UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 2, 2023

Jennifer Stafford
Agent for Terramera, Inc.
c/o Compliance Services International
7501 Bridgeport Way West,
Lakewood, WA 98499

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Addition of Sublabel D; Update chemigation instructions; Revise use sites section; Other minor changes
Product Name: TNO70 Broad Spectrum
EPA Registration Number: 88760-10
Application Date: 10/03/2022
OPP Case Number: 00398923

Dear Ms. Stafford:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 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 the U.S. Environmental Protection Agency (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 false or misleading statements or

claims substantially differing from the EPA-approved 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 any questions, please contact Susannah Powell via email at powell.susannah@epa.gov.

Sincerely,

James Parker, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

{Note: Texts in [ ] are optional language. Texts in { } are notes for reviewers.}

TNO70 Broad Spectrum (EPA Reg. No. 88760-10)

MASTER LABEL

Sublabel A is for Agricultural Use
Sublabel B is for Commercial Greenhouse and Nurseries
Sublabel C is for Residential Use
Sublabel D is for Row Crops

ACCEPTED
Mar 02, 2023
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 88760-10

TNO70 Broad Spectrum

[Alternate Brand Names: Rango; Socoro; Proof Cold-Pressed Neem Oil Concentrate; Proof Neem Oil Biopesticide]

Biological Insecticide [/Fungicide] [/Nematicide] [/Miticide]

For control of foliar and soil insects, fungal diseases [and] [nematodes].
For use in vegetables, fruits, tree crops, grapes, [row crops,] greenhouses, ornamental plants, nurseries, and other listed plants

Active Ingredient:	
Cold Pressed Neem Oil…….....	70.0%
Other Ingredients.....	30.0%
Total	100.0%

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

Shake Well Before Use

NET CONTENTS: 8 FL. OZ. to 275 GALLONS

EPA Reg. No.: 88760-10
EPA Est. No. 49292-WA-001

Batch No.

Manufactured for:
Terramera, Inc.
6920 Salashan Pkwy D-109
Ferndale, WA 98248

[Optional Marketing Claims – Applicable to All Sublabels]

- [Use] The Power of Neem
- [Cold Pressed]] Neem Oil
- Derived From Neem
- Cold-pressed from seeds of the Neem Tree
- [TNO70 Broad Spectrum] contains Cold-Pressed Neem Oil that [provides] [contains] [keeps] the full spectrum of limonoids
- [TNO70 Broad Spectrum] contains the full spectrum of bioactive[s] [compounds] of Neem [Oil]
- Cold pressed neem oil, plant-based [biopesticide] active ingredient
- Cold pressed neem oil, botanical [based] [biopesticide] active ingredient
- Cold pressed neem oil is a botanical active ingredient.
- Cold pressed neem oil is a plant-based active ingredient.
- Protect your plants from insects and diseases
- Broad Spectrum [control] [action]
- Multiple Modes of Action
- Insect Growth Regulator
- [TNO70 Broad Spectrum is a] broad-spectrum bioinsecticide
- [TNO70 Broad Spectrum is a] broad-spectrum biofungicide
- [4-in-1,] [multi-purpose product –] fungicide, insecticide, miticide and nematicide* [*for use on listed pest and crops]
- Multi-purpose biopesticide [- 3 in 1] [product]
- One product, triple control
- Insecticide
- Miticide
- Nematicide
- Fungicide
- Botanical Insect Growth Regulator (IGR)
- Kills eggs, larvae and adult insects
- Controls insects and their eggs
- Affects insects at all stages of growth
- [Excellent] for control of spider mites, aphids, whiteflies, leafhoppers, caterpillars
- Controls chewing and sucking insects
- [Also] controls aphids, [beetles,] [stink bugs,] [caterpillars,] [leafhoppers,] [leafminers,] [whiteflies,] [mealy bugs,] [midges,] [spider mites,] [nematodes,] [weevils,] [scales,] [and] [&] [thrips] [other listed insects and nematodes]
- Prevents [and controls] listed [major] diseases
- Prevents fungal attack of plant tissues
- Tool for prevention and control of powdery mildew and botrytis
- Controls powdery mildew, botrytis, [stem mildew,] [and] [&] [sour rot]
- Use for the prevention and control of powdery mildew, botrytis, stem mildew and others as listed on label.
- [For] Use as part of an Integrated Pest Management [program] [strategy]
- Complement for IPM programs

- Alternative within conventional programs
- Peel Here [for Directions & Precautions]
- Pull Here to Open
- Concentrate
- [Only] a 4-hour Re-Entry Interval
- Spray right up to the time of harvest
- Zero-day Pre-Harvest interval
- Can be used up to day of harvest [as a [4 in 1,] multi-purpose product [– fungicide, insecticide, miticide and nematicide *]] [*for use on listed pest and crops]
- For indoor and outdoor use
- For use in hydroponic systems
- Keep plants healthy; keep insects away
- “NC” FRAC Code – No known [disease] resistance
- No MRLs
- For use in forage, grain, legume, oilseed crops and other listed plants
- Made in the USA
-

TNO70 Broad Spectrum (EPA Reg. No. 88760-10)
Sublabel A: Agricultural Use

TNO70 Broad Spectrum
[ABN: Rango]

For control of foliar and soil insects, fungal diseases [and] [nematodes].
For use in vegetables, fruits, tree crops, grapes, [row crops,] greenhouses, ornamental plants, nurseries, and other listed plants.

FOR ORGANIC PRODUCTION **[OMRI Logo]**

Active Ingredient:
Cold Pressed Neem Oil…….. 70.0%
Other Ingredients..... 30.0%
Total 100.0%

[This product contains 5.37lbs of cold pressed neem oil per gallon.]

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

Shake Well Before Use

[See label booklet for additional precautionary statements, directions for use, storage and disposal statements, and warranty.]

NET CONTENTS: 8 FL. OZ. to 275 GALLONS

EPA Reg. No.: 88760-10
EPA Est. No. 49292-WA-001

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Manufactured for:
Terramera, Inc.
6920 Salashan Pkwy D-109
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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions are available, wash with detergent and hot water. Keep and store PPE separately from other laundry.

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.

ENVIRONMENTAL HAZARDS

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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

USER SAFETY RECOMMENDATIONS

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

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS. 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 product 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 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), notification to workers and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow 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
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the scope of the WPS 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. For other uses, including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried

PRODUCT MODE OF ACTION

TNO70 Broad Spectrum controls target pests on contact or by ingestion. The modes of action on insects are repellence, anti-feedance and interference with the molting process. Diseases are controlled by inhibition of mycelial growth.

GENERAL INFORMATION

Read all directions before using this product.

TNO70 Broad Spectrum is an emulsifiable concentrate containing cold pressed neem oil for the broad spectrum control of listed pests in vegetables, fruits, tree crops, grapes, agronomic crops, ornamental plants, greenhouses, and other listed plants. **TNO70 Broad Spectrum** is exempted from the requirement of a tolerance and may be applied to listed food and non-food crop up to and including the day of harvest.

