9592-22

# UNITE TATES ENVIRONMENTAL PROTECTION GENCY

Mr. Nicholas Wright AgraQuest Inc. 1540 Drew Avenue Davis, California 95618

#### DEC 1 2 2008

Subject: AgraQuest Inc. QRD 400, EPA Registration No. 69592-22 Label Amendment to Add First Food Use, B63 Application Dated 1/2/2008, PRIA Date 12/27/2008

Dear Mr. Wright:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A), is acceptable provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Submit two (2) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Chris Pfeifer at 703-308-0031 or by email at: <u>pfeifer.chris@epa.gov</u>. A stamped copy of the label is enclosed for your records.

Sincerely,

sopr A. Hith

Linda A. Hollis, Chief Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

Enclosure

	CONCURRENCES	
SYMBOL > 7511P		
SURNAME PFEIFÉP		
EPA Form 1320-14 (1/90)	Printed on Recycled Paper	OFFICIAL FILE COPY

\* U.S. Government Printing Office: 2005 206-899 (mac)

# QRD 400

# [Alternate Brand Names: REQUIEM<sup>™</sup> 25EC, METRONOME<sup>™</sup>]

Master Label

Sub-Label A: Agricultural/Commercial Use

Sub-Label B: Greenhouse & Nursery/Commercial Use

Active Ingredient:	
Extract of Chenopodium ambrosioides near ambrosioides	
Other Ingredients	<u>75.0%</u>
Total:	100.0%

#### **KEEP OUT OF REACH OF CHILDREN**

## CAUTION

EPA Reg No.: 69592-22

EPA Establishment No.: 69592-MEX-1

Manufactured By: AgraQuest, Inc. 1540 Drew Avenue Davis, California 95618 (530) 750-0150

# ACCEPTED DEC 1 2 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2000 - 200

69592-22

QRD 400 Master Label (v1.4) 10-DEC-08

# QRD 400

# (Alternate Brand Name: REQUIEM<sup>™</sup> 25EC)

# Sub-Label A

# For Agricultural / Commercial Use Only Not For Residential Use

QRD 400 Master Label (v1.4) 10-DEC-08

# **REQUIEM<sup>TM</sup> 25EC**

#### INSECTICIDE AND ACARICIDE FOR CONTROL OR SUPPRESSION OF APHIDS, THRIPS, WHITEFLIES, PLANT-FEEDING MITES, MEALY BUGS, LEAFMINERS, LYGUS BUGS, SCALE, LEAF HOPPERS, AND LEPIDOPTEROUS INSECTS IN AGRICULTURAL CROPS. NOT FOR RESIDENTIAL USE

Active Ingredient:	
Extract of Chenopodium ambrosioides near ambrosioides	
Other Ingredients	<u>75.0%</u>
Total:	100.0%

#### **KEEP OUT OF REACH OF CHILDREN**

#### CAUTION

FIRST AID			
If In Eyes	<ul> <li>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.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
In On Skin Or Clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
HOT LINE NUMBER			

#### CHEMTREC (800) 424-9300 (24 hours)

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

See side/back panels for additional precautionary statements

EPA Reg No.: 69592-22

EPA Establishment No.: 69592-MEX-1

Net Contents: 2.5 gallon (320 fl. oz.) (9.5 L)

Manufactured By: - AgraQuest, Inc. 1540 Drew Avenue Davis, California 95618 (530) 750-0150

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#### PRECAUTIONARY STATEMENTS

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear the appropriate Personal Protective Equipment (PPE).

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks
- Protective eyewear
- Coveralls for high-pressure handwand and groundboom applicators.
- For overhead exposure wear chemical resistant headgear.
- For greenhouse uses, applicators and other handlers must wear a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter. Follow the 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 Controls: When handlers use enclosed cabs in a manner that meets 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.

#### **USER SAFETY RECOMMENDATIONS**

Users should:

• 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.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic invertebrates. For terrestrial uses: Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply when weather conditions favor drift or runoff from treated areas. Do not apply when a rain event is expected within 2 hours. Groundboom and air-blast applications

must maintain a spray buffer of 15 feet from any water body. See the Directions for Use for details.

#### PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

#### **DIRECTIONS FOR USE**

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

READ THE ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH THE LABEL. FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

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 State or Tribal 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, greenhouses and handlers of agricultural insecticides. 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 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

#### SHAKE WELL BEFORE USE

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#### **GENERAL INFORMATION**

REQUIEM<sup>™</sup> is a contact insecticide/acaricide for use in the control or suppression of many foliage feeding plants including aphids, thrips, plant-feeding mites, whiteflies, mealy bugs, leafminers, lygus bugs, scale, leaf hoppers, and lepidopterous insects infesting labeled crops. The emulsifiable concentrate of REQUIEM must be mixed with water and applied as a foliar spray with ground equipment equipped for conventional insecticide spraying.

#### MIXING AND APPLICATION INSTRUCTIONS

Do not apply this product by aerial application or through any type of irrigation system.

REQUIEM is toxic to aquatic invertebrates. Users must maintain the following buffer zones: Groundboom and air-blast spray applicators must not apply within 15 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Groundboom and air-blast applicators must also account for wind direction and speed. Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 10 mph. Do not apply when a rain event is expected within 2 hours.

Shake container well before use. REQUIEM must be diluted with water for spray applications. Partially fill the spray tank with clean water, add the specified amount of REQUIEM to the tank, and finish filling the tank to the proper volume to obtain the desired application rate per acre as specified in the crop and pest tables listed below. Use at dilutions no more concentrated than 2% v/v.

**Tank Mixing:** Do not combine REQUIEM in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

To ensure compatibility of tank-mix combinations they must be evaluated prior to use. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Use of Adjuvants: The use of additional adjuvants with REQUIEM is not required.

Biological Control Agents: This product is compatible with the following biological control agents: Encarsia formosa, Amblyseius fallacis, Phytoseiulus persimilis, Orius

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*insidiosus, Aphidius colemani, Zetzellia mali, Neoseiulus fallacies, Typhlodromus pyri, Stethorus punctum,* lacewings, syrphid fly larvae, phytoseiid mite predators, aphid midges, lady beetles, and other predacious mites. Wait at least 2 hours after application before introducing new biological agents, or spray the evening before the day of introduction of new biological control agents.

AgraQuest is committed to the practice of sound resistance management programs that include rotation and tank mixing with other treatments having a variety of modes of actions.

#### APPLICATION

Use REQUIEM early in the pest cycle when local thresholds are reached or before insects reach damaging levels. Applications can be made for ovicidal control. However, ovicidal control will not provide sustained control of migrating adults. **REQUIEM is a contact insecticide and thorough coverage is necessary for optimum control.** Use appropriate nozzles and nozzle configurations, along with sufficient spray volume to achieve thorough coverage. Rates of REQUIEM may need to increase with increased insect populations and/or large plant canopies. It is not necessary to use a surfactant with REQUIEM.

REQUIEM can be applied with commonly used ground equipment. Use of air-blast spray equipment may result in overhead exposure and requires the use of chemical-resistant headgear.

When using REQUIEM with a new crop, test on a small area before applying to the entire field. Do not apply REQUIEM more than 10 times per crop production cycle.

#### SPRAY DRIFT PRECAUTIONS

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 and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

All ground application equipment must be properly maintained and calibrated using appropriate carriers.

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection and by avoiding excessive spray boom pressure.

Make ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph.

Risk of exposure to sensitive areas can be reduced by avoiding applications when wind direction is toward the area.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

#### FOR USE ON THE FOLLOWING CROPS

#### <u>Asparagus</u>

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Aphids Thrips	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

#### Brassica (Cole) Leafy Vegetables

Including Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy and Napa), Cauliflower, Cavalo, Collards, Kale, Kohlrabi, Mustard Greens, Rape Greens, and other Brassica leafy vegetable crops.

Pests	REQUIEM	Remarks
	(qts/acre)	
Aphids:	2 - 4	Begin treatments when thresholds have
Cabbage aphid		been reached.
• Green peach aphid		
• Turnip aphid		
Leafminers	· ·	
Thrips		Begin applications as soon as thrips are seen
_		in the crop. Continue applications as
		needed. Thrips will seek shelter in hard-to-
		reach parts of the plant. Use appropriate
		nozzles with sufficient spray volume.
Whiteflies:		Apply before pests reach damaging levels.
• Silverleaf whitefly		Repeat applications as needed to maintain
		control. Do not wait until heavy populations

		have become established. Use the high rate when conditions are favorable for heavy
· · · · · · · · · · · · · · · · · · ·	·	pressure.

