JAN 6 1992

Kevney J. O'Connor Agent for Urania Agrochem GmbH 4660 Kenmore Avenue, Suite 1018 Alexandria, VA 22304

Dear Mr. O'Connor:

Subject: Funguran(R)-OH

EPA Registration No. 64744-1 Label Amendment - Name Change

Your Letter of 11/26/91 Your Application of 12/6/91

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted prior to releasing the product for shipment.

Under the STATEMENT OF PRACTICAL TREATMENT, correct the spelling of "PRACTICAL". Also, correct the spelling of "gelatin" in the "IF SWALLOWED" instructions.

Under "GENERAL INSTRUCTIONS", correct the spelling of "mixtures" in the last sentence of the first paragraph.

Under "DIRECTIONS FOR USE", "ALMONDS," in the next to the last sentence, correct "0.25". For "APPLE," correct the spacing between "cover" and "spray" in the fifth line from the top. Under "BANANAS," correct "0.5" in the second line. For "BROCCOLI, BRUSSELS SPROUT, CABBAGE & CAULIFLOWER," correct "0.5" in the second line. Under "CACAO," correct "4.5" in the fourth line, and "6.5" and "8.5" in the seventh line.

CONCURRENCES									
SYINBOL 17.3.C									
SURNAME DE COLLEGE						1			
DATE 1/2/92									

Finally, under the use directions for "APPLE", "BROCCOLI", "GRAPES", and "PEACHES", delete the signal word "Caution". You may use the word "Attention" to focus the reader's attention to the effects of using your product on these crops.

Sincerely Yours,

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Cynthia Giles-Parker Product Manager (22) Fungicide-Herbicide Branch Registration Division (H7505C)

FUNGURAN (R)-OH

ACTIVE INGREDIENT:

Copper Hydroxide								. 23	} %	
TOTA	L	• •	• •	• •	 	•	• •	100	7.	,
(METALLIC COPPER EQUIVALENT					 			. 50) 2	

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

PRECAUCION AL USARIO: Si usted noio lee ingles, no use este, producto hasta que le etiqueta haya sido explicado amplia-

STATEMENT OF PRACICAL TREATMENT

If Swallowed: Drink promptly a large quantity of milk, egg white, <u>Gelantin</u> solution, or if these are not available, large quantities of water. Avoid alcohol. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric lavage.

If Inhaled: Remove victim to fresh air. Apply artificial respiration if indicated.

If On Skin: Remove contaminated clothing. Wash skin immediate-

ly with soap and water. Call a physician immediately. If In Eyes: Flush eyes immediately with plenty of water. Call a physician immediately.

See side panel for additional precautionary statements.

EPA Reg. No. 64744-1

EPA Est. No. 64744-

NET CONTENTS:

ACCEPTED with COMMENTS In EPA Letter Dated:

MANUFACTURED BY:

TM 6 1033

URANIA AGROCHEM GMBH ALSTERTERRASSE 2 W-2000 Hamburg 36 Germany

Under the reneral insecticide Fungicide, and Rodenticide as amended, for the pesticide registered under EPA Reg. No.

64744-1

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER - PELIGRO

Corrosive, causes eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed, inhaled, or absorbed through the skin. Do not breathe vapors or spray mist. May cause skin sensitization in certain individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not allow rinsate from cleaning of equipment to enter surface or ground water.

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 area without protective clothing until sprays have dried or dusts have settled.

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.

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 warnings must include the following information:

Danger: Area treated with FUNGURAN (R)-OH on ... (Date of application). Do not enter without appropriate protective clothing until sprays have dried or dusts have settled. In case of accidental exposure, see the Statement for Practical Treatment on this label.

GENERAL INSTRUCTIONS

Use FUNGURAN^(R)-OH as noted below. FUNGURAN^(R)-OH is adaptable to spraying from all types of spray equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. For dilute, high volume sprays: use from 25 to 100 gallons of water per acre(GPA) for most vegetable crops, 400 to 800 GPA for fruit orchards and up to 1500 GPA as may be required for large citrus groves. For concentrate ground sprays apply from 5 to 20 GPA for most vegetable crops and 25 to 100 GFA for fruit and nut crops. For aerial spraying, 3 to 15 GPA are commonly used. No additional surfactants are needed. Add FUNGURAN OH slowly to a spray tank partially filled with water. Spreaderstickers, insecticides, nutrients, etc. should be added last. Observe all cautions and limitationson labels of all products used in mixtures.

