NEMA-Q™ 0408/0209(02) - Page 1 of 4

A Bio-Pesticide

Active Ingredient:
*Saponins of Quillaja saponaria ............................................... 8.6%
Other Ingredients: ................................................................... 91.4%
Total: .....................................................................................100.0%
*bidesmosidic derivatives of quillajic acid substituted with a trisaccharide at C-3 and an oligosaccharide in C-28
EPA Reg. No. 82572-1-17545

KEEP OUT OF REACH OF CHILDREN
WARNING
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 in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin: 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 swallowed: 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING: Causes substantial but temporary eye damage. Do not get in eyes or on clothing. Harmful if swallowed or absorbed through skin. Avoid contact with skin.
Personal Protective Equipment (PPE)
Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Protective eyewear
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks

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 RECOMMENDATIONS
Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Never apply material so as to contaminate eating or drinking area.
- Remove clothing/PPE immediately if product 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
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.

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

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 the label about personal protective equipment and the 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 without protective clothing during the restricted-entry interval (REI) of 24 hours.

For control of plant parasitic nematodes in vineyards, orchards, field crops, turf and ornamentals

For control of plant parasitic nematodes in vineyards, orchards, field crops, turf and ornamentals
Chemigation application: Apply Nema-Q through the following types of systems. Do not apply this product through any other type of irrigation system.

- Low volume (ground or underground) drip, drip tape, strip tubing, micro-jet sprinklers, mini-sprinklers;
- Sprinkler including center pivot, lateral move, end tow, side (wheel) roll, solid set, or hand move;
- Furrow.

Check irrigation system and emitters to ensure all systems are operating normally before injecting Nema-Q. Lack of effectiveness or crop injury can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, chemigation experts or the Distributor of this product.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. In addition, check local and state regulations regarding pesticide injection into public water systems.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Maintain the system’s operating pressure low enough to prevent fogging and/or misting during applications. Inject Nema-Q into the irrigation system after the filter(s) or shut off the automatic back flush system in order to avoid back flushing of treated water.

Systems using a gravity flow pesticide dispensing system must meter the product into the water at the head of the field and downstream of the hydraulic discontinuity, such as a drop structure or weir box, to decrease potential for water source contamination from backflow if water flow stops.

Systems using a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 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 pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of material that are compatible with pesticide and capable of being fitted with a system interlock.

It is highly recommended that the soil be irrigated to field capacity (down to two feet of soil) before pesticide application. For best results, inject Nema-Q into the irrigation line in the last quarter of the irrigation
time. Continue irrigation until all lines are flushed. Maintain irrigation for enough time to assure this product has penetrated down into the targeted root zone. Do not over irrigate after applying this product. If excessive watering occurs immediately following application, this product may move down past the desired root zone due to its high water solubility. Do not irrigate for at least 24 hours following application of this product. Pest injury to the crop may result from uneven distribution of this product during application.

Do not allow air in the line prior to injecting Nema-Q. The product’s density will cause swelling of the line due to foam formation and prevent uptake of material. If a pesticide supply tank is used, follow directions listed under “Mixing” above. There generally will be some level of foam at the base of the wetted area until it dissolves (usually within 30 minutes after application, depending on temperature and amount of water following application).

If applied in heavy rainfall areas, avoid application during rain or when rain is forecasted within the next 24 hours that may exceed movement of this product past targeted root zone.

Do not apply when wind speed favors drift beyond the areas intended for treatment.

**Application Rates for Control of Nematodes:**

To control/suppress plant parasitic nematodes, apply Nema-Q to the full irrigated zone. For row crops, the irrigated zone is 30-50% of the row area. For orchards or around trees, apply from tree trunk to drip-line to cover at least 50% of soil area or the area under the canopy of the tree, whichever is greatest. Single applications should be made in the spring just prior to or during root flush, and again in the fall after harvest. For best results, multiple applications may be made in the spring, followed by a single application in the fall after harvest.

