

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR - 5 2002

Richard Mc Corkle
R.D. & Associates, Inc.
P.O. Box 547754
Orlando, FL 32854

Subject: R.D. 20
EPA Registration Number: 53642-1
Application Date: December 1, 2001
Receipt Date: December 7, 2001

Dear Mr. Mc Corkle:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

- update label language
- clarify use directions

Conditions

Revise the label as follows:

1. Revise the directions for use on "Work Areas and Benches", pages 5 and 15, by adding a reference to the contact time of *10 minutes* for this use.
2. Your label indicates that this product is not to be added to bird baths when fish are present because "...it may cause fish to suffocate and die." This does not appear to be the correct mode of toxicity for your product. Delete the phrase "it may cause fish to suffocate and die" each time it appears on your label: pages 5, 6, 12, 16, and 22.

CONCURRENCES

SYMBOL	7510C						
SURNAME	J. Long						
DATE	3/5/02						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

3. Your directions for the use of this product to control algae in swimming pools are incomplete. Revise directions on page 6 to begin as follows: "Initial dose when algae is present: apply 2 quarts of product per..." then add "...used every 5-7 days to maintain control. Initial dose when no signs of algae: apply 1 pint of product per 50,000 gallons of water (or 3 1/5 ounces per 10,000 gallons of water) every 5-7 days. Apply product along edges of pool. Keep the filter running to facilitate one change over of water in the pool after treatment. Back flush the filter if it becomes clogged or if the pressure drops. After adding the product wait 30 minutes before..."

4. Your label directions for mosquito control in commercial spas, hot tubs, and swimming pools are incomplete (page 12). In addition, your rate for mosquito control is significantly higher (100 X) than that for algae control. We have concerns about this higher rate. Your label requires a 30 minute waiting period after treatment for algae. Since this use is at such a higher rate we feel that 30 minutes is not adequate. A person entering the pool shortly after this treatment may have an adverse reaction to this product. Therefore we feel a longer reentry interval is needed for mosquito control. Revise your label to include the following instructions: "When adding this product to spas, hot tubs, and swimming pools keep the filter running to facilitate one change over of water in the pool after treatment. After adding the product wait at least 8 hours or overnight before using the pool, hot tub or spa to allow the product to be distributed evenly throughout to pool. At the beginning of the swimming season or after a storm, remove branches, leaves and other foreign material before treating water with product."

Due to our concerns about this high rate, delete the uses of this product for mosquito control in residential spas, hot tubs, and swimming pools (page 22).

If you desire to change the above required statements, please submit a new application to the Agency and provide appropriate data. You may contact the Agency for guidance as to the data needed to support a change in reentry interval.

5. Revise the directions for use as a general purpose disinfectant by added the following statement which is required when this product is used in sites where food is present: "Before use in food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected."

6. We have discussed your warranty statement with OGC. The documents which you provided did not support your warranty statement. OGC has conveyed to us that your warranty statements are overbroad and misleading and thus unacceptable. Revise your warranty statement to include the following phrases:

"Limitation of Liability: As permitted by state law, manufacturer warrants..." and "...In no case shall manufacturer be liable for consequential, special or indirect damages resulting from the use or handling of this product inconsistent with the label. Damages caused by..." Make these same revisions to pages 14 and 23 of your label.

CONCURRENCES							
SYMBOL							
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General Comments

A stamped copy of the labeling accepted with conditions is enclosed. Submit two (2) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions concerning this letter please contact Tracy Lantz at (703) 308-6415.

Sincerely,



Velma Noble
Product Manager (31)
Regulatory Management Branch I
Antimicrobials Division (7510C)

Enclosure: Stamped Label
7510C:T.Lantz:2/28/02:53642-1d

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

R•D•20®

DISINFECTANT FOR USE AGAINST FUNGAL, BACTERIAL, ALGAL
AND VIRAL PLANT PATHOGENS AND THEIR ODORS

PATENT PENDING

Stable — Mixes Readily with Water
Does Not Separate — A Good Wetting Agent
Leaves No Residue Marks on Foliage

R•D•20 is a Concentrate and Must be Diluted Before Use

Active Ingredients:

n-Alkyl (60%C ₁₄ , 30%C ₁₆ , 5%C ₁₂ , 5%C ₁₈) dimethyl benzyl ammonium chloride.....	10%
n-Alkyl (68%C ₁₂ , 32%C ₁₄) dimethyl ethylbenzyl ammonium chloride.....	10%
Other Ingredients.....	80%
Total	100%

EPA Reg. No. 53642-1

EPA Est. No. 48498-CA-1 / XXXXX-FL-X

KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO

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).

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none"> • 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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Net Contents: _____ gallon(s)

ACCEPTED
with COMMENTS
in EPA Letter Dated:

Manufactured for: RD & Associates, Inc.
PO BOX 547754 • Orlando, FL 32854

MAR 05 2002

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 53642-1

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER – CORROSIVE. Causes irreversible eye damage and skin burns. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear long-sleeved shirt and long pants, shoes and socks. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing wash clothing before reuse. Wash clothing separately from other laundry. Keep unprotected persons out of treated areas until sprays have dried.

(the following Worker Protection Standard (WPS) and Personal Protective Equipment (PPE) language is required for when this product label is designed for use in a commercial setting- these WPS and PPE language statements must be removed when the product is clearly sold and distributed for residential use)

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Coveralls worn over Long-sleeved Shirt and Long Pants
- Waterproof gloves
- Chemical-Resistant Footwear and Socks
- Protective eyewear
- Chemical-Resistant Headgear when using this product for algae control in overhead watering systems
- Chemical-Resistant Apron when mixing, loading or cleaning equipment

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

USER SAFETY :
 Users must:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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(if the container is 5 gallons or larger, the following statement must appear on the label)

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark excepted for algae control in ponds and control of mosquito populations as specified on this label. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

(if the container is less than 5 gallons, the following statement must appear on the label)

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark excepted for algae control in ponds and control of mosquito populations as specified on this label. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

(this statement is required for both commercial and residential use product labels)

PHYSICAL OR CHEMICAL HAZARDS

Do not mix with iron-based micronutrients, dye indicators or other anionic materials.

