

4-80

09/06/2006

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

SEP 6 2006  
OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Rebecca M. Horton  
Registration by Design, Inc.  
1181/2 E. Main Street  
Salem, Virginia 24153-5630

**Subject:** Label Amendment: Add "for organic gardening"  
Bonide Horticultural and Dormant Spray Oil  
EPA Reg. No. 4-80  
Submission dated March 15, 2006 and May 31, 2006 to support  
"organic" labeling

Dear Ms. Horton:

The revised labeling referenced to above, submitted in connection with the registration under the Federal Insecticide, fungicide, and Rodenticide Act (FIFRA) as amended, is acceptable with the following comments:

- 1) The addition of "for organic gardening" statement is acceptable based on a memorandum from the BPPD organic labeling coordinator.
- 2) You must delete Superior Type from your optional marketing statements. "...and many more listed insects" must be changed to "other listed insects". "For Deciduous Fruit, Shade Trees" is confusing and is better represented by "For use on fruit trees, shade trees" which is listed on your label.

A stamped copy "accepted with comments" of the label is enclosed for your records.

Please submit two (2) copies of the final printed before shipment. If you have any questions please call me at (703) 308-8328.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Akiva Abramovitch".

Akiva Abramovitch, Ph.D.  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

[FRONT PANEL]



**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
SEP 6 2006**



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

**BONIDE<sup>®</sup> HORTICULTURAL AND ~~4-80~~  
DORMANT SPRAY OIL**

For Residential Use Only [when packaged in containers less than 2.5 gal.]

[Additional Brand Name: All Seasons Horticultural and Dormant Spray Oil Ready to Spray]

Optional Marketing Statements:

Kills insects by smothering.

For use on fruit trees, shade trees, evergreens, ornamentals, flowers, houseplants.

Use year-round.

For Deciduous Fruit, Shade Trees, Roses, Ornamental Shrubs and Certain Vegetables

Superior Type

Dormant and Growing Season Insect Spray

CONTROLS Scale Insects, Mealybugs, Apple Aphids, European Red Spider Mites, Leafminers and many more listed insects... USE on pears, cherries, peaches, asparagus, corn, peppers, roses, houseplants and home greenhouses.

**ACTIVE INGREDIENT:**

Petroleum Oil..... 98%

**OTHER INGREDIENTS:**..... 2%

**TOTAL**..... 100%

(Superior type U.R. Min 92%)

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See side/back/other panel(s) for additional precautionary statements.

**NET CONTENTS:** \_\_\_\_\_

[BACK/SIDE/OTHER PANEL(S) OR ATTACHED BOOKLET]

<b>FIRST AID</b>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.</p>	
<b>If Swallowed:</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Do not give any liquid to a person.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in Eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<p><b>Note to Physician:</b> Contains petroleum – vomiting may cause aspiration pneumonia.</p>	

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed, inhaled, or absorbed through the skin. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. In case of contact, wash immediately with soap and warm water. Wash hands, arms, and face thoroughly with soap and warm water after handling. Wash all contaminated clothing with soap and hot water before re-use.

[WPS text required when packaged in 2½, 5, 30 or 55 gallon containers.]

#### **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 of training, decontaminating, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about person 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 of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is: coveralls, waterproof gloves, and shoes plus socks.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on the label.

**DIRECTIONS FOR USE**

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

**STORAGE AND DISPOSAL**

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

**[Residential Use – when packaged in containers less than 2.5 gal.]**

**Pesticide Storage:** Store and transport in an upright position. Keep container tightly closed to prevent evaporation. Do not use, pour, spill or store near heat or open flame. Store in a cool dry area inaccessible to children or pets.

**Pesticide & Container Disposal:** *If empty* – Do not reuse this container. Place in trash or offer for recycling if available. *If partly filled* – Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

**[Commercial Use – when packaged in 2.5 gal. containers or larger]**

**Pesticide Storage:** Store unused product in original container only. Store in a cool, dry area out of the reach of children and animals.

**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:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NOTE: DO NOT APPLY HORTICULTURAL SPRAY OIL WITH SULFUR SPRAYS OR WHERE SULFUR IS ON THE FOLIAGE. TO DO SO MAY CAUSE FOLIAGE INJURY, LEAF DROP. DO NOT APPLY HORTICULTURAL SPRAY OIL AT ABNORMAL TEMPERATURES (ABOVE 90°F) OR WHEN PLANTS ARE DRY (SUFFERING FOR WANT OF MOISTURE) AS IT MAY CAUSE LEAF DROP DUE TO “SHOCK.”**

SEE ATTACHED BOOKLET FOR COMPLETE USE DIRECTIONS.