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<tr>
<th>Crop</th>
<th>Remarks</th>
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<tr>
<td><strong>Berries</strong> (Not for use in California): Blackberry (including boysenberry, dewberry, marionberry, olallieberry, youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Raspberry (black and red) <strong>Citrus:</strong> Calamondin, Citrus citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarins, Orange (sour and sweet), Pummelo <strong>Grapes</strong> (raisin, table, wine) <strong>Nut Crop:</strong> Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Cinquapin, Filbert, Macadamia, Pecan, Walnut (black and English) <strong>Pome Fruit:</strong> Apple, Crabapple, Loquat, Mayhaw, Pear (including oriental pear), Quince <strong>Stone Fruit:</strong> Apricot, Cherry (sweet or tart), Nectarine, Peach, Plum, Plumcot, Prune</td>
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<td>On heavily infested soils, apply 3 gallons in 300-600 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) in a single application. On light to moderately infested soils, apply 1.5 gallons in 150-300 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) in a single application. For best results, multiple applications may be made at a rate of 2 quarts/acre in 50-100 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) every 7-14 days for up to 10 weeks.</td>
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<td><strong>Cole Crops:</strong> Broccoli (including Chinese and raab), Brussels sprouts, Cabbage (including Chinese), Cauliflower, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens <strong>Cucurbit Vegetables:</strong> Chayote, Chinese waxgourd, Citron melon, Cucumber, Gherkin, Edible gourd, Momordica spp. (including balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (including cantaloupe, casaba, crenshaw, golden pershaw, honeydew, honey balls, mango, Persian, pineapple, Santa Claus, and snake), Pumpkin, Summer squash (including crookneck, scallop, straightneck, vegetable marrow and zucchini), Watermelon, Winter squash (including acorn, butternut, calabaza, Hubbard, and spaghetti) <strong>Fruiting Vegetables:</strong> Eggplant, Groundcherry, Pepino, Pepper (including bell, chili, cooking, pimento and sweet), Tomatillo, Tomato <strong>Leafy Vegetables:</strong> Amaranth, Arugula, Cardoon, Celery (including Chinese celery), Celatuce, Chervil, Edible chrysanthemum, Corn salad, Cress (garden and upland), Dandelion, Dock (sorrel), Endive (escarole), Fennel, Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio, Rhubarb, Spinach (including New Zealand and vine), Swiss chard <strong>Strawberry</strong> Apply 1-7 days preplant to the planting zone. Apply centered on the top of the row on pre-wetted soil. Follow with water to assure penetration of the product into the root zone. On heavily infested soils, apply 3 gallons in 300-600 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) in a single application. On light to moderately infested soils, apply 1.5 gallons in 150-300 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) in a single application. For best results, multiple applications may be made at a rate of 2 quarts/acre in 50-100 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) every 7-14 days for up to 10 weeks.</td>
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<td><strong>Bulb Vegetable</strong>: Garlic, Leek, Onion (including dry bulb, green and Welch), Shallot</td>
<td>Apply prior to planting to row area to be planted. Apply centered on the top of the row on pre-wetted soil. Follow with water to assure penetration of the product into the root zone.</td>
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<td><strong>Root and Tuber Vegetables</strong>: Arrachacha, Arrowroot, Artichoke, Beet (garden and sugar), Burdock, Canna, Carrot, Cassava (bitter and sweet), Celeriac, Chayote, Chervil, Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip rooted), Parsnip, Potato, Radish, Rutabaga, Salsify, Skirret, Sweet potato, Tanier, Turmeric, Turnip, Yam (bean and true)</td>
<td>On heavily infested soils, apply 3 gallons in 300-600 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) in a single application.</td>
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<td><strong>Ornamentals</strong>: Bare root, container, bedding and flowering stock, cut flowers, nursery and landscape, potted flowering, shade and flowering trees, woody ornamentals</td>
<td>For best results, multiple applications may be made at a rate of 2 quarts/acre in 50-100 gallons water per acre (to achieve a concentration of 5,000-10,000 ppm) every 7-14 days for up to 10 weeks.</td>
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<td><strong>Turfgrass</strong>: Ornamental lawns, Golf courses, Sod farms</td>
<td>Apply 9 fl. oz. in 3-7 gallons water per 1,000 sq. ft. (equivalent to 3 gallons in 130-300 gallons water per acre) using a sprayer with a pressure nozzle tip applicator sufficient to penetrate into the lower part of the turf leaves where Anguina pacifica nematode galls are formed. Do not exceed a concentration of 1.5% solution of Nema-Q in any application. Repeat applications every 5-10 days. Additional applications to break the life cycle of the nematode should be repeated 2-4 times within 60 days to significantly reduce this pest problem in one season. Do not water turfgrass for at least 12 hours following application of Nema-Q. Nema-Q is water soluble and does not require additional water application through sprinkler following application.</td>
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**STORAGE AND DISPOSAL**

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

**Pesticide Storage**: Store in cool dry area.

**Pesticide Disposal**: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal**: Un-Refillable Container. Do not refill or reuse this container. Triple rinse (or equivalent) promptly after emptying. 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.

**LIMITED WARRANTY**

Monterey AgResources warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet (“Directions”) when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.