(if the container is greater than one gallon, use the following storage and disposal statements)

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Open dumping is prohibited. Do not reuse empty container. Place in locked storage inaccessible to children and others unfamiliar with product use.

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 instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

(if the container is one gallon or less, use the following storage and disposal statements)

STORAGE AND DISPOSAL

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

Store in original container. Place in locked storage inaccessible to children, pets and others unfamiliar with product use.

Partially filled container may be disposed of by securely wrapping in several layers of newspaper and discard in trash.

Do not reuse empty container. Securely wrap original container in several layers of newspaper and discard in trash.

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53642-1

(THE FOLLOWING USE DIRECTIONS ARE SPECIFIC TO ONLY THE COMMERCIAL USE PRODUCT)

DIRECTIONS FOR USE

For Commercial Use

It is a violation of Federal Law to use this product in a manner inconsistent with its label. 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). 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 4 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 worn over long sleeved shirt and long pants, waterproof gloves, chemical-resistant shoes plus socks, and protective eyewear.

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.

Keep unprotected persons, children, pets and others out of treated areas until sprays have dried.

CHEMIGATION: Do not apply this product through any type of irrigation system except when used to control algae in nozzles as directed on this label.

GENERAL INFORMATION

R•D•20 is a general disinfectant. It will help in the control of fungal, bacterial and viral plant pathogens, bacterial and fungal leaf rots, slime forming fungi, and odor causing bacteria and algae. It is designed specifically for greenhouse use where cross contamination may occur between plants. Pre-clean all surfaces prior to application of the disinfectant solution. All inanimate surfaces must be thoroughly wetted and remain wet for 10 minutes for disinfection. Then wipe up excess or allow to air dry. Fresh solution must be prepared daily and when use solution becomes visibly dirty.

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DISINFECTING

Work Areas and Benches:

Spray or swab working surface with a solution of 1 Tbsp. R•D• 20 per gallon of water before each work period and again after each plant is completed to help control transfer of diseases such as *Botrytis*, crown rot, downy mildew, *Erwinia*, *Phalaenopsis* and root rot.

Pots, Flats and Flower Buckets:

Brush or wash used pots and flats, then soak in a solution of 1 Tbsp. of R•D• 20 per gallon of water for 10 minutes to help control transfer of diseases such as anthracnose, blight, *Botrytis*, crown rot, *Erwinia*, mildew, *Phalaenopsis*, root rot, and rust.

Cutting Tools:

Soak cutting edge of tool for 10 minutes in a solution of 1 Tbsp. of R•D• 20 per gallon of water [1 teaspoon/quart] before use to help control transfer of diseases such as *Botrytis*, *Erwinia*, *Phalaenopsis*, root and stem rots, and Tobacco Mosaic Virus (TMV). Dry and oil tools at the end of each workday.

ALGAE CONTROL

When used as directed, R•D• 20 is effective against algae. With a little experience, you will quickly recognize algae contamination as it starts. Algae should be killed immediately! Remember - algae can double or quadruple in growth every day. Algae are generally dead when it does not feel slick to the touch and the color has changed. However, algae do not always change color when killed.

Greenhouse Glass:

Spray or swab surface with a solution of 1 tsp. of R•D• 20 per gallon of water. Allow to air dry. Wash off dead algae with water. Spray clean surface again with the solution. Do not rinse.

House Plants:

To control algae and cross contamination in terrariums, bubbles, etc., wipe inside of glass with a solution of 1/4 tsp. R•D• 20 per quart of water. Lightly mist plants with same solution.

Walkways:

For heavy infestations, spray or swab surface with a solution of 1 Tbsp. of R•D• 20 per gallon of water. Let stand for an hour or more then brush and wash away dead algae. Soak area again with the solution. Do not rinse. This product will inhibit the growth of algae on walkways. Allow to dry on the surface and repeat application when algae growth returns.

Bird Baths:

DO NOT use when fish are present; it may cause fish to suffocate and die.

Clean to remove algae growth prior to filling birdbath and spray the exposed surface with a solution of 1 Tbsp. of R•D• 20 per gallon of water. Allow to air dry and brush off dead algae.

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Fountains, Water Displays, Decorative and Swimming Pools/Ponds and Standing Water (in such places as puddles at golf courses, recreational parks, amusement parks, universities and cemeteries)

DO NOT use when fish are present; it may cause fish to suffocate and die.

Remove floating type algae by raking, dragging with cable or chain, skimming, or any other suitable method. It is more economical to remove floating type algae before the water is treated. Treat water by "dribbling" R•D•20 solution (1 part R•D•20 to 4 parts water) around the edges where visible algae growth is evident. Apply 12 ounces of use solution per 1000 gallons of water. The use solution is often dribbled liberally along the windward side to float across the water and along the leeward side where contamination gathers. Where a spray rig is available, it may be used to apply the use solution instead of the hand "dribbling" method.

Note: Algae does not usually grow in water that is 5 feet or more in depth. However, floating type algae may grow on pond weeds that grow on the surface of the water.

Decorative Pool Applications:

Initial Dosage: 1 tsp. per 52 gallons of water (5ppm)
1 oz. per 312 gallons of water (5 ppm)
1 pint per 5,000 gallons of water (5 ppm)
1 quart per 10,000 gallons of water (5ppm)

* ppm- parts per million active ingredient

Weekly Maintenance: Add not more than one-half the initial dosage. When pool is to remain empty for several weeks or longer, spray exposed surfaces with a solution of 1 Tbsp. of R•D•20 per gallon of water.

