moth flights. For application to individual trees, use 1 level teaspoonful of Gowan Azinphos-M 50 WP per gallon of water.

\*This dosage is calculated for conventional hydraulic-type sprayers. When lower volumes of spray are applied per acre with concentrate sprayers, increase the concentration of Gowan Azinphos-M 50 WP in the spray mixture in order to apply amount of Gowan Azinphos-M 50 WP per acre equivalent to a full coverage spray. See "Directions" for water dilution guidelines.

**NOTICE ON CONDITIONS OF SALE**

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other material.

booklet - (3)

Bugs, Spittlebug—1 to 1½ lbs per acre. Apply using a minimum of 10 gallons of water per acre. 20 to 25 gallons of water per acre (with ground equipment) may be necessary on heavy growth for control of Alfalfa Weevil or Egyptian Alfalfa Weevil. DO NOT apply within 14 days of harvest at rates from ½ to ¾ lb per acre, or within 16 days of harvest at rates of 1 lb per acre. DO NOT apply rates above 1 lb per acre within 21 days of harvest. DO NOT apply more than once per cutting at any rate.

**BARLEY; OATS; RYE; WHEAT:** Cereal leaf Beetle—Apply ¾ to 1 lb per acre in sufficient water for complete coverage. DO NOT apply more than once per season. DO NOT harvest for food, feed, forage or graze within 30 days of treatment.

**COTTON:** Bollweevil—¼ to ½ lb per acre. Pink Bollworm—1 to 2 lbs per acre. Brown Cotton Leafworm, Cotton Fleahopper, Cotton Leafworm, Thrips—½ lb per acre. Rapid Plant Bug, Tarnished Plant Bug—½ to 1 lb per acre. Apply by ground or air equipment in sufficient water for complete coverage, but not less than 5 gallons of water per acre. For early season control of Pink Bollworm, use 1 to 1½ lbs, and for mid- to late-season applications, use 1½ to 2 lbs. Repeat as necessary. DO NOT apply within 1 day of picking. Cotton receiving late-season applications should not be pastured.

**SOYBEANS:** Aphids, Bean Leaf Beetle, Green Cloverworm, Leafhoppers, Leaf Miners, Leaf Rollers, Stink Bugs, Velvet Bean Caterpillar—Apply ¾ to 1 lb per acre. Mexican Bean Beetle—Apply 1 to 1½ lbs per acre. Apply in sufficient water for complete coverage. Repeat as necessary. DO NOT apply within 45 days of harvest. DO NOT graze or feed treated vines to livestock.

**TOBACCO:** Aphids, Grasshoppers, Tobacco Hornworm, Tobacco Fire Beetle—1 to 1½ lbs per acre. Tobacco Budworm—1½ lbs per acre. Apply in sufficient water for complete coverage. Treat for Hornworms as soon as egg masses or worms are first found. Repeat as necessary. DO NOT apply within 6 days of harvest. Prime before treating.

**FRUIT**

**APPLES; CRABAPPLES; PEARS; QUINCES:** Aphids, Apple Maggot, Codling Moth, European Apple Sawfly, Eye-Spotted Bud Moth, Forbes Scale, Fruit Tree Leaf Roller, Green Fruitworm, Leafhoppers, Mealybugs, Mites, Orange Tortrix, Pear Psylla, Plum Curculio, Putnam Scale, Red-Banded Leaf Roller, San Jose Scale, Stink Bug, Tarnished Plant Bug—Apply ½ to ¾ lb in 100 gallons of water as a full coverage spray\* using not more than 1000 gallons of finished

spray per acre. Repeat as necessary. DO NOT apply more than 8 times per season, or within 15 days of harvest. An alternate spray schedule may be used by making 6 applications at rates of ½ to ¾ lb, followed by 2 applications at the ½ lb rate, but not within 7 days of harvest. Gowan Azinphos-M 50 WP is compatible with dormant and summer oils, which may be added to APPLE and PLUM sprays in accordance with local recommendations. DO NOT use oils within 30 days of sulfur or lime-sulfur treatments. **FOR AERIAL APPLICATIONS:** Apply 2 to 3 lbs in a minimum of 3 gallons of water per acre for the Northwestern States, and a minimum of 10 gallons of water per acre in other areas. Apply by fixed-wing or helicopter aircraft. Where Aphids and Mites are a problem, aerial applications may not provide satisfactory control. DO NOT apply more than 5 times at the 2 lb rate, or 3 times at rates above 2 lbs. DO NOT apply within 7 days of harvest.

