



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

October 08, 2024

Mike Peplowski
PeplowskiM@iskbc.com
ISK BIOSCIENCES CORPORATION

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment - Add currently registered use of greenhouse cucumbers
Product Name: RANMAN ORNAMENTAL AND GREENHOUSE FUNGICIDE
Admin Number: 71512-38
EPA Receipt Date: 04/20/2020
Action Case Number: 00471463

Dear Mike Peplowski:

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

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have questions, please contact Elisha Graham via email at graham.elisha@epa.gov.

Sincerely,

Kable Bo Davis

Kable Bo Davis, Senior Advisor
FB, RD
Office of Pesticide Programs



RANMAN® ORNAMENTAL
AND GREENHOUSE FUNGICIDE

FIRST AID	
If on skin	• Take off contaminated clothing. • Rinse skin immediately with plenty of soap and water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Call 1-888-484-7546. For Chemical Emergency, Spill, Leak, Fire or Accident, Call CHEMTREC 1-800-424-9300.	



ACTIVE INGREDIENT: Cyazofamid* 34.5%
OTHER INGREDIENTS: 65.5%
Total..... 100.0%

*4-chloro-2-cyano-*N,N*-dimethyl-5-(4-methylphenyl)-1*H*-imidazole-1-sulfonamide (CA)

Contains 3.34 pounds Cyazofamid Per Gallon (400 grams per liter)

KEEP OUT OF REACH OF CHILDREN

CAUTION

See side panel for additional precautionary statements.
[See inside [attached booklet] for First Aid, Precautionary Statements, Directions for Use, Storage and Disposal, and Warranty And Disclaimer.]

Read entire label carefully and use only as directed.

ISK Biosciences Corporation
7470 Auburn Road, Suite A
Concord, Ohio 44077 U.S.A.

EPA Reg. No. 71512-38 EPA Est. No.

Net Contents:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of any waterproof material.

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. Do not allow contact of contaminated clothing with unprotected skin. 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.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

USER SAFETY RECOMMENDATIONS

Users should:

- * Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- * Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT contaminate waters when disposing of equipment wash waters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Where states have more stringent regulations, they must be observed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container, in a secured, dry place separate from fertilizer, food, and feed.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container (equal to or less than 5 gallons). DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration.

[Nonrefillable container (greater than 5 gallons). DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration.]

DIRECTIONS FOR USE

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

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

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

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of twelve (12) hours.

PPE required for early entry to the 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,
- chemical resistant gloves made of any waterproof material,
- shoes plus socks and protective eyewear.

Commercial greenhouses and nurseries are within the scope of the Worker Protection Standard.

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. Ornamental landscapes are not within the scope of the Worker Protection Standard. Keep children, pets, and unprotected persons out of the treated area until sprays have dried.

PRODUCT INFORMATION

Ranman is a flowable suspension concentrate for control of Pythium, Phytophthora and Downy mildew diseases on ornamental plants in landscapes and plants grown in commercial greenhouses and nurseries.

INTEGRATED PEST MANAGEMENT

RANMAN is an excellent disease control agent when used according to label directions for control of several Oomycete fungi. Although RANMAN has limited systemic activity, it needs to be utilized as a protectant fungicide and applied before the disease infects the crop. Depending upon the level of disease pressure, good protection of the crop against disease can be expected over a period of 7 to 28 days.

RANMAN is recommended for use as part of an Integrated Pest Management (IPM) program, which may include the use of disease-resistant crop varieties, cultural practices, crop rotation, biological disease control agents, pest scouting and disease forecasting systems aimed at preventing economic pest damage. Practices known to reduce disease development need to be followed. Consult your state cooperative extension service or local agricultural authorities for additional IPM strategies established in your area. RANMAN may be used in State Agricultural Extension advisory (disease forecasting) programs that recommend application timing based upon environmental factors that favor disease development.