Mixture ratios vary. Read and use according to application directions. Apply using a good pressure spray hose-end or watering can.

**HORTICULTURAL SPRAY OIL** is a self-emulsifying spray oil, composed of superior highly paraffinic oil with emulsifier and spreader sticker, which envelop, wet and smother over wintering eggs of European red spider mites, Adelgids, scale insects, apple aphids (except rosy aphids), bud moth, leaf roller, red bug, codling moth larvae, psylla (adults), blister mites, galls, whitefly larvae and mealybugs on fruit trees, shade trees, vegetables, ornamentals, shrubs and roses.

**HORTICULTURAL SPRAY OIL** is a high quality, pleasant to use spray oil, that will not harm clothing.

**HORTICULTURAL SPRAY OIL** may be used at the DORMANT STAGE (before buds show green tissue), GREEN TIP STAGE (when leaves of blossom buds are bursting and show about 1/8 to 1/4 inch of green color), DELAYED DORMANT STAGE (when the leaves of the blossom buds are out from 1/4 to 1/2 inch), and during the GROWING SEASON.

**(WHEN PACKAGED IN READY-TO-SPRAY CONTAINER)**

**HOW TO USE**

Make sure water control knob on hose sprayer is in the "OFF" position. Hold by handle and shake vigorously, turning bottle as you shake. Attach hose to spray nozzle. Bend safety tab back and break off. Turn control to "WATER" position. Slowly turn on water supply to moderate rate of flow. Point nozzle toward spray area, turn control knob to "ON." Product will automatically mix with the water. Slowly sweep the area to be treated. To stop spraying, turn control valve to the "OFF" position. Turn off water at faucet. To relieve pressure, turn control valve to the "WATER" position pointing sprayer away from self. Remove from hose.

**(WHEN PACKAGED IN MIX & APPLY CONTAINER)**

Amt. Dormant Spray Oil		Amt. Water	=	Actual Oil	Amt. Dormant Spray Oil Small Quantities
2 Qts.	+	25 Gals.	=	2%	5 Tbs. with 1 gal. of water
3 Qts.	+	25 Gals.	=	3%	7½ Tbs. with 1 gal. of water
1 Gal.	+	25 Gals.	=	4%	5 fl. oz. with 1 gal. of water
1½ Gals.	+	25 Gals.	=	6%	7 fl. oz. with 1 gal. of water
1¾ Gals.	+	25 Gals.	=	7%	8 fl. oz. with 1 gal. of water

**DILUTION TABLE – 2 Tablespoons = 1 fluid ounce**

Consult your experiment station for proper timing and choice of fungicide to use with HORTICULTURAL SPRAY OIL.

Use Bonide's Liquid Fruit Tree Spray for home orchard care. Multi-purpose, pre-blended insecticide-fungicide liquid.

**SHAKE WELL.** Then add HORTICULTURAL SPRAY OIL to desired amount of water and mix thoroughly, use a good pressure spray and apply enough liquid per tree to wet entire surface of branches, main limbs and trunk. Give special attention to underside of limbs. Make application when the temperature is above 40°F.

**APPLES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES** – For scale insects, red bugs, European red mite, bud moth, leaf roller, apple aphids (except rosy aphids). Use 2% actual oil solution for mites, San Jose scale – Use 3% actual oil solution for scurfy scale, leaf roller, bud moth, red bug, codling moth larvae. **DORMANT STAGE** of bud development for all above mentioned insects, use 4% actual oil.

**PEARS: DORMANT STAGE** – For scale insects, blister mite, leaf roller, psylla (adults) – Use 3% actual oil solution, apply spray on the 3<sup>rd</sup> or 4<sup>th</sup> sunny warm day in early spring before buds break and when psylla flies are swarming on the spurs.

**PLUMS, PRUNES: DELAYED DORMANT** – For European red mites, scale insects – Use 2% actual oil solution for red mites and San Jose scale. – Use 3% to 4% actual oil solution for scurfy scale.

**PEACHES: DELAYED DORMANT** – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

**CHERRIES (Sour): DORMANT STAGE** – For European red mites, scale insects. – Use 3% to 4% actual oil solution.

**GRAPES: DORMANT STAGE** – For grape plume moth, scale insects. – Use 3% actual oil solution, apply before buds begin to swell.