Operating Fountains Applications:

Initial Dosage: Add a 0.5 tsp of concentrate R•D•20 per 52 gallons of water at a time. Repeat until slight patches of foam appear. Then discontinue. Overdose reduces lighting efficiency.

Weekly Maintenance: Add not more than one-half the initial dosage until slight foam reappears.

Monthly Maintenance: Drain and clean bowl. Refill with fresh water and repeat initial treatment. Draining also removes airborne dirt, dust, contamination and alkali buildup.

Swimming Pool Applications:

Initial dose should be 2 quarts of product per 50,000 gallons of water (or 13 ounces per 10,000 gallons of water) followed by cleaning out settled algae next day and retreatment at the same dosage. This is repeated until the pool is clear of visible algae. Then 1 pint of product per 50,000 gallons of water (or 3 1/5 ounces per 10,000 gallons of water) is used every 5-7 days to maintain control. Apply product along edges of the pool. After adding the product wait 30 minutes before using the pool to allow the product to be distributed evenly throughout the pool. At the beginning of the swimming season or after a storm, remove branches, leaves and other foreign material before treating pool with product.

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ORCHIDS

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Orchids — Seedlings	Damping-off (caused by Pythium, Fusarium or Rhizopus)	1.5 tsp.	From flask, soak seedling in solution for 2-5 minutes before potting to remove agar. Spray seedlings once a month as preventative maintenance. Spray any time disease is evident with solution.
Orchids — Dividing plants		1 Tbsp.	Remove compost then soak plant for 2-5 minutes in solution. Operate with wet hands and cutting tools (see Disinfecting). After division and root trim, soak divisions in solution for 2 to 5 minutes. Pot in compost drenched with solution.
Orchids — Adult plants		2 tsp.	Spray any time disease, other than rot (see Adult Orchid Rots), is evident with solution. Spray once per month as preventative maintenance. Drench compost when fungus is evident.
	Botrytis petal blight	1/3 tsp.	During cool weather, spray plants, flowers and under benches at first sign of spotting on flowers. Normally, weekly sprayings will greatly reduce or eliminate the botrytis spotting.
	Rots (such as <i>Erwinia</i> , <i>et al</i>):	1 Tbsp.	Remove compost from plant, then soak entire plant 10 minutes or more in solution. Cut away all rot with treated tool (see Disinfecting). Soak plant wounds again for 10 minutes in solution. Repot in drenched compost.
	Crown rot	2 tsp.	Spray plants weekly with solution, assuring coverage around and in base of leaves.

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HORTICULTURAL USAGES

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Bulbs: Such as Daffodils, Easter lilies, Gladioli, Hyacinth, Iris, Narcissus, Tulips	Fusarium basal rot	1 Tbsp.	Prestorage: treat the corms and bulbs immediately after they are "cleaned" by soaking them for 10 minutes in the solution. Preplant: treat again immediately before planting.
Cut flowers: in containers, tubes and decorative vases	Bacterial stem plugging (restricts water uptake) Fungi (can create ethylene gas, a cause of petal drop)	1 tsp.	Flower spikes should be hardened in solution during harvesting, storage and shipping to help control the transfer of diseases.
Plant Cuttings: Such as Begonias, Carnations, Chrysanthemums, Fuschias, Geraniums	Carnation rust, Crown gall, Gray mold leaf spots and Powdery mildew	2 tsp.	Soak cuttings 2-5 minutes in the solution. Plant in compost drenched with the solution.
Seedlings	Damping off	2 tsp.	Treat seeds and cuttings before planting by spraying with solution to completely wet all surfaces. Use inert material for planting seeds and cuttings, such as sphagnum moss, vermiculite, perlite, pumice, sterilized commercial mix rather than garden soil. If garden soil must be used, thoroughly saturate with the solution. After planting, water with solution (unless using soil saturated as above) and again after seedlings emerge. Spray weekly as needed.
	Downy mildew	2 tsp.	Spray with solution at 5 day intervals as needed.

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ORNAMENTAL USAGES

Whenever possible, remove and destroy dead and/or infected plant parts before applying R•D•20.

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Aucuba, Dahlia, Fuschia, Geranium, Gladiolus, Peony, Piersis	Botrytis	2 tsp.	Spray buds and blooms lightly at first sign of disease, and repeat 2-3 times per week as needed. Before shipping, dip spikes in solution.
	Downy mildew, Gray mold	2 tsp.	Spray at first sign of disease repeating at 7-14 day intervals. Before shipping, dip spikes in solution.
	Rust	2 tsp.	Spray at 7-14 day intervals during the wet periods starting in early Summer. Before shipping, dip spikes in solution.
Begonias, Ferns, Gesneria	Bud rot, Leaf spots, Gray mold, Shoot rot	1 tsp.	Spray solution before buds open, when blossoms show pink, at 3/4 blossom fall, and 2 weeks after petal fall.
Cactus	Bacterial leaf spot, Root rot, Top rot	2 tsp.	Sterilize seeds and disease free cuttings by dipping cuttings in the solution for 5 minutes before planting. Then spray at 10-14 day intervals.
	Slimy collar rot	2 tsp.	Just before planting, dip entire plant in the solution.
Calendulas, China Asters, Chrysanthemum, Dahlias, Lilac, etc.	Powdery mildew	2 tsp.	Spray upper and lower surface of leaves and branches with solution until thoroughly wet. Spray when buds burst in Spring and repeat in 2 weeks. Spray every 2 weeks during the mildew season.
Carnations	Canker rot, Carnation rust, Crown rot, Leaf spot, Root rots, Stem rot	2 tsp.	Spray at first sign of disease and repeat at 7-10 day intervals.
	Gray mold rot	2 tsp.	Spray 1-2 times just before bloom and again as flowers are opening.