RESISTANCE MANAGEMENT

Some plant pathogens are known to develop resistance to products used repeatedly for disease control. RANMAN's mode/target site of action is complex III of fungal respiration: ubiquinone reductase, Qi site, FRAC code 21. A disease management program that includes alternation or tank mixes between RANMAN and other labeled fungicides that have a different mode of action and/or control pathogens not controlled by RANMAN is essential to prevent disease resistant pathogens populations from developing. RANMAN should not be utilized continuously nor tank mixed with fungicides that have shown to have developed fungal resistance to the target disease.

For resistance management, RANMAN contains a Group 21 fungicide. Any fungal population may contain individuals naturally resistant to RANMAN and other Group 21 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate RANMAN or other Group 21 fungicides within a growing season with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

Since pathogens differ in their potential to develop resistance to fungicides, follow the directions outlined on this label for specific resistance management strategies for each plant type. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of RANMAN in programs that seek to minimize the occurrence of disease resistance. RANMAN is not cross-resistant with other classes of fungicides that have different modes of action.

PLANT PHYTOTOXICITY

Although Ranman has been evaluated on several plants with no indication of phytotoxicity, neither the manufacturer nor seller has determined whether or not Ranman can be used safely on ornamental and nursery plants not specified on this label. The professional user must determine if Ranman can be used safely prior to commercial use by testing a small

number of the type of plants to be treated at the specified rates for that particular group for phytotoxicity.

MIXING AND SPRAYING

Slowly invert container several times to assure uniform mixture of formulation before adding this product to the spray tank.

Fill the mixing tank with half of the required amount of water. Add the required amount of Ranman slowly into the spray tank during filling to the required volume. Keep agitator running when filling spray tank and during spray operations. Do not allow spray mixture to stand overnight or for prolonged periods of time. Prepare only the amount of the spray mixture required for immediate use. Spraying equipment needs to be thoroughly cleaned immediately after the application is completed.

Apply Ranman in sufficient water to obtain adequate coverage of the foliage. Gallonage to be used will vary with plant type and amount of plant growth.

TANK MIX COMPATIBILITY

RANMAN is physically compatible (no nozzle or screen blockage) with many products registered for control of diseases and insects on ornamental plants. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. RANMAN is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of RANMAN with tank mix partners must be evaluated before use. Conduct a jar test with intended tank-mix pesticides prior to preparation of large volumes. Use the following procedure: 1) Pour the recommended proportions of the products into a suitable container of water, 2) Mix thoroughly and 3) Allow to stand 5 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible. Any physical incompatibility in the jar test indicates that RANMAN must not be used in the tank-mix.

RANMAN may be applied with all types of spray equipment normally used for ground applications. Apply RANMAN in sufficient water to obtain adequate coverage of the foliage. Gallonage to be used will vary with crop and amount of plant growth. Application through sprinkler irrigation

systems is not recommended unless specific directions are given for a crop. See application and calibration instruction below.

MANDATORY SPRAY DRIFT

Boomless Ground Applications: Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher low rate.
- Pressure – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no

wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

ORNAMENTALS

Container Grown Plants – Soil Application

For control of damping-off, root and stem rot diseases of ornamentals, including conifers, grown in containers in greenhouses, outdoor nurseries and landscapes, apply RANMAN as a soil drench or soil surface spray. Do not make more than 2 applications of RANMAN per crop cycle for control of Pythium or Phytophthora soil borne diseases. RANMAN may also be applied via irrigation systems as noted below.

For drench applications to containerized plants, use enough of the specified water solution to wet the root zone with minimal run-through. Do not exceed 5% run-through. In general 1 pint of the solution/sq. ft. is sufficient for ornamentals growing in a container with 4-inch depth of growth media. Containers greater than 4-inch depth generally require from 1½ to 2 pints of the solution/sq. ft.

