

## 09/28/2005





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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Kimberly S. Gilbert Mycogen Corp c/o Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

SEP 2 8 2005

Dear Ms. Gilbert:

Subject:

Labeling Amendment

M-Pede Insecticide/Fungicide EPA Registration No: 62719-515 Submission Date: September 2, 2005

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provisions:

1) The flash point/flame extension recorded on the Confidential Statement of Formula dated June 9, 2004 for the basic formulation requires that the following statement remain on the label:

Physical or Chemical Hazards
Flammable. Keep away from heat and open flame.

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the referenced label, incorporating the above changes, before releasing the product for shipment. If you have any questions regarding this letter, please contact Kable Bo Davis at (703) 306-0415.

Sincerely yours,

Daniel C. Kenny Product Manager (01) Insecticide-Rodenticide Branch Registration Division (7505C)

Enclosure.

a/<sub>N</sub>

(Base Label):

M-Pede<sup>®</sup>

Insecticide/Fungicide

## For Commercial Use

# ACCEPTED with COMMENTS In EPA Letter Dated:

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

Active Ingredient	
Potassium salts of fatty acids	49%
Inert Ingredients	51%
Total	100%



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

## Keep Out Of Reach Of Children

## WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

## **Precautionary Statements**

#### Hazard to Humans and Domestic Animals

Causes Substantial But Temporary Eye Injury And Skin Irritation

Do not get in eyes, on skin or on clothing. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate and viton. For more information, follow the instructions for category C on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the diluted product through application or other tasks must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks.

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as butyl rubber, nitrile rubber, neoprene rubber or PVC
- Chemical-resistant footwear plus socks
- · Protective eyewear
- Chemical-resistant headgear for overhead exposure
- · Chemical-resistant apron when cleaning equipment, mixing or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining



PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **User Safety Recommendations**

Users should:

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

#### First Aid

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.

Note to Physician: Probably mucosal damage may contraindicate the use of gastric lavage.

## **Environmental Hazards**

This product may be hazardous to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

EPA Reg. No. 62719-515	EPA Est. No.
*Trademark of Dow AgroSciences LLC  Dow AgroSciences LLC • Indianapolis, IN 46268 USA	
	Net Contents

4/16

(Cover):

# M-Pede<sup>®</sup>

## Insecticide/Fungicide

#### For Commercial Use

Active Ingredient	
Potassium salts of fatty acids	49%
Inert Ingredients	51%
Total	100%



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

# Keep Out Of Reach Of Children WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

## Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

EPA Reg. No. 62719-515 EPA Est. No. \_\_\_\_\_

Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Net Contents \_\_\_\_



## **Precautionary Statements**

## Hazard to Humans and Domestic Animals

## WARNING

Causes Substantial But Temporary Eye Injury And Skin Irritation

Do not get in eyes, on skin or on clothing. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

## Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate and viton. For more information, follow the instructions for category C on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the diluted product through application or other tasks must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks.

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- · Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as butyl rubber, nitrile rubber, neoprene rubber or PVC
- Chemical-resistant footwear plus socks
- · Protective evewear
- · Chemical-resistant headgear for overhead exposure
- · Chemical-resistant apron when cleaning equipment, mixing or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **User Safety Recommendations**

Users should:

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

#### First Aid

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.



Note to Physician: Probably mucosal damage may contraindicate the use of gastric lavage.

#### **Environmental Hazards**

This product may be hazardous to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

## **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

## Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

## Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

## Storage and Disposal

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

**Pesticide Storage:** Store only in original container; in a dry place; inaccessible to children and pets. Keep container tightly sealed when not in use.

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

**Container Disposal:** Do not reuse empty container. Triple rinse, then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill or by incineration, if allowed by state and local authorities. If burned, stay out of smoke.