- Thorough coverage is key to providing good insect, mite and disease control.
- For best results maintain constant agitation in spray tank and apply immediately.
- For optimal performance, follow the Mixing Instructions.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.
- Application in early morning/late evening is recommended to minimize the potential for leaf burn.
- Do not apply under high humidity and temperature conditions >90°F.
- Do not apply to wilted or stressed plants and newly germinated or transplanted crops prior to root establishment.
- Use with care on plants with tender tissue. Test on a small area prior to broader use.
- Do not apply to sensitive plant species such as poinsettias, impatiens, hibiscus flowers, certain carnation and rose flower species, ornamental olive trees and comice pear.
- Weather conditions, intensity, type and physical stages of the pests, and treated crop can influence the degree of product efficacy.
- DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur.
- DO NOT apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

FOLIAR RATES FOR ANNUAL CROPS

Insecticide, Miticide & Fungicide Foliar Applications

- For insect & disease control in spray volumes of 100 gallons or less per acre, rates up to 230 fl oz/acre can be used. A spray volume above 100 gallons per acre may be used in annual crops. However, the maximum rate of product cannot exceed 230 fl oz per acre.

Insecticide and Miticide Foliar Applications Only:

- Use a concentration of 0.625 -1.25% v/v for normal pest and crop conditions.
- Use a concentration 1.8% v/v **for heavier infestations.**

Fungicide Foliar Applications Only:

- Use a concentration of 1.25 -1.8% v/v.

Rate & Dilution Table for Foliar Applications in Annual Crop

v/v %	Pest	Pest Pressure*	Product Rate (fl oz/ac)				
			10 ga spray	**20 ga spray**	**40 ga spray**	**50 ga spray**	**100 ga spray**
1.25%	Disease	[Low -] Medium	**16 fl oz/ac**	**32fl oz/ac**	**64 fl oz/ac**	**80 fl oz/ac**	**160 fl oz/ac**
1.80%	Disease	High	**23 fl oz/ac**	**46fl oz/ac**	**92fl oz/ac**	**116 fl oz/ac**	**230 fl oz/ac**
0.625%	Insects/Mites	Low	**8 fl oz/ac**	**16 fl oz/ac**	**32 fl oz/ac**	**40 fl oz/ac**	**80 fl oz/ac**
1.25%	Insects/Mites	Medium	**16 fl oz/ac**	**32fl oz/ac**	**64 fl oz/ac**	**80 fl oz/ac**	**160 fl oz/ac**
1.80%	Insects/Mites	High	**23 fl oz/ac**	**46 fl oz/ac**	**92 fl oz/ac**	**116 fl oz/ac**	**230 fl oz/ac**

FOLIAR RATES FOR PERMANENT CROPS

- For insect control with high volume applications between 100 and 300 gallons of spray solution per acre, use a rate range between 80 and 640 fl oz per acre in permanent tree crops. A spray volume above 300 gallons per acre may be used. However, the maximum rate of product cannot exceed 640 fl oz per acre.
- For disease control with high volume applications between 100 and 300 gallons of spray solution per acre, use a rate between 160 and 640 fl oz per acre in permanent tree crops. A spray volume above 300 gallons per acre maybe used however the maximum rate of product per acre cannot exceed 640 fl oz per acre

Rate & Dilution Table for Foliar Applications for Permanent Crop

v/v %	Pest	Pest Pressure*	Product Rate (fl oz/ac)			
			100 ga spray	**150 ga spray**	**200 ga spray**	**300 ga spray**
1.25%	Disease	[Low -] Medium	**160 fl oz/ac**	**240 fl oz/ac**	**320 fl oz/ac**	**480 fl oz/ac**
1.80%	Disease	High	**230 fl oz/ac**	**345 fl oz/ac**	**430 fl oz/ac**	**640 fl oz/ac**
0.625%	Insects/Mites	Low	**80 fl oz/ac**	**120 fl oz/ac**	**160 fl oz/ac**	**240 fl oz/ac**
1.25%	Insects/Mites	Medium	**160 fl oz/ac**	**240 fl oz/ac**	**320 fl oz/ac**	**480 fl oz/ac**
1.80%	Insects/Mites	High	**230 fl oz/ac**	**345 fl oz/ac**	**430 fl oz/ac**	**640 fl oz/ac**

[SOIL APPLIED RATES

Soil Applications:
- Use a concentration of 1.25-2.4% v/v.
- Up to maximum use rate of 7.25 quarts (230 fl oz) of **TNO70 Broad Spectrum** per acre.]

MIXING INSTRUCTIONS

TNO70 Broad Spectrum is an emulsifiable concentrate and requires only water for the appropriate use dilution. Additional surfactant is not required.

Always shake container well before use [as per Shaking Instructions below].

TNO70 Broad Spectrum Alone:

- Add **TNO70 Broad Spectrum** to a clean spray tank half-filled with water and agitate.
  - For best emulsion, it is recommended to premix the product with warm water at a ratio of 1:1. Then add the emulsion to the spray tank.
- Next, add additional water to final spray volume, while maintaining continuous agitation.
- Best results are achieved by using a spray water with a temperature of 45°F or warmer.

- Agitate continuously during mixing and application to prevent separation of the emulsion. Inadequate agitation can cause a non-uniform dilution resulting in crop injury and/or reduced efficacy.
- Always use the spray solution promptly after mixing and do not allow mixture to sit for extended periods of time. If allowed to sit, agitate thoroughly before resuming application.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.

[Shaking Instruction:
- {For 1 gallon or smaller containers} Shake container vigorously up and down for 30 – 60 seconds before use.
- {For 2.5 gallon container} Hold container horizontally with two hands and shake vigorously from side to side for 30 – 60 seconds before use.]

Thawing Instruction:
Due to its fatty acid content, neem oil can thicken at temperatures below 60 °F. For optimal use experience, store at 60 °F or above. If the product has started to solidify, expose container to temperatures over 80°F and shake well intermittently, until product is completely liquified before use. Refer to "Mixing Instructions" section for additional information.

Mixing Order for Tank Mixes:

- Fill clean spray tank with water to 1/3 of the required spray volume.
- Start agitation.
- Add different formulation types in the following order: 1) water dispersible granules, 2) wettable powders.
- Maintain agitation and add water to ¾ of final spray volume.
- Next add **TNO70 Broad Spectrum,** other emulsifiable concentrates, water-based solutions, adjuvants, surfactants, oils and/or fertilizers.
- Agitate to achieve complete emulsification. Do not use if a uniform, cloudy emulsion is not formed.
- Continue adding water and agitating to desired final spray volume.
- Always use the spray solution promptly after mixing with water.
- Do not let tank mixture sit for an extended period of time. If tank mixture is allowed to sit, agitate thoroughly again prior to and during application. Sparger line agitators are preferred.
- Tank-mix combinations can alter the pH of the finished spray solution. Adjusting the spray mixture pH to a range between 5.5 and 7.0 will provide optimal performance.