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Crassula, Kalanchoe, Sedum	Crown gall, Crown rot, Root rot	2 tsp.	Destroy infected plant parts and drench the remainder. Spray plants weekly as needed.
Dogwood	Anthracnose, Leaf blight, Leaf spots	2 tsp.	Spray 4 times: when flower buds begin to open, as soon as flower bracts have fallen, 4 weeks later, and in late summer after flower buds are well formed. If possible, spray just before rainy periods.
Fuschia, Gardenia, Geranium, Heliotrope	Bud rot, Gray mold, Stem rot	2 tsp.	Spray at first sign of disease and repeat weekly as needed.
Hawthorn	Rust	2 tsp.	Begin protective spraying with new leaf formation after winter dormancy but before onset of rainy season. Thoroughly spray undersides of infected leaves.
Hawthorn (Crataegus)	Leaf blights	2 tsp.	Make 3 applications: begin when leaves emerge from buds, when leaves are half grown, and again when fully grown.
Hollyhock	Rust	2 tsp.	Apply at weekly intervals as soon as growth begins. Repeat applications in late Summer.
Iris	Botrytis, Crown rot, Gray mold rot	2 tsp.	Treat all new rhizomes before planting. Submerge rhizomes and 3-4' of leaves in the solution for 30 minutes. Plant at once while still wet with solution.
	Leaf spots	2 tsp.	Spray weekly with solution while leaves are growing.
Ornamental Trees (Such as Sycamore, Ash, Crape Myrtle, Live Oak, etc.)	Anthracnose	2 tsp.	Spray upper and under sides of leaves and twigs until thoroughly wet. A large tree requires 50-60 gallons of spray per treatment for adequate coverage. Make 3 applications: when buds start to swell in the spring, as leaves start to expand, and when leaves are about 3/4 grown.
	Powdery Mildew	2 tsp.	Spray upper and lower surface of leaves and branches with solution until thoroughly wet at bud break and again in April. Apply 50-60 gallons of spray per tree for adequate coverage.

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Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 5.3642-1

Palms	Heart rot, Penicillium leaf base rot	2 tsp.	At first sign of rot, completely fill cup or "heart" formed by the palm branches at top center of the plant. Repeat every 7 days as needed.
Roses	Black spots, Powdery mildew, Rusts, Stem gall	2 tsp.	When symptoms appear, spray upper and lower surface of leaves and branches with solution until thoroughly wet. Apply at 7-10 day intervals as needed.
	Brown canker	2 tsp.	Begin spray applications in early spring when new growth starts and repeat weekly until plant is dormant.
Rubber Plant	Anthrachnose, Crown gall	1 tsp.	Spray plant at first sign of disease and repeat weekly as needed.
Saintpaulias (African Violets)	Bud rot, Crown rot, Downy mildew, Gray mold rot (Botrytis), Powdery mildew, Root rot	3/4 tsp.	Dip entire plant and pot in the solution for 5 minutes. Thereafter, spray every 10 days as needed.
Snapdragons	Anthrachnose, Downy mildew, <i>Phyllosticta</i> blight, Powdery mildew, Stem rot, Wilt	2 tsp.	When symptoms appear, spray upper and lower sides of leaves until thoroughly wet. Repeat every 7-10 days as needed. Collect and burn tops in the fall.
	Rust	2 tsp.	Apply at 7-10 day intervals as soon as plants are set out. Collect and burn tops in the Fall.

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TREATMENT OF LAWNS, GOLF COURSES AND COMMERCIAL TURF

To control fungal diseases [including dollar spot (*Sclerotinia*), fusarium blight (*Fusarium*), leaf spot (*Helminthosporium*), brown patch (*Rhizoctonia*), fading-out (*Curvularia*), Southern blight (*Sclerotium rolfsii*), pythium blight, rust, toad stools and fairy rings] and algal build-up in turf grasses, including lawns of GRASS or DICHONDRA, spray a solution of one tablespoon (1/2 oz) R•D•20 per gallon of water. Treat at the rate of one gallon of solution to 40 square feet (4 ft. x 10 ft.) of lawn. Treat entire lawn to prevent spread of infection or at least one foot beyond the edges of isolated diseased areas. Saturate the entire treatment area, wetting all plant and soil surfaces. Repeat spray applications every 10 to 14 days, as needed to control new or established disease conditions. Treatment is required during the warm growing season and must be made when the lawn is dry or damp, but not during wet rainy weather.

For golf courses, greens, tees and fairways, and commercial turf applications, follow the use directions above. If commercial power sprays are used, reduce spray concentration to one teaspoon per gallon of water (or one pint to 50 to 100 gallons of spray mixture to treat 10,000 square feet or 1/4 acre) (1.6 oz. per 1,000 square feet or 1/2 gallon per acre).

Do not graze treated areas or feed clippings to livestock.

MOSQUITO CONTROL

When used as directed, R•D•20 is effective as an ovicidal, larvicidal, pupacidal control of *Aedes aegypti* (Yellow fever carrier) and *Culex nigripalpus* (carrier of various diseases of man and animal, such as heartworm and Hepatitis) mosquitos. This product will also reduce larval populations of *Anopheles quadrimaculatus* (Malaria carrier) mosquitoes.

R•D•20 controls mosquitoes where they breed (fountains, water displays, decorative pools, decorative ponds, sewage treatment systems, spas, hot tubs, swimming pools and standing water (in such places as old tires, empty tin cans, barrels, puddles, and water drains around buildings).

Spray from fountains treated with R•D•20 will not harm poolside plantings. DO NOT use when fish are present; it may cause fish to suffocate and die.