## General Information

M-Pede<sup>®</sup> insecticide/fungicide is an effective contact insecticide, miticide and fungicide for control of soft-bodied insects, mites and powdery mildew. The formulation is based on potassium salts of naturally derived fatty acids that have been optimized for insect activity. This product may be used to control targeted pests on crops which include vegetables, grapes and other small fruits, tree fruits, tree nuts, cotton, tobacco, shrubs, shade and ornamental trees, turf, foliage and flowering plants growing outdoors, in greenhouses and in interiorscapes. This product can be applied up to harvest.

#### **Pests Controlled**

This product may be used as a foliar spray to control or suppress soft bodied pests which include: adelgids, aphids, caterpillars, earwigs, lace bugs, leafhoppers, leafminers, mealybugs, mole crickets, plant bugs, psyllids, sawfly larvae, scales, spider mites, tent caterpillars, thrips, whiteflies, gypsy moth, and chinch bugs. M-Pede is most effective on mites, aphids and whiteflies. Effects on other pests are limited to early growth stages and eggs. This product provides curative control of powdery mildew.

## Mixing and Application

#### Rates

- Stand Alone Rate: M-Pede rates as low as 0.25% v/v or as high as 4% v/v may be used. The 2% v/v rate is the most frequently used stand-alone rate.
  - Refer to individual sections of this label for specific use rates for control of pests on specific crops.
  - Rates are provided as a % volume/volume (v/v) solution. A 2% solution is prepared by adding 2 gallons of M-Pede to 98 gallons of spray water.
  - The activity of this product is directly related to the solution concentration and to contact with the
    pest, not the amount of product applied per acre.
- Tank Mix Rate: To achieve enhanced and residual pest control, use a 1 to 2% v/v solution of this product in combination with a recommended product.

## Rate Table

	% v/v	Amount of M-Pede		
Total Mix Volume	Solution	English	Metric	Tablespoons
1 gallon (3.785 liters)	0.25%	0.315 fl oz	9.5 ml	0.63
	0.5%	0.63 fl oz	19 ml	1.25
	1.0%	1.25 fl oz	38 ml	2.4
	1.5%	2.0 fl oz	57 ml	3.75
	2.0%	2.5 fl oz	76 ml	5
	4.0%	5 fl oz	152 ml	10
100 gallon (378.5 liters)	0.25%	0.25 gal	0.95 liters	•
	0.5%	0.5 gal	1.9 liters	-
	1.0%	1 gal	3.8 liters	-
	1.5%	1.5 gallons	5.7 liters	-
	2.0%	2 gallons	7.6 liters	•
	4.0%	4 gallons	15.1 liters	-

#### Mixing

Always determine the compatibility of water, pesticides and other tank additives with this product prior
to addition to the spray tank. Determine compatibility by conducting a jar test using proportional
quantities of each material.



- For best results, use freshly mixed spray made with soft water. If water has high mineral content (hardness >300 ppm or 17.5 grains/gallon), check for compatibility as described above. If needed, add an approved compatibility agent to the tank prior to the addition of this product. Do not lower the pH of the final spray mixture below 8.0. See notes to User: Understanding Plant Sensitivity.
- A defoaming agent may be needed for use in sprayers equipped with an agitator.
- This product is compatible with other labeled pesticides, including Success insecticide, Entrust insecticide, and Bt based insecticides. However, when tank mixing M-Pede with other products, a compatibility test (jar test) using relative proportions of the tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mix, the most restrictive situations must apply.
- Unless otherwise noted, do not tank mix this product with adjuvants such as penetrators, spreader stickers or activators, gibberellic acid, calcium nitrate, or diatomaceous earth, foliar nutrients, alkaline based chelating agents (such as EDTA), Aliette fungicide, chlorothalonil and pesticides containing sulfur or metallic ions (such as manganese, magnesium, iron, zinc, etc.) as they may be physically incompatible and/or phytotoxic.
- Do not mix M-Pede with Carzol insecticide as they are not physically compatible.
- Do not mix M-Pede with sulfur. Do not use within 3 days of a sulfur application.

When using this product in a tank mix, read and follow all product labels. The recommended order of mixing is:

- Compatibility agent (if needed)
- · Wettable and soluble powders
- Flowable liquids
- · Emulsifiable oils and concentrates
- M-Pede

Application of spray mixtures should conform to use precautions and directions for all products included in the tank mix. Combinations should be kept agitated and sprayed promptly after mixing.