#### **Bulb Vegetables**

Including Garlic, Leek, Onion (dry bulb, green, and Welch), and Shallot and other bulb vegetable crops.

<b>Pests and Application Rates:</b>	sts and A	oplication	Rates:
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Pests	REQUIEM (qts/acre)	Remarks
Leafminer Maggots Mites	1.5 - 4	Apply before pests reach damaging levels. Repeat applications as needed to maintain control. The amount of REQUIEM per acre will depend on plant size, leaf canopy and pest pressure. Choose lower rates for light infestations and/or small plants and higher rates for heavy infestations and/or larger plants.
<ul><li>Thrips:</li><li>Onion thrips</li><li>Western flower thrips</li></ul>		Begin applications as soon as thrips are seen in the crop. Continue applications as needed. Thrips will seek shelter hard-to- reach parts of the plant. Use appropriate nozzles with sufficient water for thorough coverage.

#### **Bush Berries**

Including Blueberry, Currant, Gooseberry, Huckleberry, Elderberry, and other bush berry crops.

Pests	REQUIEM (qts/acre)	Remarks
Aphids	2 - 4	Apply before pests reach damaging levels.
Leafhoppers Leafrollers		Repeat applications as needed to maintain control The amount of REQUIEM per acre
Loopers		will depend on plant size, leaf canopy and
Lygus Maggots		pest pressure. Choose lower rates for light
Mites	1	infestations and/or small plants and higher rates for heavy infestations and/or larger
Plum curculio Thrips		plants.
1 mips		

#### <u>Citrus Fruits</u>

Including Grapefruit, Lemon, Lime, Orange, Tangerine, Citrus hybrids, Pummelo, and other citrus fruit crops.

Pests	REQUIEM	Remarks
	(qts/acre)	
Asian citrus psyllid	2 - 4	Treat when pests appear or in accordance
Lepidoptera larvae:		with local economic thresholds. Repeat
<ul> <li>Avocado leafroller</li> </ul>	•	applications as needed to maintain control.
<ul> <li>Citrus peelminer</li> </ul>		The rate of REQUIEM will depend on tree
Citrus Leafminer		size and pest pressure. Use a lower rate for
• Cutworms		light infestation and/or small trees and a
• Fruit tree leafroller		higher rate for heavy infestations and/or
Orange tortrix		large trees. When applying to large trees,
Mites:		use higher water volumes to ensure
• Broad mite		thorough coverage. Do not exceed 2% v/v solution.
• Citrus flat mite		solution.
• Citrus bud mite		
• Citrus red mite		
• Citrus rust mite		
• Six-spotted spider mite		
• Texas citrus mite		
• Yuma spider mite		
• Two-spotted spider mite		
• Rust mite		
Thrips:		
• Citrus thrips		
<ul> <li>Frankliniella spp.</li> </ul>		· · · · · ·
Bean thrips		
Scale		Begin applications when thresholds are
	$\sim - \chi$	reached. Treat for scale when crawlers are
		present in the spring and fall.

#### Pests and Application Rates:

## <u>Cranberry</u>

**Do not apply to flooded fields.** 

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Aphids	2 - 4	Begin applications when thresholds have
Leafhoppers		been reached. The rate of REQUIEM will
Leafrollers		depend on plant size and pest pressure. Use

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Loopers	a lower rate for light infestation and/or
Thrips	small plant canopy and a higher rate for
Wireworms	heavy infestations and/or large plants.

#### Cane Berries

Including Blackberry (including varieties, cultivars, and/or hybrids), Loganberry, Raspberry, and other cane berry crops.

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Aphids Leafhoppers Leafrollers Loopers Sawfly Whiteflies	2 - 4	Apply before pests reach damaging levels. Repeat applications as needed to maintain control. The amount of REQUIEM per acre will depend on plant size, leaf canopy and pest pressure. Choose lower rates for light infestations and/or small plants and higher rates for heavy infestations and/or larger plants.

#### Cucurbit Vegetables

Including Cucumber, Citron melon, Edible Gourds, Gherkin, Muskmelons (including hybrids and/or cultivars of *Cucumis melo*), Pumpkin, Summer and Winter Squash, Watermelon, Cantaloupe, and other cucurbit vegetable crops.