**SHADE TREES, ORNAMENTALS, ROSES: GREEN TIP THROUGH THE DELAYED DORMANT STAGES** – For scale insects, certain aphids, gall, whitefly larvae, mealybugs, Adelgids. – Use 3% actual oil solution. – For scurfy scale, use 4% actual oil solution. – For terrapin scale, use 6% to 7% actual oil solution.

**GROWING SEASON** – To control Scale Insects, Red Spider Mites, Mealybugs and Whitefly Larvae on Citrus (Oranges, Lemons, Grapefruit, Tangerines, Limes), Fruit Trees (Apples, Plums, Pears, Apricots, Peaches, Pecans, Cherries), Shade Trees, Evergreens, Camellias, Azaleas, Hardy Shrubs: 5 Tablespoonfuls (2½ fl. oz.) per gal. water. This application is also effective in the removal of sooty mold fungus through the control of Whitefly Larvae.

## HOUSEPLANTS

Plant	Pest	Application Rate Tablespoons per 1 Gallon Water	Comments*
Chrysanthemum, Dieffenbachia, Dracaena, Ferns, Gardenias, Jade Plant, Palms, Philodendron, Schefflera	Aphids, Leafminers, Mealybugs, Scales, Spider Mites, Whitefly*	2.5 – 5.0	Do not apply to plants in direct sunlight behind glass. Do not use on Coconut Palms or Maidenhair Ferns. Chrysanthemum blooms have shown phytotoxic symptoms at the higher rate.

*\*Horticultural and Dormant Spray Oil is most effective on Whitefly during immature stages.*

**Protect floor, floor coverings and furnishings from overspray.**

**CAUTION: Do not exceed 3 consecutive applications without allowing a two week application interval.**

## HOME GREENHOUSE

Plant	Pest	Application Rate Tablespoons per 1 Gallon Water	Specific Comments
Azaleas, Begonias, Camellias, Chrysanthemums, Easter Lilies, Ferns, Gardenias, Geranium, Hibiscus Foliage, Jade Plant, New Guinea Impatiens, Palms, Philodendron, Portulaca, Reigor Begonias, Zinnias	Aphids, Fungus Gnat, Leafminers, Mealybugs, Scales (soft & hard), Spider Mites, Whitefly*	2.5 – 5.0	Do not use on Coconut Palms or Maidenhair Ferns. The blooms of Chrysanthemum and Geranium have shown Phytotoxic symptoms at the 5 tablespoon rate. <b>Frequency of Application:</b> <i>For the greenhouse pests listed, use once a week initially, then as the pest is controlled, decrease the frequency to every 2-3 weeks as needed.</i>
Dieffenbachia, Poinsettias		2.5	Do not use on Poinsettia bracts.
Leaf Polish for Hardy Plants		2.5	

*\*Horticultural and Dormant Spray Oil is most effective on Whitefly during immature stages.*

## FOR HOUSEPLANTS AND HOME GREENHOUSES

- Do not exceed the maximum rates or apply more often than recommended.
- Certain plant species may be sensitive to oil. A small number of plants should be test sprayed prior to general spraying.
- Use caution on open blooms – bleaching and spotting have been observed on the open bloom of certain plants.

**FRUITS**

<b>Crop (Site)</b>	<b>Pest</b>	<b>Application Rate Tablespoons per 1 Gallon Water</b>	<b>Time of Application</b>
Blueberry	Thrips Mites Sawfly (eggs) Scales	5.0	Foliage
		7.5	Dormant
Strawberry	Aphids Mites	2.5	Dormant (and Foliage)
Grape	Mealybugs	10-15 in 2-3 gal.	Dormant – A tank mix with an insecticide improves control.

**VEGETABLES**

<b>Crop (Site)</b>	<b>Pest</b>	<b>Application Rate Tablespoons per 1 Gallon Water</b>	<b>Time of Application</b>
Asparagus, Beans, Beets, Corn, Pepper, Radish, Squash, Tomato	Aphids, Mites, Beetle Larvae, Leafminers, Thrips, Leafhopper, Whitefly	2.5 – 5.0	As needed

**CAUTION!** Do not spray again with oil for at least a month. Do not spray drought injured or winter burned plants. Do not apply oil sprays within 30 days of sulfur applications. Injury may result if oil sprays are used on ferns, palms, hibiscus, certain conifers including blue spruce, white pine, arborvitae and junipers, and certain deciduous trees such as Japanese maple, beech, hickory, walnut and butternut.

To determine actual oil percentage, consult dilution table.

When used in knapsack or small sprayer, shake occasionally to keep solution agitated.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Buyer's Guarantee Limited to Label Claims

Manufactured by:  
Bonide Products, Inc.  
Oriskany, NY 13424