## **Timing of Application**

- Initiate applications as soon as pest is observed, or as needed to avoid economic injury. Repeat applications at one-week intervals, or as needed, to control infesting or increasing pest populations.
- Do not make repeat applications at less than 7 day intervals, or make more than 3 sequential
  applications at 7 to 14 day intervals unless your experience has shown the use pattern to be noninjurious to the type and the development stage of plant(s) to be treated under local growing
  conditions.

## **Application Guidelines**

- This product may be applied with most types of ground or aerial spray equipment. Do not use with pulse or thermal fogger applicators. Do not apply through any type of irrigation system.
- This product must come into contact with the targeted soft-bodied pests or powdery mildew to be
  effective. Complete coverage of pests is essential for maximum control. Direct sprays to contact the
  pests. In general, adequate coverage requires a minimum of 50 gallons of total spray volume per
  acre. Higher volumes may be required on larger perennial crops.
- Apply M-Pede solutions to wet (minimize run-off) to decrease the potential for injury on foliage, fruit
  and flowers of sensitive plants.
- Apply promptly after mixing with other pesticides to avoid or reduce alkaline hydrolysis of certain pesticides.
- Avoid applications when wind conditions impair thorough coverage.
- Avoid applications on new transplants and unrooted cuttings.



## Notes to User: Understanding Plant Sensitivity

Sensitivity of plants to this product can be influenced by several factors which include: pest and disease pressure, cultivar, plant vigor, environmental conditions (temperature, relative humidity, moisture availability, light intensity, etc.), spray concentration, companion products, spray additives, pH of spray mixtures, delivery volume as well as the timing, number and frequency of applications.

- Potential for plant injury increases when this product is used under the following conditions:
  - Plants are stressed, such as under hot (>90°F), humid and/or drought conditions.
  - More than 3 sequential applications are made at 7-day intervals.
  - The pH of the final spray mixture is lowered below 8.0.
  - High volume applications cause the spray to collect on the bottom of fruit such as apple, pear, nectarine, orange and grape.
  - Tender new foliage is present on narrow leaf evergreen trees and shrubs.
  - When existing insect, mite or disease pressure has already stressed plant foliage or damaged fruit (for example, mite burn on leaves).
- Application of this product may alter the appearance of the glaucous bloom on spruces and the waxy bloom on grapes.
- Evaluate the effect of this product alone or in combination with desired companion product(s) on a few
  test plants prior to full scale applications when sensitivity of plant species or cultivars under local use
  conditions is unknown.
- Do not apply to very sensitive plants such as: horse chestnut, Japanese maple, mountain ash, Cherimoya, bleeding heart or sweetpeas.
- The following plants may be sensitive to this product: bald cypress, begonia, chrysanthemum, Crown of Thorns and other Euphorbia, cucumber, delicate ferns, narrow leaf evergreens (especially when stressed or when tender new growth is present), Dieffenbachia, fuschia, gardenia, impatiens, jade plant, lantana, ornamental ivy, palms, poinsettia, redbud, river birch, schefflera, Zebra plant and some succulents. Test first on a few plants prior to broad scale applications when sensitivity under local use conditions is unknown.
- Flowers of plants including African violet, ageratum, azalea, begonia, camellia, chrysanthemum,
  dahlia, geranium, gloxinia, impatiens, lily, marigold, orchid, pansy, petunia, poinsettia bracts, rose,
  salvia, snapdragon, vinca and zinnia may be injured when sprayed with this product. Safety to blooms
  should be determined for each individual cultivar of plant to be treated by conducting a small test
  under local use conditions.

## Insecticidal/Miticidal and Fungicidal Uses

This product may be used as a foliar spray to control or suppress soft bodied pests which include: adelgid, aphid, earwig, lace bug, leafhopper, mealybug, mole cricket, plant bug, psyllid, sawfly larva, scale, spider mite, tent caterpillar, thrips, whitefly, gypsy moth, and chinch bug.