INITIAL DOSAGE				
R•D•20		p e r	Unit water for 200 ppm*	
Metric	U.S.		Metric	U.S.
3.8 cc	0.13 oz		3.78 l	1 gal
38.0 cc	1.28 oz.		37.85 l	10 gal.
380.0 cc	12.8 oz.		378.5 l	100 gal.
3785.0 cc	1.0 gal.		3.75 Kl	1,000 gal.

Treat water by "dribbling" R•D•20 solution around the edges of the site to be treated. Where a spray rig is available - it may be used to apply the use solution - instead of the hand dribbling method.

* ppm- parts per million active ingredient

WEEKLY MAINTENANCE				
R•D•20		p e r	Unit water for 100 ppm *	
Metric	U.S.		Metric	U.S.
1.9 cc	0.065 oz.		3.78 l	1 gal
19.0 cc	0.64 oz.		37.85 l	10 gal.
190.0 cc	6.4 oz.		378.5 l	100 gal.
1,892.5 cc	64 oz.		3.75 Kl	1,000 gal.

Each week repeat maintenance dosage or add R•D•20 using a test kit to maintain the proper concentration

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OTHER USES

Mildewstat - Tabletops, floors, walls. To control mold and mildew on pre-cleaned hard, non-porous surfaces, apply a solution of 1-1/2 oz. [3 Tablespoons] of R•D• 20 per gallon of water with a cloth, mop or sponge, making sure to wet all surfaces completely. Let air dry. Repeat at weekly intervals or when mildew growth reappears. Prepare a fresh solution for each use.

Overhead Watering Systems - During the last 2-3 minutes of watering use 1 oz. [2 Tablespoons] of R•D• 20 per 20 gallons of water as a control program. Due to variations of growing conditions, use every second to fourth watering. Will control algae in nozzles.

Evaporative Cooler - Controls algae, slime forming fungi on cooler pads and certain fungal plant pathogens that may carry over in the cooler as well as bacterial odors. Use 1 teaspoon of R•D• 20 per 15 gallons of water every other week.

Poultry House Disinfectant - Remove all poultry and feeds from premises, trucks, coops and crates. Next remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a disinfecting solution of 1- 3/4 oz. [3.5 Tablespoons] of R•D• 20 per 5 gallons of water for a period of 10 minutes. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has absorbed, set or dried. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

Farm Premise Disinfectant - Remove all animals and feed from premises, vehicles and enclosures. Next remove all litter and manure from floors, walls and surfaces of barns, stables, stalls, pens, chutes, kennels and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks, and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a disinfecting solution of 1-3/4 oz. [3.5 Tablespoons] of R•D• 20 per 5 gallons of water for a period of 10 minutes. Immerse all halters, ropes and other types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, vehicles and other closed spaces. Do not house livestock or employ equipment until treatment has absorbed, set or dried. Thoroughly scrub treated feed racks, troughs, mangers, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

Sanitizer: Commercial Food Grade Eggs Only - To sanitize previously cleaned whole food grade egg shells (dirty, cracked or punctured eggs cannot be sanitized) in shell egg and egg processing plants intended for food or food products, spray with a solution of 1/2 ounce [1 Tablespoon] of R•D• 20 per 4 gallons of water (providing 200 ppm of active ingredient). The temperature of the solution should be equal to or warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs that have been sanitized with this product shall be subjected to a thorough potable water rinse only if they are to be immediately broken for use in the manufacture of egg products. Eggs should be reasonably dry before casing or breaking. The solution should not be reused for sanitizing eggs.

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Sanitizer: Food Contact Surfaces Only - For use in restaurants, dairies, and food processing plants on hard nonporous surfaces. Remove all gross food particles and soil from areas that are to be sanitized with a routine pre-flush, pre-soak or pre-scrape treatment. Thoroughly pre-clean all surfaces with a detergent. Then rinse with potable water prior to applying the sanitizing solution. To sanitize pre-cleaned inanimate nonporous food contact surfaces, prepare a solution of 1/2 ounce [1 Tablespoon] of R•D•20 per 4 gallons of water (providing 200 ppm of active ingredient). Prepare a fresh solution daily or more frequently as solution becomes diluted or soil is apparent.

For immobile items such as counter tops, flood the area for at least 60 seconds, making sure to wet all surfaces completely. Remove or drain the use solution from the surface and let air dry. Prepare a fresh solution daily or more frequently as solution becomes diluted or soil is apparent.

For mobile items such as drinking glasses or eating utensils, immerse the item for at least 60 seconds, making sure to immerse completely. Remove or drain the use solution from the surface and let air dry. Prepare a fresh solution daily or more frequently as solution becomes diluted or soil is apparent.

General Purpose Disinfectant - For use in food processing plants, dairies, restaurants, animal quarters, poultry and turkey farms, kennels and other nonmedical institutions to disinfect pre-cleaned inanimate nonporous surfaces such as floors and walls. Remove all gross filth or heavy soil and thoroughly clean the surfaces prior to application. Prepare a disinfecting solution of 1 3/4 ounces [3.5 Tablespoons] of R•D•20 per 5 gallons of water and apply with a mop, cloth or mechanical sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. Prepare a fresh solution daily or when solution becomes diluted or soiled. When treating food contact surfaces, follow with a potable water rinse.

Instructions for use in areas which house animals: For cleaning and disinfecting the following hard nonporous surfaces: equipment not used for animal food or water, utensils, instruments, cages, kennels, stables, catteries, etc. Remove all animals and feeds from premises, animal transportation vehicles crates, etc. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a solution of 1-3/4 oz. per 5 gallons of water for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has absorbed, set or dried.

Note: This product has been tested on a wide variety of plants and in our opinion has demonstrated excellent plant safety. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences such as crop injury or ineffectiveness may result because of certain environmental or growing conditions, manner of use or application, and insect resistance. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage and for performance prior to full-scale application. All risks shall be assumed by the user.