The following specific instructions are based on general applications. The recommendations of State Agricultural Extension Services should be closely followed as to timing, frequenty and number of sprays per season.

STORAGE AND DISPOSAL

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

STORAGE: Store unused product in original container only in cool, dry area out of reach of children und animals.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or 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 bag in a sanitary landfill, by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

Use high rate when conditions are favorable for disease development or when signs and symptoms of disease are present. Use lower rate when conditions are less favorable for disease.

ALFALFA, Cercospora & Leptosphaerulina Leaf Spots. Apply at 2 pounds per acre 10-14 days before each harvest or earlier if disease threatens. Apply with ground or aerial equipment. Spray injury may occur with sensitive varieties such as Lahontan.

ALMONDS, Coryneum Blight & Blossom Brown Rot. Use 2-3 pounds per 100 gallons of water (300-400 GPA) in late dormant before foliage buds swell if frequent rainfall occurs. A second application should be made during the early bloom stage (popcorn). To avoid plant injury, do not use above rate after full bloom. Bacterial Blast (Pseudomonas). Use 3-4 pounds per 100 gallons at dormant to early pink bud. For blast control in sprinker irrigated orchards or where disease is severe, apply 2-4 sprays at 0.25 pound per 100 gallons at 2 week post-bloom intervals or just before sprinkling. Slight leaf injury may occur from post-bloom spray.

APPL: Anthracnose, Furopean Canker, Pseudomonas. Apply before fall rains at 3-4 pounds per 100 gallons (300-400 GPA). Use on yellow varieties may cause discoloration. To avoid, pick before spraying. Fireblight. Apply at 2-4 pounds/100 gallons of water as a full coverspray. Make application between silver-tip and green-tip CAUTION: Phytotoxicity may occur from late application. (Discontinue use when green-tip is 1/2-inch). Crown or Collar Rot. Mix 4 pounds in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply either in early spring or in fall after harvest each year. Do not use if soil pH is below 5.5 or copper toxicity may result. (EXCEPT CALIFORNIA)

APRICOTS, Coryneum Blight (Shot Hole) & Blossom Brown Rot. Apply at popcorn to full bloom using 2-3 pounds per 100 gallons (300-400 GPA). To avoid spray injury, do not apply after bloom.

AVOCADOS, Scab. Apply when bloom buds begin to swell at 2 pounds per 100 gallons or 8-10 pounds per acre depending on equipment. Continue application at monthly intervals for 5 to 6 applications. Follow recommendations of State Agricultural Experiment Stations.

BANANAS, Sigatoka. Apply by air at 2 pounds per acre in 3 gallons of water containing 065 gallon agricultural oil. Apply on a 14 day schedule throughout the wet season. Apply at 21 days intervals during dry periods. Black Pitting. Apply at 4 pounds per 100 gallons directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after emergence.

BEANS, Bacterial Blight (Halo & Common). For protective sprays, apply first application when plants are six inches high. Apply on 7-14 days schedule depending on local conditions. Use 1-3 pounds per acre depending on disease severity.

BLACKBERRIES (Santiams, Logans, Boysens, Marions, Auroras, Cascades, Chehalems, and Thornless Evergreens). Leaf & Cane Spot. Apply delayed dormant spray after training in spring at 4 pounds plus I quart superior-type oil per 100 gallons. Make fall spray application after harvest using 4 pounds plus I quart superior-type oil per 100 gallons.

BROCCOLI, BRUSSELS SPROUT, CABBAGE & CAULIFLOWER, Downy Mildew.

Apply 0,5 to 1 pound in a minimum of 25 GPA at 7 day intervals.

(CABBAGE ONLY). Black Rot (Xanthomonas) & Black Leaf Spot

(Alternaria). Apply at 2 pounds per acre in a minimum of 25 GPA

at 7 to 10 days intervals. (Caution: A slight reddening of older
leaves may occur on broccoli and a slight flecking of wrapper
leaves may occur on cabbage at the two pound rate). For control
of diseases of these crops, begin applications after transplants
are set in the field, or shortly after emergence of field-seeded
crops or when conditions favor disease development.