## Vegetables, Herbs And Spices (Greenhouse and Outdoor)

Vegetables: Artichoke<sup>†</sup>, Asparagus, Brassica (cole), (such as: bok choy, broccoli, broccoli raab, Brussels sprout, cabbage, cauliflower, Chinese broccoli, Chinese cabbage, collard greens, kale, kohlrabi, mustard greens, napa cabbage and Swiss chard), Bulb (such as: green onion, leeks, garlic and onion), Cucurbit (such as: cucumber, melon, pumpkin and summer squash), Fruiting (such as: eggplant, pepper and tomato), Leafy (such as: celery, endive, escarole, lettuce and spinach), Legume (such as: bean, pea and soybean), Root and tuber (such as: beet, carrot, horseradish, potato, radish, rutabaga, shallot, sugarbeet and yam), Herbs and spices: (such as: basil, chive, dill, marjoram, parsley and sage). Watercress<sup>†</sup>

<sup>†</sup> Not for use in California



#### Use Recommendations:

Stand Alone Rate: Apply a 1-2% v/v solution of this product, unless otherwise noted. Refer to the Mixing and Application section of this label for general rate, timing and application information except as noted below.

as noted below.	
Pest	Recommendations
Leafminer and green peach aphid	Apply this product only in tank mix combination with a labeled companion insecticide.
Other aphids	To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a recommended rate of another labeled product. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Whiteflies	Apply a 1-2% v/v solution of this product for stand alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a recommended rate of another labeled product. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
thrips, plant bugs, spider mites, broad mites, russet mites and leafhoppers	See Mixing and Application section of this label for information on rates, mixing and application.
Powdery mildew	Cucurbits, Fruiting Vegetables, Herbs and Spices, Leafy Vegetables, Legumes, Root and Tuber Vegetables and Greenhouse Cucumber: For stand alone use, apply a 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10 day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. For tank mix use, apply a 1-2% v/v solution of this product with a recommended fungicide to achieve protectant/residual control of powdery mildew.  For additional instructions, see Application Guidelines and Notes to User: Understanding Plant Sensitlvity sections of this label.

## Fruit, Nut And Vine Crops

Citrus fruits (such as: citron, grapefruit, kumquat, lemon lime, tangelo, and tangerine), Pome fruits (such as: apple, crabapple, pear and quince), Stone Fruits (such as: apricot, cherry, nectarine, peach, plum and prune), Small Fruits and Berries (such as: blackberry, blueberry, cane berries, cranberry, currants, grape, raspberry, strawberry, boysenberry, and olallieberry) and Tree Nuts (such as: almond, chest-nut, filbert, pecan, pistachio, black and English walnut) and Pomegranates.

٠.



#### Use Recommendations:

**Stand alone Rate:** Apply a 1-2% v/v solution of this product, unless otherwise noted. Refer to the Mixing and Application section of this label for general rate, timing and application information except as noted below.

- For all Fruit and Nut Crops: Apply to wet (minimize run off) with an air blast or other appropriate sprayer. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist.
- Grapes: This product may alter the waxy bloom and or cause marking on the surface of grapes which can affect the quality rating of table grapes at harvest. To reduce potential for fruit injury, do not apply in greater than 75 gallons of water per acre on table grapes after berries are 6 -7 mm in diameter. Do not apply this product to Calmeria or Italia varieties of grapes.
- . Citrus (Precaution): Fruit marking may occur when sooty mold is present.
- Pears: Applications of this product are not recommended after the delayed dormant stage on fresh market pear varieties including d'Anjou and Asian pears. Applications after fruit set may cause marking which can reduce market value of the fruit.
- Stone Fruits: Concentrate (air blast) applications are recommended with a maximum volume of 100 gallons per acre on smooth skinned fruits and 175 gallons per acre on peaches. Do not make dilute spray applications on smooth skinned fruit after fruit formation. This product is not recommended for use on yellow skinned nectarine varieties. Do not apply M-Pede to sweet cherries between fruit formation and harvest.