Field Grown (Bed) Plants – Soil Application

For control of damping-off, root and stem rot in field-grown (bed) plants, including forest tree nurseries, with drench applications, use sufficient water solution to allow for penetration into the root zone. For soil surface applications made in outdoor nurseries, irrigate with at least ½ inch of water if rainfall does not occur within 24 hours. For all field grown (bed) plant applications, apply RANMAN only to the root zone area of the plant at the rate of 6 fl. oz. of RANMAN per 100 gallons. Do not exceed 1000 gallons of this mixture per acre per application (1.56 lbs. a.i./A). Do not make more than 2 applications of RANMAN per year to field grown (bed) plants (3.12 lbs. a.i./A/yr.). Applications may also be applied via drip irrigation as noted below.

Container and Field Grown (Bed) Plants - Foliar Application

For foliar applications, apply sufficient spray solution to thoroughly wet the foliage to the point of run-off (generally not to exceed 100 gallons per acre). Do not apply more than two consecutive applications of RANMAN before alternating to another registered fungicide with a different mode of action. Do not make more than 4 applications of RANMAN per crop cycle for control of downy mildews or Phytophthora foliar diseases.

Begin applications of RANMAN when conditions are favorable for disease development or when plants first exhibit disease symptoms, from germination to mature crop.

For Container Grown Plants:

Pot Diameter (Inches)	Maximum Drench Volume (fl. oz. of drench mixture/pot)
4	2
5	3
6	4
8	10
10	20
12	30

For Application to Ornamental Plants:

Disease	Product Rate per 100 gallons	Application Instructions
Pythium crown and root rots and damping-off	1.5 to 3.0 fl. oz. (0.039 to 0.078 lb. a.i.)	Make applications on a 14 to 28 day interval using another registered fungicide with a different mode of action between applications of Ranman. Within the rate range, use the lower rate and shortest interval and the higher rate at the longest interval when disease conditions are low. When disease is severe use the highest rate at the shortest interval. See the rate chart above for application volumes for container grown plants. Restrictions DO NOT apply more than 3 fl. oz. (0.078 lb. a.i.) per 100 gallons per soil application. DO NOT apply more than 2 soil applications per year at the high rate of 3 fl. oz./100 gallons. DO NOT exceed 2000 gallons of a mixture of 3 fl. oz. per 100 gallons (60 fl. oz./A; 1.56 lb. a.i./A) per soil application per acre or 4000 gallons of that mixture (120 fl. oz./A; 3.12 lb. a.i./A) per year. The minimum retreatment interval is 14 days.
Phytophthora crown and root rots and foliar blights.	3.0 to 6.0 fl. oz. (0.078 to 0.156 lb. a.i.)	Make applications on a 14 to 28 day interval using another registered fungicide with a different mode of action between applications of Ranman. Use the lower rate and longest interval as a disease preventative spray or when disease conditions are low. Use the shortest interval and the highest rate when disease conditions are severe. See the rate chart above for soil applications to container grown plants. For foliar applications, apply sufficient product to wet all foliage to the point of run-off (generally not to exceed 100 gallons per acre). Restrictions DO NOT apply more than 6 fl. oz. (0.156 lb. a.i.) per 100 gallons per soil application. DO NOT apply more than 2 soil applications per year at the high rate of 6 fl. oz./100 gallons. DO NOT exceed 1000 gallons of a mixture of 6 fl. oz. per 100 gallons (60 fl. oz./A; 1.56 lb. a.i./A) per soil application per acre or 2000 gallons of that mixture (120 fl. oz./A; 3.12 lb. a.i./A) per year. DO NOT exceed 6 fl. oz./acre (0.156 lb. a.i./A) per foliar application. DO NOT apply more than 4 foliar applications per year for a total of 24 fl. oz./acre/year (0.624 lb. a.i./acre/year). DO NOT apply more than two consecutive foliar applications of Cyazofamid 400SC. Alternate with another registered fungicide with a different mode of action. The minimum retreatment interval is 14 days

For Application to Ornamental Plants (continued):