CACAO, Black Pod. Begin applications at the start of the rainy season and continue while infection conditions persist. Sprays should be made as often as 14 to 21 days in high rainfall areas at varying rates from 2 to 4,5 pounds per acre depending on disease severity. For drier areas, where 2 to 4 applications are recommended during critical infection periods and at long intervals, use 6,5 to 8,5 pounds per acre, according to disease incidence and planting density.

CANTALOUPES, HONEYDEWS & MUSKMELONS, Downy Mildew. Apply weekly at 2 pounds per acre before disease appears.

CARROTS, Carrot Blight (Cercospora). When disease threatens apply 2 bounds per acre at 7 to 14 day intervals depending on disease severity.

CELERY, Early, Late & Bacterial Blights. Apply as soon as plants are first established in the field at 2 pounds per acre, then every 5-7 days depending on severity and weather. One or two quarts of a suitable agricultural spray oil per acre may be used as spreader-sticker.

CHERRY, Dead Bud (Pseudomonas syringae) & Coryneum Blight. Apply 6 pounds plus I pint superior-type oil per 100 gallons in October (before heavy fall rains) and again in January. In orchards where the disease is severe, a spray should also be applied in August. Brown Rot Blossom Blight. For adequate control apply 2-3 pounds per 100 gallons as a full cover spray at popcorn and tull bloom.



CITRUS, Melanose, Scab, Greasy Spot & Pink Pitting. Apply as pre-bloom and post bloom sprays. Use 0.75 to 1.5 pounds per 100 gallons, depending on disease severity. May be used in concentrate sprays at equivalent rates. For aerial application use 6 pounds per 100 gallons per acre. Brown Rot. Use 0.5 to 1 pound per 100 gallons as dilute spray or at equivalent rate as concentrate spray depending on severity of disease. Begin application in fall before or just after first heavy rains. Apply to skirts of trees to a height of at least 4 feet. Apply also to bare ground one foot beyond skirt. (California only) In areas subject to copper injury, add 1/2 to 1 pound of hight quality lime per pound.

COFFEE, Iron Spot (Cercospora coffeicola) & Pink Disease (Corticium salmonicolor). Apply at 2 pounds per acre as a concentrate or dilute spray. Begin treatment at start of wet season and continue at monthly intervals for three applications. Leaf Rust (Brazil). Apply at 3.5 to 5.5 pounds per acre for average density plantations. High density plantations may require 7-8 pounds per acre. Make application from September to March depending on altitude and local recommendations. Apply at 3 to 4 week intervals depending on disease severity and rainfall conditions.

CRANBERRY, Fruit Rot. Apply at 8 pounds per acre beginning in late bloom. One or two additional applications made at 10 to 14 day intervals may be required, depending on disease pressure. Follow the advice of the State Agricultural Extension Service.

CUCUMBERS, Angular Leaf Spot & Downy Mildew. Apply weekly once the plants begin to vine. Use at 1.5 to 2 pounds per acre.

CURRANTS & GOOSEBERRY, Leaf Spot. Make three applications at 10 pounds per acre, starting after harvest, before bloom and after petal fall.

EGGPLANT, Alternaria Blight, Anthracnose, Phomopsis. Use 2 pounds per acre before disease appears. Repeat at 7 to 10 day intervals (EXCEPT CALIFORNIA).

FILBERTS, Bacterial Blight. Apply 4-6 pounds FUNGURAN^(R) OH plus 1 pint superior-type oil per 100 gallons in late August or early September. In seasons of heavy rainfall, apply another spray when three-fourths of the leaves have dropped.

GRAPES, Black Rot, Powdery Mildew & Downy Mildew. Apply 2 pounds FUNGURAN -OH plus 2-6 pounds hydrated lime per acre as a dilute or concentrate spray. Use FUNGURAN -OH for the last one or two late summer applications following early season application of another_fungicide. Follow State schedule for exact timing. (Caution: Slight to severe foliage injury may occur on coppersensitive varieties such as Concord, Delaware, Niagara, and Rosette).