Nursery and non-bearing trees can be sprayed to runoff with no more than 3 consecutive applications with 7 day intervals.

Pest	Recommendations
Citrus rust mite	Apply a 1-2% v/v solution of this product. Use of a suitable citrus spray oil in combination with this product applied to wet (minimize run-off) with an air blast or other appropriate sprayer may help improve performance.
European red mite, Pacific mites, two spotted mites, Willamette mite	Apply a 1-2% v/v solution of this product to control motile stages. To achieve enhanced and residual control, use a 1-2 % v/v solution of this product in combination with recommended products such as Vendex or Kelthane.
Green apple aphid	To achieve enhanced and residual control, use a 1 - 2% v/v solution of this product in combination with recommended products such as Thiodan.
Western grape aphid and variegated leafhoppers	To achieve enhanced and residual control, use of a 1 -2 % v/v solution of this product in combination with recommended products such as Pyrellin or Pyrenone. Scout and make first application to control nymphs during the first generation (first brood) when the majority of nymphs are in the third to fourth instars.  This product is effective for late season and preharvest suppression of leafhoppers in wine and raisin grapes.
Pear psylla	Apply a 1-2% v/v solution of this product at delayed dormant to control winterform and newly hatched nymphs. Make follow up applications on processing pears at petal fall and turn down for control of 1st and 2nd generation nymphs before they mature into fourth instars.
Rosy apple aphid	Apply a 1-2% v/v solution of this product. Addition of an appropriate spray oil to this product may help improve performance. Time sprays to coincide with pre-pink or pink stages of apples.
White apple leafhopper	To achieve enhanced and residual control, use a 1 -2% v/v solution of this product in combination with recommended products such as Thiodan. Target 1st generation nymphs before they mature into flyers.
Other aphids, campyloma, mealybugs, rust mites, pear slug (sawfly larvae)	See Mixing and Application section for information on rates, mixing and application.



scale crawlers, leafhoppers and whiteflies	
Powdery mildew	Grapes: Apply a 1-2% v/v solution of this product to control powdery mildew spores and hyphae. Initiate sprays at bud break or as appropriate based on local powdery mildew control recommendations. Repeat at 7 to 10 day intervals, or as needed through veraison (development of variety-specific color). Do not apply past veraison. Schedule a follow-up fungicide application within 7 to 10 days after each application when M-Pede is used alone. Use this product in a scheduled preventive spray program with other labeled fungicides. Do not mix with sulfur. Do not use within 3 days of sulfur application. This product may be applied in tank mixes with other labeled fungicides. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Tank mix this product at the rate of 1-2% v/v with labeled rates of companion pesticides. Rates of M-Pede below 1.5% v/v will not be fungicidal against powdery mildew. Complete coverage of grape clusters as well as leaf surfaces is essential for effective control. For additional instructions on use with sulfur, see Application Guidelines and Notes to User: Understanding Plant Sensitivity sections of this label.
Powdery Mildew	Citrus fruit, Pome fruit, Stone fruit, Small fruits and Berries, and Tree Nuts: Apply a 1 - 2% v/v solution of this product to control powdery mildew spores and hyphae.  Stand Alone Rate: Apply a 1 - 2% v/v solution of this product when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14 day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14 days after each application when this product is applied alone.  Tank Mix Rate: Apply a 1 - 2% v/v solution of this product with a recommended fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.



## **Field Crops**

## Alfalfa<sup>†</sup>, Canola<sup>†</sup>, Cotton, Peanut<sup>†</sup>, Tobacco<sup>†</sup> and Wheat<sup>†</sup>

Pests Controlled: Aphids, cater-pillars (in tank mix combination only), exposed thrips, greenbug, fleahopper, plant bug (such as lygus and stink bugs), spider mite and whitefly.

**Use Recommendations:** Refer to the Mixing and Application section of this label for general rate, timing and application information except as noted below.

Stand Alone Rate: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.