TANK MIX COMPATIBILITY:

To determine the physical compatibility of **TNO70 Broad Spectrum** with other products, test as described below before mixing.

> **Jar Compatibility Test:** Using a quart jar, add the proportionate amounts of products to be tank mixed to 1 quart of water in the following order. Add wettable powders and water-dispersible granular products first, then add liquid flowables,

then add emulsifiable concentrates and solutions last. After thoroughly mixing by agitation, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. All possible tank mixes on all crops have not been tested. Growers must test tank mix combinations for phytotoxicity on a sample of plants prior to use. Do not use mixtures of incompatible products as it may cause phytotoxicity or result in lowered effectiveness.

Always read and follow the directions for use, precautions and limitations for use on all product labels used in combination. Applications must follow the precautions and limitations of the most restrictive product label in the mixture. Do not exceed the dosage rates of any product. Check compatibility by using the correct proportion of the products in a small test container.

DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur.

APPLICATION DIRECTIONS

Apply **TNO70 Broad Spectrum** as a foliar spray or as soil treatment (soil drench, in-furrow, drip-applied) using thoroughly clean equipment. Applications can be made with any powered or manual pesticide application equipment including high volume, low volume, ultra-low volume, electrostatic, air blast, and fogging equipment. When applied as a foliar application use a spray volume that ensures complete coverage of the plant surfaces, but avoid pooling or run off. Consult with an application specialist for recommendations on nozzle types, spacing and set-up that provide complete crop canopy coverage. Follow the original equipment manufacturer's instructions.

INSECTICIDE/MITICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before or around the onset of insects, mites or their eggs (see Pests Section) or as soon as they are detected.
- Spray in intervals of 7 to 10 days for optimal results
- To control listed insects, apply **TNO70 Broad Spectrum** in sufficient amount of water and with adequate spray pressure to achieve thorough coverage of plant surfaces
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90ºF).
- Use higher rates and increase spray frequency when pest pressure is high and/or dense crop canopies exist.

FUNGICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before the onset of disease development.
- Spray intervals:
    - 10 to 14 days all crops **except** grapes
    - Grapes: For Botrytis, spray at bloom and prebunch closure. For all other diseases, spray at 10 to 14-day intervals from prebloom through veraison.

- To control listed diseases, apply **TNO70 Broad Spectrum** in sufficient amount of water and with adequate spray pressure to achieve thorough coverage of plant surfaces.
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90°F). Do not apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

[NEMATICIDE AND OTHER SOIL USE

- To control listed nematodes, apply as a preventative treatment (see Pests Section for Nematodes) or control treatment after nematodes and other listed pests have been detected.
- When applied as a soil drench, avoid excess run off.
- For best results repeat the applications as necessary.]

[ROOT-DIP NEMATICIDE USE ON STRAWBERRIES

- For bare-root dip applications on strawberries use a concentration of 2.4% (e.g. 2.4 gallons of **TNO70 Broad Spectrum** in 100 gallons of water).
- If bare-root nursery plants are in cold storage, allow them to thaw to ambient temperature – approximately 20°C (70°F).
- Submerge the entire plant to be treated in **TNO70 Broad Spectrum** emulsion and leave completely submerged in for 15-30 minutes.
- Remove the plants from the treatment solution, shake off excess liquid, and drain for 5-15 min.
- Plant after treatment, or package the plants in suitable containers and cold store between -2°C and 5 °C (28-48 °F) during shipping and until planting.]

CHEMIGATION INSTRUCTIONS

GENERAL CHEMIGATION REQUIREMENTS

Apply this product only through in-furrow or drip (trickle) irrigation & system(s). Do not apply this product through any other type of irrigation system. Crop injury, 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 should contact State Extension Service specialists, equipment manufacturers or other experts. 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. 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.

FURROW CHEMIGATION REQUIREMENTS

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops. Systems utilizing 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 back flow.
- 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 materials that are compatible with pesticides and capable of being fitted with a system interlock.

A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100~200 gallons of water. Frequent agitation is necessary. Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

DRIP CHEMIGATION 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 back flow. 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 inter-locking 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 materials that are compatible with pesticides and capable of being fitted with a system interlock.

A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 6 quarts per 100~200 gallons of water. Frequent agitation is necessary.

Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

PHYTOTOXICITY

To avoid plant damage, test for crop response by applying the spray solution on a small portion of the area to be treated before applying to the entire area. Make foliar applications in conditions that favor fast drying. Avoid applications during hot temperature conditions >90°F. Make applications early morning/late afternoon to avoid leaf burn. Do not tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur and/or apply within 14 days of an elemental sulfur application. Not all possible mixtures of pesticide sprays, fertilizers, surfactants, and adjuvants have been tested. Therefore, it is the responsibility of the user to test spray mixtures to small areas to ensure crop safety before treating the entire area.

USE SITES

TNO70 Broad Spectrum is exempted from the requirement of a tolerance and may be applied to the following food and non-food crop groups up to and including the day of harvest.

[Crop Group 3 -] Bulb Vegetable Crops such as

Garlic	Onion
Leek	Shallot

[Crop Group 9 -] Cucurbit Crops such as:

Cantaloupe	Honeydew Melon	Squash, Summer
Crenshaw Melon	Persian Melon	Squash, Winter
Cucumber	Pumpkin	Watermelon

[Crop Group 8 -] Fruiting Vegetable Crops such as:

Eggplant	Tomatillo
Pepper	Tomato

[Crop Group 4 & 5 -] Leafy & Brassica (Cole) Vegetable Crops such as

Arugula	Cilantro	Mustard green
Broccoli	Collard	Parsley
Brussel sprout	Endive	Radicchio
Cabbage	Greens	Rhubarb
Celery	Kale	Spinach
Chinese cabbage	Kohlrabi	Swiss chard
Cauliflower	Lettuce	

[[Crop Group 6 -] Legume Crops such as:

Bean	Lentil
Chickpea	Pea
Guar	[Soybean]

{If soybean is excluded above} [Except soybean]]

[Crop Group 1 -] Root & Tuber Vegetable Crops such as:

Artichoke	Horseradish	Radish
Beet	Parsnip	Sweet Potato
Carrot	Potato	Yam

[Crop Group 13 -] Small Fruit & Berry Crops such as:

Blackberry	Kiwifruit
Blueberry	Raspberry
Cranberry	Strawberry
Grape	

[Crop Group 10, 23 & 24 -] Citrus & Tropical Fruit Crops such as:

Avocado	Grapefruit	
Banana	Guava	Olive
Citrus	Lemon	Orange
Date	Lime	Papaya
Fig	Mandarin	Pineapple
	Mango	Pomegranate

[Crop Group 11 & 12 -] Pome & Stone Fruit Crops such as:

Apple	Nectarine	Peach
Apricot	Pear	Prune
Cherry	Plum	

[Crop Group 14 -] Tree Nuts such as:

Almond	Filbert	Pecan
Cashew	Hickory Nut	Pistachio
Chestnut	Macadamia Nut	
Coconut		

[Crop Group 19 -] Herbs & Spices such as:

Basil	Dill	Poppy
Chamomile	Fennel	Rosemary
Chive	Mint	Sage

Cinnamon	Mustard	Tarragon
Clove buds	Nutmeg	Wintergreen
Cumin	Pepper	
Curry leaf	Peppermint	

[[Crop Group 15 -] Cereal Grain Crops such as:

Barley	Oats	Triticale
[Corn]	Rye	[Wheat]
Millet	[Sorghum (Milo)]	Wild Rice

{if corn, sorghum, wheat are excluded above} [Except corn, sorghum, wheat]]

Crop Group 18 – Forage Crops such as:

Alfalfa	Sainfoin
Clover	Trefoil
Lupin	Vetch

[[Crop Group 20 -] Oilseed Crops such as:

[Canola]	[Cotton]	Sesame
Safflower	Sunflower	

{if cotton and canola are excluded above} [Except cotton and canola]]

Miscellaneous crops: [peanut,] hops, coffee, mushroom, okra, tobacco

[Other crop: hemp]

Other Use Sites such as:

Ornamentals	Greenhouses	Sod Farms
Fencerows	Nurseries	Turf
Mushroom Houses	Shade Houses	

{Note: Texts in [ ] are optional language. Texts in { } are notes for reviewers.}

PESTS: INSECTS, MITES, [NEMATODES,] AND DISEASES

(1) Insects and Mites:

Aphids such as:
- Cotton Aphid
- Cowpea Aphid
- Pea Aphid
- Green Peach Aphid

Beetles such as:
- Cucumber Bettle
- Japanese Beetle
- Spotted Cucumber Beetle

Borers such as:
- Peachtree Borers
- Peach Twig Borers

Caterpillars/Moths/Worms such as:
- Armyworms
- Budworms
- Cutworms
- Diamondback Moth
- Gypsy Moth
- Leafrollers
- Loopers
- Navel Orange Worm

Flies/Gnats such as:
- Fruit Fly
- Fungus Gnat
- Walnut Husk Fly

Grasshoppers such as
- Carolina Grasshopper
- Rice Grasshopper

Leafhoppers such as
- Grape Leafhopper
- Potato leafhopper

Leafminer such as:
- Citrus Leafminer
- Tomato Leafminer
- Vegetable Leafminer

Maggots/Grubs such as:
- Onion Maggots

Mealy Bugs such as:
- Citrus Mealy Bug

Mites such as:
- Pacific Spider Mites
- Red Spider Mite
- Spider Mites
- Two Spotted Spider Mite

Psyllids such as:
- Asian Citrus Psyllid
- Pear Psyllid
- Potato Psyllid

Scales such as:
- California Red Scale
- Coffee Green Scale
- San Jose Scale
- Soft Scale

Thrips such as:
- Flower Thrip
- Grape Thrip
- Onion Thrip
- Western Flower Thrip

True Plant Bugs such as:
- Lygus Bug
- Phylloxera
- Spittle Bug
- Sting Bug
- Tomato Stink Bug

Weevils such as:
- Black Vine Weevil
- Boll weevil
- Pepper Weevil

Wireworms such as:
- Field/Wheat Wireworm

Whiteflies such as:
- Cotton Whitefly
- Silverleaf Whiefly
- Greenhouse Whitefly

(2) Diseases:

Foliar Fungal Diseases

Alternaria	Downey Mildew	Scab
Anthracnose	Molds	Stem Mildew
Blight (early, late, leaf)	Powdery Midlew	Southern Blight
Botrytis	Rust	Sour Rot Grapes

Soil Fungal Diseases

Fusarium Oxysporum
Pythium
Rhizoctonia Solani

[(3) Nematodes:

Nematodes such as:

Dagger Nematode	Reniform Nematode	Soybean Cyst Nematode
Lance Nematode	Root Knot Nematode	Sting Nematode
Lesion Nematode		

]

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by pesticide storage or disposal.

PESTICIDE STORAGE: Due to its fatty acid content, neem oil can thicken at temperatures below 60°F. For optimal use experience, store at 60 °F or above. If product has started to solidify, refer to “Thawing Instruction”. Store in tightly closed original containers away from ultraviolet light (sunlight) or moisture when not in use. Store in such a manner to prevent cross contamination with other pesticides, fertilizers, food and feed.

PESTICIDAL 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).

CONTAINER HANDLING:

{For 5-Gallon or Smaller Containers} 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. 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 dispose of in trash or in a sanitary landfill or by incineration.

{For Containers Larger than 5 Gallons} 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. 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 the 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 dispose of in trash or in a sanitary landfill or by incineration.

{For 250 or 275-gallon Refillable Containers} Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Seller. All such risks shall be assumed by the user or buyer.
DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Terramera, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a purpose or otherwise, that extend beyond the statements made on this label. No agent of Terramera, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Terramera, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.
LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Terramera, Inc.'s election, the replacement of product.

[Terramera is a registered trademark of Terramera, Inc.]

[[Product Name,] {to be replaced with ABN} Terramera ®, the Terramera logo and 2-Leaf design are trademarks of Terramera, Inc.]

[Optional Marketing Claims for Sublabel A]

- [Can be used] for organic production

TNO70 Broad Spectrum (EPA Reg. No. 88760-10)
Sublabel B: Commercial Greenhouse and Nurseries

TNO70 Broad Spectrum

For control of foliar and soil insects, fungal diseases and nematodes in commercial plant production in greenhouses, under shade cloth, in container stock and field nurseries

FOR ORGANIC PRODUCTION

Active Ingredient:
Cold Pressed Neem Oil…….. 70.0%
Other Ingredients..... 30.0%
Total 100.0%

[This product contains 5.37lbs of cold pressed neem oil per gallon.]

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

Shake Well Before Use

[See label booklet for additional precautionary statements, directions for use, storage and disposal statements, and warranty.]

NET CONTENTS: 8 FL. OZ. to 275 GALLONS

EPA Reg. No.: 88760-10
EPA Est. No. 49292-WA-001

Batch No.

Manufactured for:
Terramera, Inc.
6920 Salashan Pkwy D-109
Ferndale, WA 98248

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions are available, wash with detergent and hot water. Keep and store PPE separately from other laundry.

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.

ENVIRONMENTAL HAZARDS

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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

USER SAFETY RECOMMENDATIONS

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

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS. 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 product 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 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), notification to workers and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow 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
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the scope of the WPS 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. For other uses, including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried.