LIMITATION OF LIABILITY: Manufacturer warrants that this product conforms to the chemical description on the label. Buyer assumes all risks of use in handling which are at variance in any way with the directions on the label. MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. DAMAGES CAUSED BY THIS PRODUCT ARE LIMITED TO REPLACEMENT OF THE PRODUCT OR RETURN OF THE PURCHASE PRICE.

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(THE FOLLOWING USE DIRECTIONS ARE SPECIFIC TO ONLY THE NON-COMMERCIAL RESIDENTIAL USE PRODUCT)

DIRECTIONS FOR USE

For Residential Use

It is a violation of Federal Law to use this product in a manner inconsistent with its label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

GENERAL INFORMATION

R•D•20 is a general disinfectant. It will help in the control of fungal, bacterial and viral plant pathogens, bacterial and fungal leaf rots, slime forming fungi, and odor causing bacteria and algae. It is designed specifically for use where disease cross contamination may occur between plants. Pre-clean all surfaces prior to application of the disinfectant solution. All inanimate surfaces must be thoroughly wetted and remain wet for 10 minutes for disinfection. Then wipe up excess or allow to air dry. Fresh solution must be prepared daily and when use solution becomes visibly dirty.

DISINFECTING

Work Areas and Benches:

Spray or swab working surface with a solution of 1 Tbsp. R•D•20 per gallon of water [1 tsp./quart] before each work period and again after each plant is completed to help control transfer of diseases such as *Botrytis*, crown rot, downy mildew, *Erwinia*, *Phalaenopsis* and root rot.

Pots, Flats and Flower Buckets:

Brush or wash used pots and flats, then soak in a solution of 1 Tbsp. of R•D•20 per gallon of water [1 tsp./quart] for 10 minutes to help control transfer of diseases such as anthracnose, blight, *Botrytis*, crown rot, *Erwinia*, mildew, *Phalaenopsis*, root rot, and rust.

Cutting Tools:

Soak cutting edge of tool for 10 minutes in a solution of 1 Tbsp. of R•D•20 per gallon of water [1 tsp./quart] before use to help control transfer of diseases such as *Botrytis*, *Erwinia*, *Phalaenopsis*, root and stem rots, and Tobacco Mosaic Virus (TMV). Dry and oil tools at the end of each workday.

ALGAE CONTROL

When used as directed, R•D•20 is effective against algae. With a little experience, you will quickly recognize algae contamination as it starts. Algae should be killed immediately! Remember - algae can double or quadruple in growth every day. Algae are generally dead when it does not feel slick to the touch and the color has changed. However, algae do not always change color when killed.

Greenhouse Glass:

Spray or swab surface with a solution of 1 tsp. of R•D•20 per gallon of water. Allow to air dry. Wash off dead algae with water. Spray clean surface again with the solution. Do not rinse.

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House Plants:

To control algae and cross contamination in terrariums, bubbles, etc., wipe inside of glass with a solution of 1/4 tsp. R•D•20 per quart of water. Lightly mist plants with same solution.

Walkways:

For heavy infestations, spray or swab surface with a solution of 1 Tbsp. of R•D•20 per gallon of water. Let stand for an hour or more then brush and wash away dead algae. Soak area again with the solution. Do not rinse. This product will inhibit the growth of algae on walkways. Allow to dry on the surface and repeat application when algae growth returns.

Bird Baths:

DO NOT use when fish are present; it may cause fish to suffocate and die.

Clean to remove algae growth prior to filling birdbath and spray the exposed surface with a solution of 1 Tbsp. of R•D•20 per gallon of water [3/4 tsp./quart]. Allow to air dry and brush off dead algae.

Fountains, Water Displays, Decorative Pools/Ponds and Standing Water:

DO NOT use when fish are present; it may cause fish to suffocate and die.

Remove floating type algae by raking, dragging with cable or chain, skimming, or any other suitable method. It is more economical to remove floating type algae before the water is treated. Treat water by "dribbling" R•D•20 solution (1 part R•D•20 to 4 parts water) around the edges where visible algae growth is evident. Apply 12 ounces of use solution per 1000 gallons of water. The use solution is often dribbled liberally along the windward side to float across the water and along the leeward side where contamination gathers.

Note: Algae does not usually grow in water that is 5 feet or more in depth. However, floating type algae may grow on pond weeds that grow on the surface of the water.

Decorative Pool Applications:

Initial Dosage: 1 tsp. per 52 gallons of water (5 ppm)
1 oz. per 312 gallons of water (5 ppm)
1 pint per 5,000 gallons of water (5 ppm)
* ppm – parts per million active ingredient

Weekly Maintenance: Add not more than one-half the initial dosage. When pool is to remain empty for several weeks or longer, spray exposed surfaces with a solution of 1 Tbsp. of R•D•20 per gallon of water.

Operating Fountains:

Initial Dosage: Add a 0.5 tsp of concentrate R•D•20 per 52 gallons of water at a time. Repeat until slight patches of foam appear. Then discontinue. Overdose reduces lighting efficiency.

Weekly Maintenance: Add not more than one-half the initial dosage until slight foam reappears.

Monthly Maintenance: Drain and clean bowl. Refill with fresh water and repeat initial treatment. Draining also removes airborne dirt, dust, contamination and alkali buildup.