**APRICOTS; NECTARINES; PEACHES:** Aphids, Cottony Peach Scale, European Fruit Lecanium Scale, Forbes Scale, Lesser Peach Tree Borer, Mites, Peach Tree Borer, Platynota flavedana Leaf Roller, Plum Curculio, Red-Banded Leaf Roller, San Jose Scale, Stink Bug, Tarnished Plant Bug, Terrapin Scale, Walnut Scale, White Peach Scale—½ to ¾ lb. Oriental Fruit Moth, Peach Twig Borer—½ to ¾ lbs. **NECTARINES:** Thrips—½ to ¾ lb. **PLUMS; PRUNES:** Aphids, Eye-Spotted Bud Moth, Forbes Scale, Fruit Tree Leaf Roller, Lesser Peach Tree Borer, Mites, Orange Tortrix, Peach Tree Borer, Peach Twig Borer, Plum Curculio, Red-Banded Leaf Roller, San Jose Scale, Stink Bug, Tarnished Plant Bug, Tussock Moth—½ to 1 lb. American Plum Borer—1 lb. Apply in 100 gallons of water as a full coverage spray\* using not more than 800 gallons of finished spray per acre. Repeat as necessary. DO NOT apply more than 8 times per season. DO NOT apply within 21 days of harvest for Apricots, Nectarines and Peaches or within 15 days of harvest for Plums and Prunes. Apply the ¾ lb rate for Oriental Fruit Moth and Peach Twig Borer on Apricots, Nectarines and Peaches or before mid-season. For control of Peach Tree Borer, apply 2 or 3 sprays to trunk from ground to scaffold limbs, timed with moth flight. For Scale control, apply when crawlers are present. Gowan Azinphos-M 50 WP is compatible with dormant and summer oils, which may be added to Peach and Prune sprays in accordance with local recommendations. DO NOT use oils within 30 days of sulfur or lime-sulfur treatments. **NOTE:** It is suggested that when treating Nectarines during bloom period, beekeepers should be warned well in advance to remove hives a safe distance from orchards to be treated.

**BLACKBERRIES; BOYSENBERRIES; LOGANBERRIES RASPBERRIES:** Leafhoppers, Leaf Roller—½ lb per acre. Leaf Miners—½ lb per acre. Aphids—¾

to 1 lb per acre. Obsolete Root Weevil—1 lb per acre. Raspberry Crown (Root) Borer—2 to 4 lbs per acre. Apply to foliage using 200 gallons of water for good coverage. Repeat as necessary. DO NOT apply within 14 days of harvest. For Root Weevil and Borer control prior to harvest, apply dosage to lower portion of canes and to the soil beneath the plants, in 200 gallons of water. DO NOT apply more than once per season. DO NOT make applications within 14 days of harvest at rates up to 2 lbs per acre. Rates above 2 lbs per acre should be applied only before fruit set or after crop is harvested.

**BLUEBERRIES (Eastern and North Central States Only):** Blueberry Maggot, Fruitworms, Lecanium Scale, Plum Curculio—Apply 1 to 1½ lbs per acre in 200 gallons of water for good coverage. Repeat as necessary. DO NOT apply more than 4 times per season or within 3 days of harvest. If multiple season applications of Gowan Azinphos-M 50 are to be made for Blueberry Maggot control, NOT make more than 2 spray applications of Gowan Azinphos-M 50 WP per season, with the last spray no later than June 15.

**CHERRIES (Except in California):** Eye-Spotted Bud Moth, Forbes Scale, Fruit Flies, Fruit Tree Leaf Roller, Lesser Peach Tree Borer, Mites, Plum Curculio, San Jose Scale—½ to 1 lb. Cherry Leaf Miner, Mite Moth—½ lb. Apply in 100 gallons of water as a full coverage spray\* using not more than 800 gallons of finished spray per acre. Repeat as necessary. DO NOT apply more than 8 times per season, or within 15 days of harvest.

**CITRUS FRUITS:** Aphids, Black Scale, Brown Scale, Chaff Scale, Citricola Scale, Citrus Mealybug, Citrus Rust Mite, Citrus Thrips, Cottony-Cush Scale, European Brown Snail, Florida Red Scale, Fruit Tree Leaf Rollers, Fuller Rose Beetle, Glass Scale, Orange Tortrix, Purple Scale, Snow Scale, Western Tussock Moth, Whiteflies—½ to ¾ lb. California Red Scale, Texas Citrus Mite, Yellow Scale—¾ lb. Apply in 100 gallons of water as a full coverage spray\* using not more than 2000 gallons of finished spray per acre. A single application per year may be applied up to within 7 days of picking. Where 2 applications are required, DO NOT apply the second spray within 28 days of harvest. DO NOT apply more than twice per fruit year. DO NOT spray fruit or do other work involving contact with the fruit, such as pruning, within 7 days of treatment.

**CRANBERRIES:** Cranberry Fruitworm, Spargano sulfureana Tipworm—1 to 2 lbs per acre. Fruitworms—2 lbs per acre. Apply in 200 gallons of water for good coverage. Repeat as necessary. DO NOT apply within 21 days of harvest.

(Limited to states East of the Mississippi River)

**RECOMMENDATIONS FIELD CROPS**

**ALFALFA, CLOVER (except in California):** Leafhoppers, Mites—½ to 1 lb per acre. Alfalfa Weevil, Egyptian Alfalfa Weevil—¾ to 1½ lbs per acre. Alfalfa Plant Bug, Fleahopper, Grasshoppers, Lygus