Pests	REQUIEM (qts/acre)	Remarks
Aphids <ul> <li>Green peach aphid</li> <li>Leafminers</li> <li>Mites</li> </ul>	2 - 4	Begin treatments when thresholds have been reached.
Thrips		Begin applications as soon as thrips are seen in the crop. Continue applications as needed. Thrips will seek shelter in hard-to- reach parts of the plant. Use appropriate nozzles with sufficient spray volume.
<ul><li>Whiteflies:</li><li>Greenhouse whitefly</li><li>Sweetpotato whitefly</li><li>Silverleaf whitefly</li></ul>		Apply before pests reach damaging levels. Repeat applications as needed to maintain control. Do not wait until heavy populations have become established. Use the high rate when conditions are favorable for heavy pressure.

#### <u>Figs</u>

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Mites	2 - 4	Begin applications when thresholds have
Navel orangeworm		been reached. The rate of REQUIEM will
Scale		depend on plant size and pest pressure. Use
Vinegar flies		a lower rate for light infestation and/or
•		small plant canopy and a higher rate for
	•	heavy infestations and/or large plants.

#### Fruiting Vegetables

Including Eggplant, Ground Cherry, Pepino, Pepper, Tomatillo, Tomato, and other fruiting vegetable crops.

Pests	REQUIEM	Remarks
	(qts/acre)	· · · · · · · · · · · · · · · · · · ·
Aphids:	2 - 4	Begin treatments when thresholds have
• Green peach aphid		been reached.
• Potato aphid		
Leafhoppers		
Leafminers (Liriomyza		
spp.)		
Mites		
Tomato pinworm		
Thrips:		Begin applications as soon as thrips are seen
• Western flower thrips		in the crop. Continue applications as
• Onion thrips		needed. Thrips will seek shelter in hard-to-
• Chili thrips		reach parts of the plant. Use appropriate
• Melon thrips		nozzles with sufficient spray volume.
-		
Whiteflies:		Apply before pests reach damaging levels.
• Silverleaf whitefly		Repeat applications as needed to maintain
• Greenhouse whitefly		control. Do not wait until heavy populations
• Bandedwinged whitefly		have become established. Use the high rate
		when conditions are favorable for heavy
		pressure.

#### **Globe Artichoke**

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Aphids Leafhoppers Plume moth	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

#### <u>Grape</u>

#### Pests and Application Rates:

Pests	REQUIEM (qts/acre)	Remarks
Grape berry moth Western grape skeletonizer Leafhoppers: • Grape leafhopper • Variegated leafhopper Mealy bug Mites: • Pacific spider mites • Willamette spider mite • Two-spotted spider mite	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants. Adjust equipment and spray volumes to ensure through coverage of infested parts of the crop.

#### Herbs and Spices

Including Allspice, Anise, Basil, Borage, Cardamom, Chive, Dill, Fennel (common), Juniper berry, Marjoram, Nutmeg, Pepper, Saffron, Sage, Tarragon, Vanilla, and other herb and spice crops.

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Aphids	2 - 4	Begin applications when thresholds have
Fleahoppers		been reached. The rate of REQUIEM will
Leafhoppers		depend on plant size and pest pressure. Use
Leafminers (Liriomyza		a lower rate for light infestation and/or
spp.)		small plant canopy and a higher rate for
Grasshoppers		heavy infestations and/or large plants.

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#### <u>Hops</u>

#### Pests and Application Rates:

Pests	REQUIEM (qts/acre)	Remarks
Mites Aphids	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

#### Leafy Vegetables

Including Lettuce, Arugula, Celery, Spinach, Parsley, Radicchio, Florence Fennel, Romaine, Swiss Chard, and other leafy vegetable crops.

Pests	REQUIEM	Remarks
	(qts/acre)	
Aphids:	2 - 4	Begin treatments when thresholds have
• Foxglove aphid		been reached.
• Lettuce aphid		
• Lettuce root aphid		
Cabbage aphid		·
• Turnip aphid		
• Potato aphid		
• Green peach aphid		
Leafhoppers		
Leafminers (Liriomyza		
spp.)		
Lygus bugs		
Mites (except bulb mite)		
Psyllid		
Thrips		Begin applications as soon as thrips are seen
		in the crop. Continue applications as
		needed. Thrips will seek shelter in hard-to-
		reach parts of the plant. Use appropriate
	-	nozzles with sufficient spray volume.
Whiteflies:		Apply before pests reach damaging levels.
• Silverleaf whitefly		Repeat applications as needed to maintain
		control. Do not wait until heavy populations
		have become established. Use the high rate
		when conditions are favorable for heavy

	pres	ssure.	