PRODUCT MODE OF ACTION

TNO70 Broad Spectrum controls target pests on contact or by ingestion. The modes of action on insects are repellence, anti-feedance and interference with the molting process. Diseases are controlled by inhibition of mycelial growth.

GENERAL INFORMATION

Read all directions before using this product.

TNO70 Broad Spectrum is an emulsifiable concentrate containing 70% cold pressed neem oil for the broad spectrum control of pests in commercial plant production in greenhouses, under shade cloth and in container stock and field nurseries. **TNO70 Broad Spectrum** is exempted from the requirement of a tolerance and may be applied to listed food and non-food crop up to and including the day of harvest.

- Thorough coverage is key to providing good insect, mite and disease control.
- For best results maintain constant agitation in spray tank and apply immediately.
- For optimal performance, follow the Mixing Instructions.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.
- Application in early morning/late evening is recommended to minimize the potential for leaf burn.
- Do not apply under high humidity and temperature conditions >90°F.
- Do not apply to wilted or stressed plants and newly germinated or transplanted crops prior to root establishment.
- Use with care on plants with tender tissue. Test on a small area prior to broader use.
- Do not apply to sensitive plant species such as poinsettias, impatiens, hibiscus flowers, certain carnation and rose flower species, ornamental olive trees and comice pear.
- Weather conditions, intensity, type and physical stages of the pests, and treated crop can influence the degree of product efficacy.
- DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur.
- DO NOT apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

FOLIAR RATES

Insecticide and Miticide Foliar Applications:
- Use a concentration of 0.625 – 1.25% v/v for normal pest and crop conditions.
- Use a concentration 1.8% v/v **for heavier infestations.**
- Up to a maximum use rate of 3 quarts **TNO70 Broad Spectrum** per acre.

Fungicide Foliar Applications:
- Use a concentration of 1.25 – 1.8% v/v.
- Up to a maximum use rate of 6 quarts **TNO70 Broad Spectrum** per acre.

[Soil Applications:
- Use a concentration of 1.25 – 2.4% v/v.
- Up to maximum use rate of 7.25 quarts **TNO70 Broad Spectrum** per acre.]

MIXING INSTRUCTIONS

TNO70 Broad Spectrum is an emulsifiable concentrate and requires only water for the appropriate use dilution. Additional surfactant is not required.

Always shake container well before use [as per Shaking Instructions below].

TNO70 Broad Spectrum Alone:

- Add **TNO70 Broad Spectrum** to a clean spray tank half-filled with water and agitate.
    - For best emulsion, it is recommended to premix the product with warm water at a ratio of 1:1. Then add the emulsion to the spray tank.

- Next, add additional water to final spray volume, while maintaining continuous agitation.
- Best results are achieved by using a spray water with a temperature of 45°F or warmer.
- Agitate continuously during mixing and application to prevent separation of the emulsion. Inadequate agitation can cause a non-uniform dilution resulting in crop injury and/or reduced efficacy.
- Always use the spray solution promptly after mixing and do not allow mixture to sit for extended periods of time. If allowed to sit, agitate thoroughly before resuming application.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.

[Shaking Instruction:
- {For 1 gallon or smaller containers} Shake container vigorously up and down for 30 – 60 seconds before use.
- {For 2.5 gallon container} Hold container horizontally with two hands and shake vigorously from side to side for 30 – 60 seconds before use.]

Thawing Instruction:
Due to its fatty acid content, neem oil can thicken at temperatures below 60 °F. For optimal use experience, store at 60 °F or above. If the product has started to solidify, expose container to temperatures over 80°F and shake well intermittently, until product is completely liquified before use. Refer to “Mixing Instructions” section for additional information.

Mixing Order for Tank Mixes:

- Fill clean spray tank with water to 1/3 of the required spray volume.
- Start agitation.
- Add different formulation types in the following order: 1) water dispersible granules, 2) wettable powders.
- Maintain agitation and add water to ¾ of final spray volume.
- Next add **TNO70 Broad Spectrum,** other emulsifiable concentrates, water-based solutions, adjuvants, surfactants, oils and/or fertilizers.
- Agitate to achieve complete emulsification. Do not use if a uniform, cloudy emulsion is not formed.
- Continue adding water and agitating to desired final spray volume.
- Always use the spray solution promptly after mixing with water.
- Do not let tank mixture sit for an extended period of time. If tank mixture is allowed to sit, agitate thoroughly again prior to and during application. Sparger line agitators are preferred.
- Tank-mix combinations can alter the pH of the finished spray solution. Adjusting the spray mixture pH to a range between 5.5 and 7.0 will provide optimal performance.

TANK MIX COMPATIBILITY:

To determine the physical compatibility of **TNO70 Broad Spectrum** with other products, test as described below before mixing.

Jar Compatibility Test: Using a quart jar, add the proportionate amounts of products to be tank mixed to 1 quart of water in the following order. Add wettable powders and water-dispersible granular products first, then add liquid flowables, then add emulsifiable concentrates and solutions last. After thoroughly mixing by agitation, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. All possible tank mixes on all crops have not been tested. Growers must test tank mix combinations for phytotoxicity on a sample of plants prior to use. Do not use mixtures of incompatible products as it may cause phytotoxicity or result in lowered effectiveness.

Always read and follow the directions for use, precautions and limitations for use on all product labels used in combination. Applications must follow the precautions and limitations of the most restrictive product label in the mixture. Do not exceed the dosage rates of any product. Check compatibility by using the correct proportion of the products in a small test container.

DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur**.**

APPLICATION DIRECTIONS

Apply **TNO70 Broad Spectrum** as a foliar spray or as soil treatment (soil drench, in-furrow, drip-applied) using thoroughly clean equipment. Applications can be made with any powered or manual pesticide application equipment including high volume, low volume, ultra-low volume, electrostatic, air blast, and fogging equipment. When applied as a foliar application, use a spray volume that ensures complete coverage of the plant surfaces, but avoid pooling or run off. Follow the original equipment manufacturer's instructions.

INSECTICIDE/MITICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before or around the onset of insects, mites or their eggs (see Pests Section) or as soon as they are detected.
- Spray in intervals of 7 to 10 days for optimal results.
- To control listed insects, apply **TNO70 Broad Spectrum** in sufficient amounts of water with adequate spray pressure to achieve thorough coverage of plant surfaces.
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90°F).
- Use higher rates and increase spray frequency when pest pressure is high and/or dense crop canopies exist.

FUNGICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before the onset of disease development.
- Spray in intervals of 10 to 14 days for optimal results.
- To control listed diseases, apply **TNO70 Broad Spectrum** in sufficient amount of water and with adequate spray pressure to achieve thorough coverage of plant surfaces.
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90°F).
- Do not apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

[NEMATICIDE AND OTHER SOIL USE

- To control listed nematodes, apply as a preventative treatment (see Pests Section for Nematodes) or control treatment after nematodes and other listed pests have been detected.
- When applied as a soil drench, avoid excess run off.
- For best results repeat the applications as necessary.