Disease	Product Rate per 100 gallons	Application Instructions
Downy mildews	2.1 to 3.5 fl. oz. (0.055 to 0.091 lb. a.i./A)	Apply on a 14 to 21 day schedule (refer to the additional directions given in the Foliar Application paragraphs above). Within the rate range, use the lower rate at the shortest interval and the higher rate at the longest interval when disease conditions are low. When disease conditions are severe use the highest rate and shortest interval. Apply sufficient volume (normally 50 to 100 gallons per acre) to wet all foliage to the point of run-off. If water volumes used are less than 50 gallons per acre, an organosilicone surfactant needs to be added when the disease infection is severe, or a non-ionic surfactant or a blend of an organosilicone and a non-ionic surfactant needs to be added when disease infection is moderate or light, according to the manufacturer's label recommendations. Restrictions DO NOT apply more than 4 foliar applications per year for a total of 14 fl. oz./acre/year (0.364 lb. a.i./acre/year) DO NOT apply more than two consecutive foliar applications of Cyazofamid 400SC. Alternate with another registered fungicide with a different mode of action. The minimum retreatment interval is 14 days.

For Applications to Greenhouse Grown Crops

Crop	Diseases	Use Rate Fl. Oz. Product Per Acre (lb. ai/A)	Directions for Use
Greenhouse Grown *Herb Subgroup 19A	Downy mildew (<i>Peronospora belbahrii</i>) Phytophthora root rot (<i>Phytophthora spp.</i>)	2.75 to 3.0 (0.071 to 0.078)	Resistance Management: Alternate sprays of RANMAN with a fungicide with a different mode of action. Application Instructions: For control of downy mildew on herbs, make the applications on a 7- to 10-day schedule beginning when disease conditions are favorable for disease development. Use the lower rate and longest interval as disease preventative sprays or when disease conditions are low. Increase to the highest rate and shortest interval under moderate to heavy disease pressure. For water volumes less than 60 gallons per acre, RANMAN needs to be tank-mixed with an organosilicone surfactant when the disease infection is severe, or a non-ionic surfactant or a blend of organosilicone and a non-ionic surfactant when disease infection is moderate or light, at the manufacturer's label recommendation. Normal water volumes are 50 to 75 gallons per acre. RANMAN may be applied through sprinkler irrigation equipment. See calibration directions elsewhere on the label. Restrictions: DO NOT apply more than 9 applications of RANMAN per crop. DO NOT apply more than 27 fluid ounces (0.7 lb a.i.) per acre per year. The Pre-Harvest Interval (PHI) for this crop is 0 days. DO NOT make more than three consecutive applications of RANMAN. Follow this by at least three applications of fungicides having a different mode of action before applying additional RANMAN.
*Includes all members of the Herb Crop Subgroup 19A:			angelica; balm; basil; borage; burnet; camomile; catnip; chervil (dried); chive; Chinese chive; clary; coriander leaf (cilantro or Chinese parsley); costmary; culantro (leaf); curry (leaf); dillweed; horehound; hyssop; lavender; lemongrass; lovage (leaf); marigold; marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram); nasturtium; parsley (dried); pennyroyal; rosemary; rue; sage; summer and winter savory; sweet bay; tansy; tarragon; thyme; wintergreen; woodruff; and wormwood.

For Applications to Greenhouse Grown Crops (continued)