#### Legume Vegetables (Succulent or Dried)

Including Beans, Green beans, Snap beans, Shell beans, Garbanzo beans, Lima beans, Peas, Chick peas, Split peas, Lentils and other legume vegetable crops.

#### Pests and Application Rates:

Pests	REQUIEM (qts/acre)	Remarks
Aphids	2 - 4	Begin applications when thresholds have
Leafhoppers		been reached. The rate of REQUIEM will
Leafminers		depend on plant size and pest pressure. Use
Lygus bugs		a lower rate for light infestation and/or
Mites		small plant canopy and a higher rate for
Thrips		heavy infestations and/or large plant
Whiteflies		canopy.

#### <u>Mint</u>

#### Pests and Application Rates:

Pests	REQUIEM (qts/acre)	Remarks
Mites Aphids Thrips	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

#### <u>Okra</u>

Pests	REQUIEM (qts/acre)	Remarks
Aphids Leafhoppers Leafminers (Liriomyza spp.)	2 - 4	Begin treatments when thresholds have been reached.
Mites Tomato pinworm		
Thrips		Begin applications as soon as thrips are seen in the crop. Continue applications as needed. Thrips will seek shelter in hard-to- reach parts of the plant. Use appropriate nozzles with sufficient spray volume.
Whiteflies		Apply before pests reach damaging levels. Repeat applications as needed to maintain control. Do not wait until heavy populations

have become established. Use the high rate when conditions are favorable for heavy
pressure.

## <u>Pome Fruits</u>

Including Apple, Crabapple, Loquat, Mayhaw, Pear, Quince, and other pome fruit crops.

Pests and Application Rate	REQUIEM	Remarks
	(qts/acre)	
Aphids:	2 - 4	Begin applications when thresholds have
• Green apple aphid		been reached. The rate of REQUIEM will
• Wooly apple aphid		depend on plant size and pest pressure. Use
• Cotton aphid		a lower rate for light infestation and/or
• Bean aphid		small plant canopy and a higher rate for
• Rosy apple aphid		heavy infestations and/or large plant
• Spirea aphid		canopy.
• Green peach aphid		· .
Mites:		
• Brown mite		
• Pear rust mite		
• Pear leaf blister mite		
• European red mite		
• Two-spotted spider mite		
• Pacific spider mite	•	
• McDaniel spider mite		
Leafhoppers		
Mealy bugs		
Pear psyllid		
Plum curculio		
Scale		
Thrips		
Codling moth		Monitor the moth flights and the infestation
Oriental fruit moth	· · ·	densities of the larval stages. Repeat
Tufted apple moth		applications as necessary to maintain
Leafminers (lepidopteran):		control.
<ul> <li>Spotted tentiform</li> </ul>		
• Western tentiform		
Leafrollers:		
<ul> <li>Oblique-banded</li> </ul>		
Pandernis		· · · · · ·

#### <u>Olives</u>

#### **Pests and Application Rates:**

Pests	REQUIEM (qts/acre)	Remarks
Mites Scale Thrips	2 - 4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plants.

#### Root / Tuber and Corm Vegetables

Including Carrot, Potato, Sweet Potato, Cassava, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip, True Yam, and other root/tuber and corm crops.

Pests	REQUIEM (qts/acre)	Remarks
Aphids:	2 - 4	Begin treatments when thresholds have
Potato aphid		been reached.
• Green peach aphid		
Leafhoppers		
Leafminers (Liriomyza		
spp.)		
Mites		
Psylla:		
• Potato psyllid		
Thrips	-	Begin applications as soon as thrips are seen
		in the crop. Continue applications as
		needed. Thrips will seek shelter in hard-to-
		reach parts of the plant. Use appropriate
		nozzles with sufficient spray volume.
Whiteflies:		Apply before pests reach damaging levels.
• Silverleaf whitefly		Repeat applications as needed to maintain
-		control. Do not wait until heavy populations
•		have become established. Use the high rate
		when conditions are favorable for heavy
		pressure.