]

[Root-dip Nematicide Use on Nursery Plants

- For bare-root dip applications on plants use a concentration of 2.4% (e.g. 2.4 gallons of **TNO70 Broad Spectrum** in 100 gallons of water).
- If bare-root nursery plants are in cold storage, allow them to thaw to ambient temperature – approximately 20°C (70°F).
- Submerge the entire plant to be treated in **TNO70 Broad Spectrum** emulsion. Leave the plant completely submerged in for 15-30 minutes.
- Remove the plants from the treatment solution, shake off excess liquid, and drain for 5-15 min.
- Plant immediately after treatment, or package the plants in suitable containers and cold store between -2°C and 5 °C (28-48 °F) during shipping and until planting. **]**

CHEMIGATION INSTRUCTIONS

GENERAL CHEMIGATION REQUIREMENTS

Apply this product only through in-furrow or drip (trickle) irrigation & system(s). Do not apply this product through any other type of irrigation system. Crop injury, 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 should contact State Extension Service specialists, equipment manufacturers or other experts. 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. 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.

FURROW CHEMIGATION REQUIREMENTS

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops. Systems utilizing 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 back flow.
- 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 materials that are compatible with pesticides and capable of being fitted with a system interlock.

A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100~200 gallons of water. Frequent agitation is necessary. Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

DRIP CHEMIGATION 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 back flow. 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 inter-locking 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 materials that are compatible with pesticides and capable of being fitted with a system interlock.

A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100~200 gallons of water. Frequent agitation is necessary. Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

Dilution Table for Foliar Applications (1 to 20 gallons per acre)

Gallons of Water	0.625% v/v	1.25% v/v	1.8% v/v
1	0.8 fl oz	1.6 fl oz	2.3 fl oz
5	4 fl oz	8 fl oz	12 fl oz
10	8 fl oz	16 fl oz	23 fl oz
20	16 fl oz	32 fl oz	46 fl oz

PHYTOTOXICITY

To avoid plant damage, test for crop response by applying the mixed spray solution on a small portion of the area to be treated before applying to the entire area. Make foliar applications in conditions that favor fast drying. Avoid applications during hot temperature conditions >90F. Make applications early morning/late afternoon to avoid leaf burn. Do not tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur and/or apply within 14 days of an elemental sulfur application. Not all possible mixtures of pesticide sprays, fertilizers, surfactants, and adjuvants have been tested. Therefore, it is the responsibility of the user to test spray mixtures to small areas to ensure crop safety before treating the entire area.

USE SITES

TNO70 Broad Spectrum is exempt from tolerances and may be applied to listed food and non-food crop groups up to and including the day of harvest. Use **TNO70 Broad Spectrum** on the following crop groupings.

[Crop Group 3 -] Bulb Vegetable Crops such as:

Garlic	Onion
Leek	Shallot

[Crop Group 9 -] Cucurbit Crops such as:

Cantaloupe	Honeydew Melon	Squash, Summer
Crenshaw Melon	Persian Melon	Squash, Winter
Cucumber	Pumpkin	Watermelon

[Crop Group 8 -] Fruiting Vegetable Crops such as:

Eggplant	Tomatillo
Pepper	Tomato

[Crop Group 4 & 5 -] Leafy & Brassica (Cole) Vegetable Crops such as:

Arugula	Cilantro	Mustard green
Broccoli	Collard	Parsley
Brussel sprout	Endive	Radicchio
Cabbage	Greens	Rhubarb
Celery	Kale	Spinach
Chinese cabbage	Kohlrabi	Swiss chard
Cauliflower	Lettuce	

[Crop Group 6 -] Legume Crops such as:

Bean	Lentil
Chickpea	Pea
Guar	Soybean

[Crop Group 1 -] Root & Tuber Vegetable Crops such as:

Artichoke	Horseradish	Radish
Beet	Parsnip	Sweet Potato
Carrot	Potato	Yam

[Crop Group 13 -] Small Fruit & Berry Crops such as:

Blackberry	Kiwifruit
Blueberry	Raspberry
Cranberry	Strawberry
Grape	

[Crop Group 10, 23 & 24 -] Citrus & Tropical Fruit Crops such as:

Avocado	Grapefruit	
Banana	Guava	Olive
Citrus	Lemon	Orange
Date	Lime	Papaya
Fig	Mandarin	Pineapple
	Mango	Pomegranate

[Crop Group 11 & 12 -] Pome & Stone Fruit Crops such as:

Apple	Nectarine	Peach
Apricot	Pear	Prune
Cherry	Plum	

[Crop Group 14 -] Tree Nuts such as:

Almond	Filbert	Pecan

Cashew	Hickory Nut	Pistachio
Chestnut	Macadamia Nut	
Coconut		

[Crop Group 19 -] Herbs & Spices such as:

Basil	Dill	Poppy
Chamomile	Fennel	Rosemary
Chive	Mint	Sage
Cinnamon	Mustard	Tarragon
Clove buds	Nutmeg	Wintergreen
Cumin	Pepper	
Curry leaf	Peppermint	

[Crop Group 15 -] Ceral Grain Crops such as:

Barley	Oats	Triticale
Corn	Rye	Wheat
Millet	Sorghum (Milo)	Wild Rice

[Crop Group 18 -] Forage Crops such as:

Alfalfa	Sainfoin
Clover	Trefoil
Lupin	Vetch

[Crop Group 20 -] Oilseed Crops such as:

Canola	Cotton	Sesame
Safflower	Sunflower	

Miscellaneous crops: peanut, hops, coffee, mushroom, okra, tobacco

[Other crop: hemp]

Other Use Sites such as:

Ornamentals	Greenhouses	Sod Farms
Fencerows	Nurseries	Turf

PESTS: INSECTS, MITES, NEMATODES, and DISEASES

(1) Insects and Mites:

Aphids such as:	Grasshoppers such as	Scales such as:
Cotton Aphid	Carolina Grasshopper	California Red Scale

Cowpea Aphid
Pea Aphid
Green Peach Aphid

Beetles such as:
Cucumber Beetle
Japanese Beetle
Spotted Cucumber Beetle

Borers such as:
Peachtree Borers
Peach Twig Borers

Caterpillars/Moths/Worms such as:
Armyworms
Budworms
Cutworms
Diamondback Moth
Gypsy Moth
Leafrollers
Loopers
Navel Orange Worm