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ORCHIDS

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Orchids — Seedlings	Damping-off (caused by Pythium, Fusarium or Rhizopus)	1.5 tsp.	From flask, soak seedling in solution for 2-5 minutes before potting to remove agar. Spray seedlings once a month as preventative maintenance. Spray any time disease is evident with solution.
Orchids — Dividing plants		1 Tbsp.	Remove compost then soak plant for 2-5 minutes in solution. Operate with wet hands and cutting tools (see Disinfecting). After division and root trim, soak divisions in solution for 2 to 5 minutes. Pot in compost drenched with solution.
Orchids — Adult plants		2 tsp.	Spray any time disease, other than rot (see Adult Orchid Rots), is evident with solution. Spray once per month as preventative maintenance. Drench compost when fungus is evident.
	Botrytis petal blight	1/3 tsp.	During cool weather, spray plants, flowers and under benches at first sign of spotting on flowers. Normally, weekly sprayings will greatly reduce or eliminate the botrytis spotting.
	Rots (such as <i>Erwinia</i> , <i>et al</i>);	1 Tbsp.	Remove compost from plant, then soak entire plant 10 minutes or more in solution. Cut away all rot with treated tool (see Disinfecting). Soak plant wounds again for 10 minutes in solution. Repot in drenched compost.
	Crown rot	2 tsp.	Spray plants weekly with solution, assuring coverage around and in base of leaves.

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HORTICULTURAL USAGES

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Bulbs: such as Daffodils, Easter lilies, Gladioli, Hyacinth, Iris, Narcissus, Tulips	Fusarium basal rot	1 Tbsp.	Prestorage: treat the corms and bulbs immediately after they are "cleaned" by soaking them for 10 minutes in the solution. Preplant: treat again immediately before planting.
Cut flowers: in containers, tubes and decorative vases	Bacterial stem plugging (restricts water uptake) Fungi (can create ethylene gas, a cause of petal drop)	1 tsp.	Flower spikes should be hardened in solution during harvesting, storage and shipping to help control the transfer of diseases
Plant Cuttings: such as Begonias, Carnations, Chrysanthemums, Fuschias, Geraniums	Carnation rust, Crown gall, Gray mold leaf spots and Powdery mildew	2 tsp.	Soak cuttings 2-5 minutes in the solution. Plant in compost drenched with the solution
Seedlings	Damping off	2 tsp.	Treat seeds and cuttings before planting by spraying with solution to completely wet all surfaces. Use inert material for planting seeds and cuttings, such as sphagnum moss, vermiculite, perlite, pumice, sterilized commercial mix rather than garden soil. If garden soil must be used, thoroughly saturate with the solution. After planting, water with solution (unless using soil saturated as above) and again after seedlings emerge. Spray weekly as needed.
	Downy mildew	2 tsp.	Spray with solution at 5 day intervals as needed.

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ORNAMENTAL USAGES

Whenever possible, remove and destroy dead and/or infected plant parts before applying R•D•20.

<i>Species</i>	<i>Diseases Controlled</i>	<i>Rate/ gal of water</i>	<i>Additional Information</i>
Aucuba, Dahlia, Fuschia, Geranium, Gladiolus, Peony, Piersis	Botrytis	2 tsp.	Spray buds and blooms lightly at first sign of disease, and repeat 2-3 times per week as needed. Before shipping, dip spikes in solution.
	Downy mildew, Gray mold	2 tsp.	Spray at first sign of disease repeating at 7-14 day intervals. Before shipping, dip spikes in solution.
	Rust	2 tsp.	Spray at 7-14 day intervals during the wet periods starting in early Summer. Before shipping, dip spikes in solution.
Begonias, Ferns, Gesneria	Bud rot Leaf spots Gray mold Shoot rot	1 tsp.	Spray solution before buds open, when blossoms show pink, at 3/4 blossom fall, and 2 weeks after petal fall.
Cactus	Bacterial leaf spot, Root rot, Top rot	2 tsp.	Sterilize seeds and disease free cuttings by dipping cuttings in the solution for 5 minutes before planting. Then spray at 10-14 day intervals.
	Slimy collar rot	2 tsp.	Just before planting, dip entire plant in the solution.
Calendulas, China Asters, Chrysanthemum, Dahlias, Lilac, etc.	Powdery mildew	2 tsp.	Spray upper and lower surface of leaves and branches with solution until thoroughly wet. Spray when buds burst in Spring and repeat in 2 weeks. Spray every 2 weeks during the mildew season.
Carnations	Canker rot, Carnation rust, Crown rot, Leaf spot, Root rots, Stem rot	2 tsp.	Spray at first sign of disease and repeat at 7-10 day intervals.
	Gray mold rot	2 tsp.	Spray 1-2 times just before bloom and again as flowers are opening.
Crassula, Kalanchoe, Sedum	Crown gall, Crown rot, Root rot	2 tsp.	Destroy infected plant parts and drench the remainder. Spray plants weekly as needed.

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Dogwood	Anthracnose, Leaf blight, Leaf spots	2 tsp.	Spray 4 times: when flower buds begin to open, as soon as flower bracts have fallen, 4 weeks later, and in late summer after flower buds are well formed. If possible, spray just before rainy periods.
Fuschia, Gardenia, Geranium, Heliotrope	Bud rot, Gray mold, Stem rot	2 tsp.	Spray at first sign of disease and repeat weekly as needed.
Hawthorn	Rust	2 tsp.	Begin protective spraying with new leaf formation after winter dormancy but before onset of rainy season. Thoroughly spray undersides of infected leaves.
Hawthorn (Crataegus)	Leaf blights	2 tsp.	Make 3 applications: begin when leaves emerge from buds, when leaves are half grown, and again when fully grown.
Hollyhock	Rust	2 tsp.	Apply at weekly intervals as soon as growth begins. Repeat applications in late Summer.
Iris	Botrytis, Crown rot. Gray mold rot	2 tsp.	Treat all new rhizomes before planting. Submerge rhizomes and 3-4" of leaves in the solution for 30 minutes. Plant at once while still wet with solution.
	Leaf spots	2 tsp.	Spray weekly with solution while leaves are growing.
Ornamental Trees (Such as Sycamore, Ash, Crape Myrtle, Live Oak, etc.) Note: Commercial application is required for large mature trees.	Anthracnose	2 tsp.	Spray upper and under sides of leaves and twigs until thoroughly wet. A large tree requires 50-60 gallons of spray per treatment for adequate coverage. Make 3 applications: when buds start to swell in the spring, as leaves start to expand, and when leaves are about 3/4 grown.
	Powdery Mildew	2 tsp.	Spray upper and lower surface of leaves and branches with solution until thoroughly wet at bud break and again in April. Apply 50-60 gallons of spray per tree for adequate coverage.