HOPS, Downy Mildew. Apply 2 pounds as a fungicide crown treatment (after pruning, but before training) as needed. After training, additional fungicide treatments are needed at about 10 day intervals. Discontinue use 2 weeks before harvest.

LETTUCE, Downy Mildew. Apply 1-2 pounds per 100 gallons of water. Begin treatment when disease first appears and repeat every 7-10 days as needed to suppress disease.

LIVE OAK, Ball Moss (Texas only). Apply at 6 pounds per 100 gallons of water, in spring after heavy rain, using 1.5 gallons of spray per foot of tree height. Make sure to wet tufts thoroughly. A second application may be required after 12 months.

MANGO (Florida), Anthracnose. Apply monthly after fruit set until harvest at 2 pounds per 100 gallons or 8-10 gallons per acre depending on equipment. Consult Extension Service for State recommendations.

OLIVES (California), Peacock Spot. Make first application at 2-3 pounds per 100 gallons or at 8-12 pounds per acre depending on equipment before winter rains fall. A second application in early spring should be made if disease is severe.

ONION, Purple Blotch & Downy Mildew. Apply 2 pounds per acre when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals.

PEACHES AND NECTARINES, Leaf Curl & Coryneum Blight (Shot Hole). Dormant application, apply at leaf fall. Dilute: Apply 2 4 pounds per 100 gallons (minimum of 8 lbs/acre). Use 16 pounds per acre when rainfall is very heavy and disease pressure 1s high. Concentrate: Apply at equivalent rates in approximately 100 gallons of water. May be used with agricultural spray oil. Brown Rot Blossom Blight. Apply at 2 or 3 pounds per 100 gallons as a full cover spray at pink bud. (Application at this time also affords some control of Leaf Curl and Coryneum Blight). Bacterial Spot. Dormant application, apply at 2 pounds per 100 gallons. Post bloom, apply 1/4 pound per 100 gallons at first and second cover sprays. Do not spray later than three weeks prior to harvest. Do not use at rates above those recommended. (Caution: Slight defoliation and spotting of leaves may occur from use in cover sprays).

PEANUTS, Cercospora Leaf Spot. Begin spraying 40-45 days after planting or when disease symptoms appear. Make ground or aerial application at 1.5 to 3 pounds per acre. For aerial application use 3-10 gallons of water. Continue applications at 10-14 day intervals. Use in sufficient water to get adequate coverage. One to two quarts of a 6-pound flowable sulfur may be added.



PEARS, Fire Blight. Apply at 0.25 pound per 100 gallons or 1 pound per acre at 5 days intervals throughout bloom period. Pseudomonas Blight. Apply FUNGURAN -OH before fall rains at a rate of 3-4 pounds per 100 gallons (300-400 GPA) and again at dormant before spring growth starts. Excessive dosages may cause fruit russet.

PEAS, Powdery Mildew. Begin spray treatment when disease symptoms first appear. Use at 1.5 to 3 pounds per acre according to disease severity. Repeat applications at weekly intervals.

PEPPERS, Bacterial Spot. When disease threatens, apply 2 to 3 pounds per acre in sufficient water for adequate coverage at 7 to 14 day intervals depending on disease severity.

PHILODENDRON, Bacterial Leaf Spot. Apply weekly before disease appears at 1.5 pounds FUNGURAN -OH plus 1.5 pounds of a coordination product of maneb and zinc (80 % active compound) per 100 gallons of water.

POTATOES, Early & Late Blight. Apply at 7 to 10 day intervals starting when plants are six inches high until two weeks before harvest. Use 1 to 1.5 pounds per acre in those locations where disease is light and up to 3-4 pounds per acre where disease is more severe.

PUMPKIN & SQUASH, Powdery Mildew. Begin applications when plants are 3 weeks old or when first disease symptoms appear. Use at weekly intervals at 1.5 to 3 pounds per acre depending on disease severity.

STRAWBERRIES, Leaf Spot & Leaf Blight. Apply at 2-3 pounds in 100 gallons per acre. Begin application, when plants are established and continue on a weekly schedule throughout season. Discontinue applications if signs of phytotoxicity appear.

SUGAR BEETS, Cercospora Leaf Spot. Start spray when disease threatens and continue for 4 to 5 applications. Spray 10-14 days depending on weather conditions at 2 to 5 pounds per acre depending on disease severity. Addition of suitable agricultural spray oil 1s recommended at 2 quarts per acre.