Flies/Gnats such as:
Fruit Fly
Fungus Gnat
Walnut Husk Fly

Rice Grasshopper

Leafhoppers such as
Grape Leafhopper
Potato leafhopper

Leafminer such as:
Citrus Leafminer
Tomato Leafminer
Vegetable Leafminer

Maggots/Grubs such as:
Onion Maggots

Mealy Bugs such as:
Citrus Mealy Bug

Mites such as:
Pacific Spider Mites
Red Spider Mite
Spider Mites
Two Spotted Spider Mite

Psyllids such as:
Asian Citrus Psyllid
Pear Psyllid
Potato Psyllid

Coffee Green Scale
San Jose Scale
Soft Scale

Thrips such as:
Flower Thrip
Grape Thrip
Onion Thrip
Western Flower Thrip

True Plant Bugs such as:
Lygus Bug
Phylloxera

Spittle Bug
Sting Bug
Tomato Stink Bug

Weevils such as:
Black Vine Weevil
Boll weevil
Pepper Weevil

Wireworms such as:
Field/Wheat Wireworm

Whiteflies such as:
Cotton Whitefly
Silverleaf Whiefly
Greenhouse Whitefly

(2) Diseases:

Foliar Fungal Diseases

Alternaria
Anthracnose
Blight (early, late, leaf)
Downey Mildew
Molds
Powdery Midlew
Scab
Stem Mildew
Southern Blight

Botrytis	Rust	Sour Rot Grapes

Soil Fungal Diseases

Fusarium Oxysporum
Pythium
Rhizoctonia Solani

[

(3) Nematodes:

Nematodes such as:

Dagger Nematode	Reniform Nematode	Soybean Cyst Nematode
Lance Nematode	Root Knot Nematode	Sting Nematode
Lesion Nematode		

]

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by pesticide storage or disposal.

PESTICIDE STORAGE: Due to its fatty acid content, neem oil can thicken at temperatures below 60°F. For optimal use experience, store at 60 °F or above. If product has started to solidify, refer to "Thawing Instruction" section. Store in tightly closed original containers away from ultraviolet light (sunlight) and moisture when not in use. Store in such a manner to prevent cross contamination with other pesticides, fertilizers, food and feed.

PESTICIDAL 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).

CONTAINER HANDLING:

{For 5-Gallon or Smaller Containers} 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. 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 dispose of in trash or in a sanitary landfill or by incineration.

{For Containers Larger than 5 Gallons} 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. 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 the 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 dispose of in trash or in a sanitary landfill or by incineration.

{For 250 or 275-gallon Refillable Containers} Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Seller. All such risks shall be assumed by the user or buyer.
DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Terramera, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a purpose or otherwise, that extend beyond the statements made on this label. No agent of Terramera, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Terramera, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.
LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Terramera, Inc.'s election, the replacement of product.

[Terramera is a registered trademark of Terramera, Inc.]

[[Product Name,] {to be replaced with ABN} Terramera ®, the Terramera logo and 2-Leaf design are trademarks of Terramera, Inc.]

[Optional Marketing Claims For Sublabel B]

- For use in hydroponic systems
- For greenhouses, shade houses, interior scapes, mushroom houses, and nursery uses.
- For indoor and outdoor vegetables, ornamentals, flowers, trees, shrubs, container grown plants, and interior scapes.
- [Can be used] for organic production

TNO70 Broad Spectrum (EPA Reg. No. 88760-10) Sublabel C: Residential Use

TNO70 Broad Spectrum

[ABN 1: Proof Cold-Pressed Neem Oil Concentrate
ABN 2: Proof Neem Oil Biopesticide]

[Biological] Insecticide [/Fungicide] [/Nematicide] [/Miticide]

For Residential Use on Listed Crops
including vegetables, fruits, citrus, nuts, [and] ornamental plants, lawns and other listed plants

FOR ORGANIC GARDENING

Active Ingredient:
Cold Pressed Neem Oil…… 70.0%
Other Ingredients..... 30.0%
Total 100.0%

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT
Shake Well Before Use

[See back label for additional precautionary statements, directions for use, storage and disposal statements, and warranty.]

NET CONTENTS: 3 FL. OZ. to 5 GALLONS

EPA Reg. No.: 88760-10
EPA Est. No. 49292-WA-001

Batch No.

Manufactured for:
Terramera, Inc.
6920 Salashan Pkwy D-109
Ferndale, WA 98248

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

DIRECTIONS FOR USE

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

GENERAL INFORMATION

TNO70 Broad Spectrum controls listed insects on contact or by ingestion. The product acts on insects by way of repellence, anti-feedant action and interference with the molting process. **TNO70 Broad Spectrum** controls listed diseases by inhibiting mycelial fungal growth. The efficacy of this product is dependent on weather conditions, intensity of pest population, area of application, and physical stages of pests and crops.

Do not store this product above 104°F for extended periods of time. Avoid storing below 70°F where possible to prevent freezing. If frozen, follow the thawing instruction below to completely thaw before use. Keep containers tightly closed and in original containers when not in use. Do not store exposed to ultraviolet light (sunlight) or moisture.

THAWING (MELTING) INSTRUCTIONS

If product is solidified, thaw (melt) it by standing product container in warm water. Make sure cap is tightly closed. Or set out in temperatures over 80°F {for < 1 gallon containers} [for 24 hours] {for 2.5 gallon size} [for 72 hours] or at 72 °F or higher for 7 days. Avoid direct exposure to temperatures over 104°F.

MIXING INSTRUCTIONS

TNO70 Broad Spectrum contains cold pressed neem oil and requires only water for the appropriate use dilution. Add **TNO70 Broad Spectrum** to a mixing tank or spray bottle with a little water and agitate thoroughly. For optimal mixing, ensure water temperature is above 45°F. Then add remaining water to the spray tank or spray bottle with continuous agitation. Agitate continuously while spraying. Non-uniform dilution can cause damage to plant or result in lowered effectiveness.

CROP USES: TNO70 Broad Spectrum may be used on bulbs, cucurbits, fruiting vegetables, leafy and brassica (cole) vegetables, legumes, root and tuber vegetables, small fruit and berries, citrus and tropical fruits, pome and stone fruits, tree nuts, herbs, and spices, grass, lawn, [hemp] and ornamentals.

{Optional} [Fruit & Nut Trees
This product can be applied to fruit trees including, but not limited to: Apples, Avacados, Crabapples, Loquat, Mayhaw, Oriental Pear, Pear, Quince, Apricot, Cherry (sweet & Tart), Citrus, Oranges, Grapefruit, Limes, lemons, Nectarine, Peach, Plum, Plumcot, Prune, Almond, Beechnut, Brazil Nut, Butternut, Cashew, Chinquapin, Filbert (Hazelnut), Hickory, Macadamia nut, Pecan, and Walnut (Black & English).