#### **Tank Mixtures:**

- When used in combination with other insecticides, use 0.75 to 4 pints of this product per acre when applied in 3 25 gallons of water per acre. Use a 1 2% v/v solution of this product when greater than 25 gallons of water are applied per acre.
- To achieve enhanced and residual control of caterpillars, use this product in combination with other labeled insecticides.
- To achieve enhanced and residual control of other insects (aphids, thrips, greenbug, fleahopper, plant bug, spider mite, white fly), use this product in combination with other labeled insecticides.
- In situations where thorough coverage of pests is not possible or practical, it is recommended that this product be tank mixed with one of the companion pesticides listed above.
- This product may be used in tank mixes with penetrator type adjuvants for application to cotton, peanuts and tobacco only if prior use under local use conditions has demonstrated plant safety.
- <sup>†</sup> Not for use in California,

## Hops<sup>†</sup>, Coffee<sup>‡</sup>, Banana<sup>‡</sup> and Pineapple<sup>‡</sup>:

Pests controlled: Aphids, leafhoppers, mealybugs, spider mites, plant bugs, scales, exposed thrips and whiteflies.

## Use Recommendations:

Stand Alone Rate: Apply a 1 - 2% v/v solution of this product, unless otherwise noted. Refer to the Mixing and Application section on page X of this label for general rate, timing and application information except as noted below.

Tank Mix Rates: To achieve enhanced and residual pest control, use a 1 to 2 % v/v solution of this product in combination with a recommended companion product.

- Use a 1% v/v rate with most companion pesticides targeted at the same pest(s) as M-Pede.
- Lower rates (0.25 1.0 % v/v solution) of this product may be used in tank mixes for knockdown/suppression of adult whiteflies.

See Application Guidelines and Notes to User: Understanding Plant Sensitivity for additional comments.

<sup>†</sup> Not for use in California.

Turf		
Pest	. Recommendations	
Chinch bug, cutworm, flea, greenbug, grub, mites, mole cricket and sod webworm	Stand Alone Rate: Apply a 1 - 2% v/v solution of this product, unless otherwise noted. Refer to the Mixing and Application section of this label for general rate, timing and application information, except as noted below.	



	Tank Mix Rate: To achieve enhanced and residual pest control, use a 1 to 2% v/v solution of this product in combination with recommended products such as: Pageant, Dursban, malathion, diazinon or Orthene. For use on mole crickets, irrigate turf prior to application of this product to bring mole crickets to the surface.
Powdery Mildew	Stand Alone Rate: Apply a 1.5 - 2% v/v solution of this product when the powdery mildew is first observed and repeat every 7 to 14 days, or as needed.
	Tank Mix Rate: This product can also be tank mixed with other fungicide products suitable for turf powdery mildew use. Tank mixes with products containing chlorothalonil should be avoided as they can cause severe phytotoxicity.

# Ornamental Landscape Trees and Shrubs, Christmas Trees, Flowers, Bedding and Indoor Plants

Pests controlled: Adelgid, ants, aphid, buck moth larvae, earwig, elm leaf beetle larvae, sawfly larvae, gypsy moth eggs and larvae, Japanese beetle, lace bug, leafhopper, mealybug, rust mite, phylloxera, spider mite, shore fly, plant bug, psyllid, scale, tent caterpillar, exposed thrips, whitefly and powdery mildew.

#### Use Recommendations:

**Stand Alone Rate:** Apply a 1-2% v/v solution of this product, unless otherwise noted. Refer to the Mixing and Application section of this label for general rate, timing and application information except as noted below.

**Tank Mix Rate:** To achieve enhanced and residual pest control, use a 1 to 2 % v/v solution of this product in combination with a recommended product. Tank mixes with products containing Chlorothalonil should be avoided as they can cause severe phytotoxicity. Lower rates (0.25 - 1.0 % v/v solution) of this product may be used in tank mixes for knockdown/suppression of adult whiteflies.

**Note:** Unless otherwise noted, apply this product to wet (minimize run off). If wilting occurs a few hours after application, rinse with a clean water spray. Since applications may cause injury to flowers of some plant cultivars, test product on a few flowering plants under local use conditions prior to large scale use.