#### Leaves of Root and Tuber Vegetables

Including Carrot, Sweet Potato, Cassava, Beets, Celeriac, Radish, Turnip, Parsnip, and other leaves of root and tuber crops.

Pests and Application Rates:			
Pests	REQUIEM	Remarks	
	(qts/acre)		
Aphids	2 - 4	Begin treatments when thresholds have	
Leafhoppers		been reached.	
Leafminers (Liriomyza			
spp.)			
Mites	· · ·		
Psylla			
Thrips	. '	Begin applications as soon as thrips are seen	
		in the crop. Continue applications as	
		needed. Thrips will seek shelter in hard-to-	
		reach parts of the plant. Use appropriate	
		nozzles with sufficient spray volume.	
Whiteflies		Apply before pests reach damaging levels.	
		Repeat applications as needed to maintain	
		control. Do not wait until heavy populations	
		have become established. Use the high rate	
•		when conditions are favorable for heavy	
		pressure.	

#### <u>Stone Fruits</u>

Including Apricot, Cherry, Nectarine, Peach, Plum, Plumcot, Prune, and other stone fruit crops

Pests	REQUIEM (qts/acre)	Remarks
Aphids Cherry fruit fly Leafhoppers Leafminers Mites Plum curculio Scale Western cherry fruit fly Thrips	2-4	Begin applications when thresholds have been reached. The rate of REQUIEM will depend on plant size and pest pressure. Use a lower rate for light infestation and/or small plant canopy and a higher rate for heavy infestations and/or large plant canopy.
Leafrollers		Monitor the moth flights and the infestation
Leafminers	``	densities of the larval stages. Repeat

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Peach twig borer	,	applications as necessary to maintain
		control.

#### <u>Strawberry</u>

#### Pests and Application Rates:

Pests	REQUIEM	Remarks
	(qts/acre)	
Aphids:	1 - 4	Begin applications when thresholds have
• Green peach aphid		been reached. The rate of REQUIEM will
• Melon aphid		depend on plant size and pest pressure. Use
<ul> <li>Potato aphid</li> </ul>		a lower rate for light infestation and/or
<ul> <li>Strawberry aphid</li> </ul>		small plant canopy and a higher rate for
Leafhoppers		heavy infestations and/or large plants.
Lygus bug		
Mites:		
• Two-spotted spider mite		
• Carmine spider mite		
• Cyclamen mite		
• Pacific spider mite		
Thrips:	``````````````````````````````````````	
• Western flower thrips	r.	·
Whiteflies:		Apply before pests reach damaging levels.
• Silverleaf whitefly		Repeat applications as needed to maintain
• Greenhouse whitefly		control. Do not wait until heavy populations
• Strawberry whitefly		have become established. Use the high rate
	•	when conditions are favorable for heavy
· · · · · · · · · · · · · · · · · · ·		pressure.

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## <u>Tree Nuts</u>

Including Almond, Beech nut, Cashew, Chestnut, Filbert, Hickory nut, Pecan, Walnut, and other tree nut crops.

Pests and	l Ap	plication	Rates:
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Pests	REQUIEM	Remarks
	(qts/acre)	
Aphids:	2 - 4	Begin applications when thresholds have
• Walnut aphid		been reached. The rate of REQUIEM will
• Dusky-veined aphid		depend on plant size and pest pressure. Use
• Rosy apple aphid		a lower rate for light infestation and/or
• Green peach aphid		small plant canopy and a higher rate for
• Spirea aphid		heavy infestations and/or large plant
Fall webworm		canopy.
Scale		
Walnut husk fly		
Mites:		
• Brown mite		
• Peach silver mite		
• Citrus flat mite		
• Pacific spider mite		
• European red mite		
• Two-spotted spider mite		
• Strawberry spider mite		
Leafminers		Monitor the moth flights and the infestation
Leafrollers	-	densities of the larval stages. Repeat
Peach twig borer		applications as necessary to maintain
Pecan nut case bearer		control.

#### **Tropical Fruits**

Including Avocado, Banana, Kiwi, Mango, Papaya, Plantains, Pineapple, and other tropical fruits.