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Palms	Heart rot, Penicillium leaf base rot	2 tsp.	At first sign of rot, completely fill cup or "heart" formed by the palm branches at top center of the plant. Repeat every 7 days as needed.
Roses	Black spots, Powdery mildew, Rusts, Stem gall	2 tsp.	When symptoms appear, spray upper and lower surface of leaves and branches with solution until thoroughly wet. Apply at 7-10 day intervals as needed.
	Brown canker	2 tsp.	Begin spray applications in early spring when new growth starts and repeat weekly until plant is dormant.
Rubber Plant	Anthracoze, Crown gall	1 tsp.	Spray plant at first sign of disease and repeat weekly as needed.
Saintpaulias (African Violets)	Bud rot, Crown rot, Downy mildew, Gray mold rot (Botrytis), Powdery mildew, Root rot	3/4 tsp.	Dip entire plant and pot in the solution for 5 minutes. Thereafter, spray every 10 days as needed.
Snapdragons	Anthracoze, downy mildew, <i>Phyllosticta</i> blight, powdery mildew, stem rot, wilt	2 tsp.	When symptoms appear, spray upper and lower sides of leaves until thoroughly wet. Repeat every 7-10 days as needed. Collect and burn tops in the fall.
	Rust	2 tsp.	Apply at 7-10 day intervals as soon as plants are set out. Collect and burn tops in the Fall.

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TREATMENT OF LAWNS

To control fungal diseases [including dollar spot (*Sclerotinia*), fusarium blight (*Fusarium*), leaf spot (*Helminthosporium*), brown patch (*Rhizoctonia*), fading-out (*Curvularia*), Southern blight (*Sclerotium rolfii*), pythium blight, rust, toad stools and fairy rings] and algal build-up in turf grasses, including lawns of GRASS or DICHONDRA, spray a solution of one tablespoon (1/2 oz) R•D•20 per gallon of water. Treat at the rate of one gallon of solution to 40 square feet (4 ft. x 10 ft.) of lawn. Treat entire lawn to prevent spread of infection or at least one foot beyond the edges of isolated diseased areas. Saturate the entire treatment area, wetting all plant and soil surfaces. Repeat spray applications every 10 to 14 days, as needed to control new or established disease conditions. Treatment is required during the warm growing season and must be made when the lawn is dry or damp, but not during wet rainy weather.

MOSQUITO CONTROL

When used as directed, R•D•20 is effective as an ovicidal, larvacidal, pupacidal control of *Aedes aegypti* (Yellow fever carrier) and *Culex nigripalpus* (carrier of various diseases of man and animal, such as heartworm and Hepatitis) mosquitos. This product will also reduce larval populations of *Anopheles quadrimaculatus* (Malaria carrier) mosquitoes.

R•D•20 controls mosquitoes where they breed (fountains, water displays, decorative pools, decorative ponds, spas, hot tubs, swimming pools and standing water (in such places as old tires, empty tin cans, barrels, puddles, and water drains around buildings).

Spray from fountains treated with R•D•20 will not harm poolside plantings. DO NOT use when fish are present; it may cause fish to suffocate and die.

INITIAL DOSAGE				
R•D•20		p e r	Unit water for 200 ppm*	
Metric	U.S.		Metric	U.S.
3.8 cc	0.13 oz		3.78 l	1 gal
38.0 cc	1.28 oz.		37.85 l	10 gal.
380.0 cc	12.8 oz.		378.5 l	100 gal.
Treat water by "dribbling" R•D•20 solution around the edges of the site to be treated.				

WEEKLY MAINTENANCE				
R•D•20		p e r	Unit water for 100 ppm *	
Metric	U.S.		Metric	U.S.
1.9 cc	0.065 oz.		3.78 l	1 gal
19.0 cc	0.64 oz.		37.85 l	10 gal.
190.0 cc	6.4 oz.		378.5 l	100 gal.
Each week repeat maintenance dosage or add R•D•20 using a test kit to maintain the proper concentration.				

* ppm- parts per million active ingredient

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OTHER USES

Mildewstat – Tabletops, floors, walls. To control mold and mildew on pre-cleaned hard, non-porous surfaces, apply a solution of 1-1/2 oz. [3.0 Tablespoons] of R•D•20 per gallon of water with a cloth, mop or sponge, making sure to wet all surfaces completely. Let air dry. Repeat at weekly intervals or when mildew growth reappears. Prepare a fresh solution for each use.

Evaporative Cooler – Controls algae, slime forming fungi on cooler pads and certain fungal plant pathogens that may carry over in the cooler as well as bacterial odors. Use 1 teaspoon of R•D•20 per 15 gallons of water every other week.

Note: This product has been tested on a wide variety of plants and in our opinion has demonstrated excellent plant safety. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences such as crop injury or ineffectiveness may result because of certain environmental or growing conditions, manner of use or application, and insect resistance. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage and for performance prior to full-scale application. All risks shall be assumed by the user.

LIMITATION OF LIABILITY: Manufacturer warrants that this product conforms to the chemical description on the label. Buyer assumes all risks of use in handling which are at variance in any way with the directions on the label. MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. DAMAGES CAUSED BY THIS PRODUCT ARE LIMITED TO REPLACEMENT OF THE PRODUCT OR RETURN OF THE PURCHASE PRICE.

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