Pest	Recommendations
Adelgid, psyllid, scale on trees and shrubs	Spray to wet infested plant surface.
Balsam woolly adelgid	Spray trees thoroughly when nymphs are abundant in early spring and/or fall. Make a second application 10 days later.
Cooley Spruce gall adelgid	Apply a 4% v/v solution to spruce in fall or spring when females begin egg laying. On Douglas fir, control exposed "woolly aphids" in early spring immediately before bud break (April) or in the fall (SeptOct.) after foliage has hardened off.
Hemlock woolly adelgid	Apply this product immediately after detecting an adelgid infestation to avoid the spread of the pest. In regions with heavy infestations and on trees with a history of infestation, a total of four applications made in April/May, June, August/September and October may be necessary. Because it is a contact insecticide, do not use this product as a preventative control measure.
Conifer and pine needle scale	When insects first appear, apply a 1 to 2% v/v spray to thoroughly wet crawlers.
Tent caterpillar	Apply a 3% v/v solution. Spray directly on young larvae when congregated on outside of tent or dismantle tents and spray to thoroughly wet larvae.



F 2	
Spider mite	Wet underside of leaves and needle sheaths. Wait 7 - 10 days to allow viable eggs to hatch and make a second application before mites reach egg laying maturity. For residual control, apply in a tank mix combination with a labeled companion product such as Avid.
Earwig	Spray directly on insects after disturbing their hiding place.
Leafminer (Dipteran)	Apply in tank mix combination with a labeled companion insecticide such as Avid which has residual activity.
Whiteflies	Scout plants regularly and apply a 1 to 2% v/v solution when pests first appear. Make a second application 7 days later to target newly hatched nymphs. Make additional applications at weekly intervals, but avoid more than three consecutive weekly applications. Do not apply to poinsettia bracts. To achieve enhanced and residual pest control, use a 1 to 2% v/v solution of this product in combination with recommended products such as: Avid, Dursban, Mavrik Aquaflow, Pounce, Talstar or Tempo. Lower rates (0.25 - 1% v/v solution) of this product may be used in tank mixes for knockdown/suppression of adult whiteflies.
Gypsy moth	To suppress gypsy moth populations, apply a 3% v/v solution directly to the larvae.
Blossom thrips on African violets	Spray to contact thrips on blooms.
Euonymous scale	Thoroughly wet crawlers with a 2% solution. Delayed dormant applications of this product (1 % v/v solution) plus summer oil (1 % v/v solution) will also be effective.
Spruce spider mite on conifers	Apply 1-2% solution of this product to thoroughly wet infested needles.  Repeat application after 7 days if needed.
Powdery mildew on greenhouse grown roses	Apply a 1-2% solution of this product to control powdery mildew spores and hyphae. Initiate sprays when first signs of powdery mildew appear and repeat at 7 to 10 day intervals, or as needed. Alternate applications of this product with other recommended fungicides to avoid making more than three successive applications of this product at intervals of 7 days or less. Roses may be treated with sublimated sulfur using sulfur-heating pots or similar devices before or after treatment with M-Pede. To minimize the potential for plant injury, allow 24 hours to elapse between M-Pede and sublimated sulfur applications. Mixing other forms of sulfur (sprayable or dusting) or applying this product within up to 5 days of a sulfur application may also increase the potential for plant injury, especially during hot weather (>90°F).

## Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

## Warranty Disclaimer

Dow AgroSciences LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## Inherent Risks of Use



It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences LLC or the seller. All such risks shall be assumed by buyer.

## **Limitation of Remedies**

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at Dow AgroSciences' election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used

Dow AgroSciences LLC shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences LLC is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Trademark of Dow AgroSciences LLC

#### **EPA Accepted:**

The use of M-Pede alone and/or in combination with certain insecticides and miticides is covered by one or more of the following U.S. patents: 4774234, 4861762, 4870102, 5192546, 4826678, 4983591, 4904645, 5047424, 5030658 and 5093124.

٠.

Patent for use as a fungicide is pending.