Pests	REQUIEM (qts/acre)	Remarks
Avocado leafroller	2 - 4	Begin applications when thresholds have
Citrus peelminer	•	been reached. The rate of REQUIEM will
Cutworms		depend on plant size and pest pressure. Use
Fruit tree leafroller		a lower rate for light infestation and/or
Naval orange worm		small plant canopy and a higher rate for
Orange tortrix		heavy infestations and/or large plants.
Western tussock moth		

Pests and Application Rates:

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Mites	·
Thrips	
Scale	·

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store in a cool dry place. Avoid freezing.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Do not contaminate water when disposing of equipment washwater or rinsate. Pesticide wastes may be toxic. Improper disposal of unused pesticide, washwater or rinse water is a violation of federal law.

**Container Disposal:** Non-refillable container. 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. Do not burn unless allowed by state and local ordinances.

#### WARRANTY AND DISCLAIMER STATEMENT

AgraQuest warrants to those persons lawfully purchasing this product that at the time of the first sale of this product by Seller that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. 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. Except to the extent prohibited by applicable law, AgraQuest offers this product with the following conditions: 1) buyers and users of this product assume the risk of any storage, handling or use contrary to AgraQuest's label and directions and 2) AgraQuest's liability shall in no case exceed the purchase price of the applicable AgraQuest product.

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Made in Mexico

QRD 400 Master Label (v1.4) 10-DEC-08

# QRD 400

# (Alternate Brand Name: METRONOME<sup>TM</sup>)

# Sub-Label B

# For Greenhouse & Nursery / Commercial Use Only Not For Residential Use

# **METRONOME**<sup>TM</sup>

#### **Insecticide and Acaricide**

#### FOR USE ON NON-FOOD ORNAMENTALS (TREES, SHRUBS, AND BEDDING PLANTS) NOT FOR RESIDENTIAL USE

Active Ingredient:	
Extract of Chenopodium ambrosioides near ambrosioides	
Other Ingredients	
Total:	100.0%

#### **KEEP OUT OF REACH OF CHILDREN**

## CAUTION

FIRST AID		
<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remo contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
<ul> <li>Take off contaminated clothing.</li> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>		
	HOT LINE NUMBER	
······································	CHEMTREC (800) 424-9300 (24 hours) or label with you when calling a poison control center or doctor or going for treatment.	

#### See side/back panels for additional precautionary statements

EPA Reg No. 69592-22

#### EPA Establishment No. 69592-MEX-1

Net Contents: 1 gallon (128 fl. oz.) (3.8 L) [ 2.5 gallon (320 fl. oz.) (9.5 L)]

> Manufactured By: AgraQuest, Inc. 1540 Drew Avenue Davis, California 95618 (530) 750-0150

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#### PRECAUTIONARY STATEMENTS

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear the appropriate Personal Protective Equipment (PPE).

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear
- Coveralls for high-pressure handwand and groundboom applicators.
- For greenhouse uses, applicators and other handlers must wear a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Follow the 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 RECOMMENDATIONS

Users should:

• 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.

#### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. For terrestrial uses: Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply when weather conditions favor drift or runoff from treated areas. Do not apply when a rain event is expected within 2 hours. Air blast applications must maintain a spray buffer of 15 feet from any waterbody. See the Directions for Use for details.

#### PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

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#### **DIRECTIONS FOR USE**

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

READ THE ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH THE LABEL. FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

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 State or Tribal 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, greenhouses and handlers of agricultural insecticides. 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 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses 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, nurseries or green houses.

Do not enter treated areas without protective clothing until spray has dried. Refer to Personal Protective Equipment section under the Precautionary Statements section.

#### **GENERAL INFORMATION**

METRONOME<sup>TM</sup> is an Emulsifiable Concentrate (EC) Insecticide and Acaricide for Use on Field and Container-grown Non-Food Ornamental Plants in Commercial Nurseries, Greenhouses, and Lath- and Shade-houses. Not For Residential Use.

METRONOME is a contact insecticide/acaricide for use in the control of aphids, plantfeeding mites, whiteflies, mealy bugs, leafminers, thrips, fungus gnats, and tarnished plant bugs. METRONOME can be applied to field and container-grown non-food ornamentals – trees, Christmas trees, shrubs, flowers, annual and perennial bedding plants, potted flowers, and tropical plants.