Crop	Diseases	Use Rate Fl. Oz. Product Per 100 Gallon (lb. ai/100 Gal)	Directions for Use
Greenhouse Grown Tomato Transplants (Soil Drench)	Pythium Damping-off (<i>Pythium spp.</i>)	3 fl oz/100 gallons water (0.078 lb a.i./ 100 gallons water)	Tomato Greenhouse Transplant Production: For control of damping-off caused by <i>Pythium spp.</i> make a single fungicide application to the seedling tray at the time of planting or at any time thereafter up until 1 week before transplanting. Apply the fungicide solution as a drench to thoroughly wet the growing medium. This results in the use of approximately 1 pint of solution per square foot if the growing medium is 4 inches deep.
Greenhouse Grown Bell Pepper (Soil Drench)	Phytophthora blight, crown and root rot (<i>Phytophthora capsici</i>) Pythium Damping-off (<i>Pythium spp.</i>)	3.2 fl oz/100 gallons water (0.083 lb a.i./ 100 gallons water)	Greenhouse Grown Bell Peppers (Soil Drench): For control of <i>Phytophthora</i> and <i>Pythium spp.</i> in production grown peppers in the greenhouse, apply the first application at transplanting or up to first fruit set, using 5 fl. oz. of the drench solution per plant. Apply the fungicide solution as a drench to thoroughly wet the growing medium. A second drench application may be applied if necessary after 42 days at the rate of 8.5 fl. oz. of the drench solution. Restrictions DO NOT apply more than 1 soil application per year on tomato transplants at the rate of 3 fl. oz. (0.078 lb. a.i.) per 100 gallons. DO NOT exceed 2000 gallons of a mixture of 3 fl. oz. per 100 gallons (60 fl. oz./acre; 1.56 lb. a.i./acre) per year on tomato transplants. DO NOT apply more than 2 soil applications per year on greenhouse grown bell peppers at the rate of 3.2 fl. oz. (0.083 lb. a.i.) per 100 gallons per soil application. DO NOT exceed 2000 gallons of a mixture of 3.2 fl. oz. per 100 gallons (64 fl. oz./acre; 1.66 lb. a.i./acre) per soil application or 4000 gallons of that mixture (128 fl. oz./A; 3.32 lb. a.i./acre) per year on greenhouse grown bell peppers. The minimum retreatment interval for peppers is 42 days. DO NOT exceed 13.5 fl. oz. of the drench solution per pepper plant. The Pre-Harvest Interval (PHI) for these listed crops is 0 day. DO NOT use any surfactant with these drench applications.
Greenhouse Cucumbers	Downy mildew (<i>Pseudoperonospora cubensis</i>) Phytophthora blight (<i>Phytophthora capsici</i>)	2.75 fl. oz./Acre (0.072 lb. a.i./ Acre)	For greenhouse grown cucumbers, apply 2.75 fl. oz. (0.072 lb. a.i.) of RANMAN 400SC per acre on a 7-day schedule as a foliar application to control Downy mildew and Phytophthora blight. Apply in adequate water for uniform coverage (a minimum of 40 to 200 gallons per acre). Follow the resistance management directions above. Restrictions DO NOT exceed the maximum number of 4 applications to greenhouse cucumbers per acre per year. DO NOT apply more than 11 fl. oz. (0.287 lb. a.i.) per acre per year to greenhouse cucumbers. The Pre-Harvest Interval (PHI) for greenhouse grown cucumbers is 1 day. The minimum retreatment interval is 7 days.

APPLICATION AND CALIBRATION TECHNIQUES FOR DRIP IRRIGATION

Apply this product only through pressurized drip (trickle) systems or micro-irrigation systems including spaghetti-tube or individual tube irrigation, or ebb and flow systems. **DO NOT** apply this product through any other type of irrigation system.

Crop injury or lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you need to contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply RANMAN through irrigation systems connected to a public water system. "Public water system" means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low-pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject RANMAN into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection

pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants to those persons lawfully acquiring title to this product that at the time of first sale of this product by Seller that this product conformed to its chemical description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions under normal conditions of use. To the extent consistent with applicable law, Buyers and users of this product assume the risk of any use contrary to such directions. **EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.** In no event shall Seller's liability for any breach of warranty or guaranty exceed the purchase price of the product as to which a claim is made. To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, including, but not limited to, incompatibility with other products unless otherwise expressly provided in Directions for Use of this product, weather conditions, cultural practices, moisture conditions or other environmental conditions outside of the ranges that are generally recognized as being conducive to good agricultural and/or horticultural practices.

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ISK Biosciences Corporation

7470 Auburn Road, Suite A

Concord, Ohio 44077 U.S.A.