SYCAMORE, Anthracnose. Make two applications using 2-3 pounds per 100 gallons as a full cover spray. Make first application at bud crack and second application 7-14 days later at 10% leaf expansion.

TOMATOES, Early Blight. When disease threatens, apply 2-3 pounds per acre at 7-10 day intervals. Bacterial Speck. Apply at 2 pounds per acre at 10-30 day intervals beginning when the disease

threatens. Use more frequent applications when disease pressure is high. Bacterial Spot. When disease threatens, apply 2-4 pounds per acre at 7-10 days intervals, more frequently when disease is severe. May be combined with 1.5 to 2 pounds per acre maneb or coordination product of maneb and zinc (80% active compound). When maneb or the coordination product of zinc and maneb is used in combination, do not apply within five days of harvest.

WALNUT, Walnut Blight. Apply first spray at early pre-bloom when catkins are partially expanded. Make three additional applications during bloom and early nutlet stage at 7-10 day intervals. Additional applications may be necessary when frequent rainfall occurs. Dilute: Apply 2 pounds per 100 gallons water (minimum of 8 lbs/acre). Concentrate: Apply at equivalent rates in 50-100 gallons water per acre. One pint of summer oil emulsion may be added per 100 gallons of spray. Do not apply more than 12.5 pounds per acre per application.

WATERMELON, Anthracnose & Downy Mildew. Apply as soon as plants become established and at weekly intervals thereafter. Anthracnose. Use at 2 pounds per acre. Downy Mildew. Use at 1.5 to 3 pounds per acre, according to disease severity.

WHEAT AND BARLEY, Septoria Leaf Blotch & Helminthosporium Spot Blotch. Apply 1.5 to 2 pounds per acre. Make first application at early heading and follow with second application 10 days later.

FOR CONTROL OF DISEASES ON ORNAMENTALS IN GREENHOUSES, FICLOS & NURSERIES

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Apply as a thorough coverage spray using I pound FUNGURAN (R) - OH per 100 gallons of water. Begin application at first sign of disease and repeat at 7-14 day intervals as needed, use shorter interval during periods of frequent rains or when severe disease conditions persist. One level tablespoon of FUNGURAN (R) - OH per gallon (R) water is equivalent to one pound per 100 gallons, FUNGURAN - OH may be used as a maintenance spray. FUNGURAN - OH may be used as a maintenance spray. FUNGURAN - OH may be used alone or in combination with other fungicides such as the dithiocarbamates.

CROP Aralia

Azalea*

Begonia Bulbs (Easter lily, tulip, gladiolus) Carnation×

Chrysanthemum*
Cotoneaster
Euonymus
Ivy*
Pachysandra
Perlwinkle
Pyracantha
Rose*
Yucca (Adam's needle)

DISEASES
Xanthomonas & Cercospora leafspots,
Alternaria
Cercospora leafspot, Botrytis blight,
Phytophthora dieback & powdery mildew
Xanthomonas leafspot, Anthracnose
Botrytis blight

Alternaria blight, Pseudomonas leafspot & Botrytis blight Septoria leafspot & Botrytis blight Botrytis blight Botrytis blight Botrytis blight, Anthracnose Xanthomonas leafspot Volutella leaf blight Phomopsis stem blight Fireblight, scab Powdery mildew, black spot Ce.cospora & Septoria leafspots

* Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.

CAUTION: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of FUNGURAN -OH, apply the recommended rate to a few plants and observe after 7-10 days for symptoms of phytotoxicity.

- WARRANTY - CONDITION OF SALE:

DIRECTIONS FOR USE of this product are based on field use and tests believed reliable and should be followed carefully. It is, however, impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of URANIA AGROCHEM or the seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result.

ALL SUCH RISKS ARE ASSUMED BY THE BUYER

URANIA AGROCHEM warrants that this product conforms the chemical description on the label and is reasonably fit for the purposes referred to in the direction for use. URANIA AGROCHEM makes no further warranties, expressed or implied, including FITNESS OR

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MIRCHANTABILITY. In no case shall URANIA AGROCHEM or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by URANIA AGROCHEM and is accepted as such by the Buyer.