#### MIXING AND APPLICATION INSTRUCTIONS

Do not apply this product by aerial application or through any type of irrigation system.

METRONOME is toxic to aquatic invertebrates. Users must maintain the following buffer zones: Airblast spray applicators must not apply within 15 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Groundboom and airblast applicators must also account for wind direction and speed. Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 10 mph. Do not apply when a rain event is expected within 2 hours.

Shake container well before use. METRONOME must be diluted with water for spray applications. Partially fill the spray tank with clean water, add the specified amount of METRONOME to the tank (see table below), and finish filling the tank to the desired volume to obtain the proper spray concentration for the desired application rate per acre.

Gallons Water	METRONOME gallons	METRONOME gallons
per Acre	0.5% solution	1% solution
25	0.12 (16 fl oz)	0.25 (32 fl oz)

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50	0.25	0.5	
	(32 fl oz)	(64 fl oz)	
75	0.37	0.75	
	(48 fl oz)	(96 fl oz)	
100	0.5	1	
For smaller quantities, mix at a rate of $0.65 - 1.3$ fl. oz. METRONOME per 1 gallon of water.			

Apply on a 7- to 14-day schedule as necessary. Apply METRONOME at first sign of insect pressure or plant-feeding mite infestation. Use higher application rate under conditions of heavy pest pressure. Uniform coverage of both upper and lower leaves is critical for effective pest control. Avoid overspraying to the point of excessive runoff. Do not apply METRONOME more than 10 times per year.

METRONOME can be applied with commonly used ground equipment, hose-end, pressurized, greenhouse, and hand-held sprayers.

**Biological Control Agents:** This product is compatible with the following biological control agents: *Encarsia formosa, Amblyseius fallacis, Phytoseiulus persimilis, Orius insidiosus, Aphidius colemani, Zetzellia mali, Neoseiulus fallacies, Typhlodromus pyri, Stethorus punctum,* lacewings, syrphid fly larvae, phytoseiid mite predators, aphid midges, lady beetles, and other predacious mites. Wait at least 2 hours after application before introducing new biological agents, or spray the evening before the day of introduction of new biological control agents.

AgraQuest is committed to the practice of sound resistance management programs that include rotation and tank mixing with other treatments having a variety of modes of actions.

**Compatibility:** Do not combine METRONOME in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

To ensure compatibility of tank-mix combinations they must be evaluated prior to use. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. Test the combination on a small number of plants to check for phytotoxicity before treating large areas. Do not use the combination if adverse effects are observed.

#### PLANTS EVALUATED FOR PHYTOTOXICITY

QRD 400 Master Label (v1.4) 10-DEC-08 METRONOME has been evaluated alone in a wide range of crops and ornamentals. However, since testing on all varieties of all ornamentals is not feasible, testing a small portion of the area to be treated for phytotoxicity is required before treating the entire area. Further, all possible combinations or sequences of pesticide sprays, including other fertilizers, surfactants, adjuvants and other pesticides, have not been tested, thus testing for compatibility and phytotoxicity of spray mixtures is required. Use the product in accordance with all label use directions. It is further required that spray equipment used to apply METRONOME be thoroughly cleaned before use.

Phytotoxicity has occasionally been observed following the use of this product on flowers of Cyclamen, Gerbera, Begonia, and Impatiens. Do not use METRONOME on flowering Cyclamen, Gerbera, Begonia, and Impatiens.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store in a cool dry place. Avoid freezing.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Do not contaminate water when disposing of equipment washwater or rinsate. Pesticide wastes may be toxic. Improper disposal of unused pesticide, washwater or rinse water is a violation of federal law.

**Container Disposal:** Non-refillable container. 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 <sup>1</sup>/<sub>4</sub> 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. Do not burn unless allowed by state and local ordinances.

#### WARRANTY AND DISCLAIMER STATEMENT

AgraQuest warrants to those persons lawfully purchasing this product that at the time of the first sale of this product by Seller that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. 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. Except to the extent prohibited by applicable law, AgraQuest offers this product with the following conditions: 1) buyers and users of this product assume the risk of any storage, handling or use contrary to AgraQuest's label and directions and 2) AgraQuest's liability shall in no case exceed the purchase price of the applicable AgraQuest product.

Metronome is a registered trademark of AgraQuest.

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