Fruit Tree Stages and Spray Schedule	
Dormant: Absence of growth in late fall, winter and early spring.	Ideal time to apply as a Dormant spray for control of over-wintering insects.
Green Tip Stage: When branch tips show new, green tissue. **Pre-Bloom/Pink Bud Stage:** When blossom buds show full color before opening.	Second application can be made anytime in this period of growth
Bloom Stage: When blossoms are open.	To protect pollinating insects, such as bees, do not spray during this period.
Petal Fall Stage: When the last of petals have fallen from the blossoms (when bees are gone).	Third application can be made.
Fruit Set: Fruit is established and clearly visible	Forth and subsequent applications can be made every 7 to 14 days

]

USE RATES:

(1) To Control Insects or Mites: Apply **TNO70 Broad Spectrum** at 0.625 – 1.8% in sufficient amounts of water to achieve complete coverage in a 7-10 day interval.

(2) To Control Diseases: Use at 1.2 – 1.8% in sufficient amounts of water to achieve complete coverage with a 10-14 day interval.

(3) [To Control Nematodes and] For Soil Use: Use at 1.2 – 2.4% in sufficient amounts of water to achieve complete coverage with a 10-14 day interval.

TNO70 Broad Spectrum is most effective when applied before insects or eggs are present in large numbers.

SPRAY DIRECTIONS
Apply **TNO70 Broad Spectrum** as a foliar spray or as soil drench to control listed pests. When applied as a soil drench, avoid excessive run off. When using as a foliar application, ensure thorough coverage of plant surfaces, but avoid pooling or run off.

Avoid spraying under conditions of high humidity and high temperature (>90°F).
To avoid potential leaf burn, apply the product in early morning or late evening. Always test the product on a small portion of plants for compatibility before treating the entire plants.

{Optional Mixing Instructions – For Refill Bottles of EPA Reg. No. 88760-12} REFILL DIRECTIONS

{Note to PM: The following instructions are intended for using [0.75 fl. oz] [1.5 fl.oz.] [3 fl.oz.] [6 fl. oz] of this product to make [½ gal] [1 gal] [2 gal] [3 gal] dilution {referring to EPA Reg. No. 88769-12} in ready-to-use containers or tank sprayers or can be used according to dilution rates}

This product can be used to refill the refillable bottles of TNO RTU {or the appropriate alternate brand name} (EPA Reg. No. 88760-12) according to the following instricutions.

[1 bottle] [0.75 fl.oz] [1.5 fl.oz.] [3 fl.oz.] [6 fl. oz] [equals] [=] [makes] [1/2 gallon][1 gallon] [2 gallons] [4 gallons]

- Add [entire contents] [0.75 fl.oz] [1.5 fl.oz.] [3 fl.oz.] [6 fl. oz] . to the [1/2 gallon][1 gallon] [2 gallons] [4 gallons] refill container or an empty tank sprayer.
- Mix product with an equal amount of clean tap water and mix vigorously to bring product into full suspension (will be cloudy white).
- Slowly add more water to fill the container. Apply according to use directions.

{End of optional mixing instructions}

Instructions for 1-Gallon Sprayer

Pests	Fluid Ounces TNO70 Broad Spectrum per Gallon Water	Tablespoons (Tbsp) TNO70 Broad Spectrum per Gallon Water
Insects – most conditions	0.8-1.5 fl. oz	1.5-3 Tbsp
Insects – heavy infestation	2.3 fl. oz	4.5 Tbsp
Disease control	1.5-2.3 fl. oz	3 – 4.5 Tbsp
Soil Treatments	1.5 - 3 fl. oz	3 – 6 Tbsp

Instructions for 32 oz. (1 Qt.) Spray Bottle

Pests	Teaspoons (tsp) per 32 fl. oz. (1 Qt) Water
Insects – most conditions	1 1/8 - 2 ¼ tsp
Insects – heavy infestation	3 ½ tsp
Disease control	2 ¼ - 3 ½ tsp
Soil Treatments	2 ¼ - 4 ½ tsp

PESTS:

TNO70 Broad Spectrum may be used to control a variety of insects and diseases listed below.

Aphids such as:
- Cotton Aphid
- Cowpea Aphid
- Pea Aphid
- Green Peach Aphid

Beetles such as:
- Cucumber Bettle
- Japanese Beetle
- Spotted Cucumber Beetle

Borers such as:
- Peachtree Borers
- Peach Twig Borers

Caterpillars/Moths/Worms such as:
- Armyworms
- Budworms
- Cutworms
- Diamondback Moth
- Gypsy Moth
- Leafrollers
- Loopers
- Navel Orange Worm

Flies/Gnats such as:
- Fruit Fly
- Fungus Gnat
- Walnut Husk Fly

Grasshoppers such as:
- Carolina Grasshopper
- Rice Grasshopper

Leafhoppers such as:
- Grape Leafhopper
- Potato leafhopper

Leafminer such as:
- Citrus Leafminer
- Tomato Leafminer
- Vegetable Leafminer

Maggots/Grubs such as:
- Onion Maggots
- Apple Maggots

Mealy Bugs such as:
- Citrus Mealy Bug

Mites such as:
- Pacific Spider Mites
- Red Spider Mite
- Spider Mites
- Two Spotted Spider Mite

Psyllids such as:
- Asian Citrus Psyllid
- Pear Psyllid
- Potato Psyllid

Scales such as:
- California Red Scale
- Coffee Green Scale
- San Jose Scale
- Soft Scale

Thrips such as:
- Flower Thrip
- Grape Thrip
- Onion Thrip
- Western Flower Thrip

True Plant Bugs such as:
- Lygus Bug
- Phylloxera
- Spittle Bug
- Sting Bug
- Tomato Stink Bug

Weevils such as:
- Black Vine Weevil
- Boll weevil
- Pepper Weevil

Wireworms such as:
- Field/Wheat Wireworm

Whiteflies such as:
- Cotton Whitefly
- Silverleaf Whiefly
- Greenhouse Whitefly

Foliar Fungal Diseases

Alternaria	Downey Mildew	Scab
Anthracnose	Molds	Stem Mildew
Blight (early, late, leaf)	Powdery Midlew	Southern Blight
Botrytis	Rust	Sour Rot Grapes
Black spot		
Brown rot or fruit rot		

Soil Fungal Diseases

Fusarium Oxysporum
Pythium
Rhizoctonia Solani

[

Nematodes such as

Dagger Nematode	Reniform Nematode	Soybean Cyst Nematode
Lance Nematode	Root Knot Nematode	Sting Nematode
Lesion Nematode		

]

STORAGE AND DISPOSAL

For optimal use experience, store in room temperature (>60 °F) where possible to prevent thickening. If product has started to solidify, refer to “Thawing Instruction”. Store in tightly closed original container when not in use. Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE:

Terramera, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Terramera, Inc., and, (2) buyer and user assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, TERRAMERA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

[Optional Marketing Claims for Sublabel C]

- TNO70 Broad Spectrum is an effective biological fungicide, insecticide, miticide and nematicide for organic gardening use on vegetables[, tree fruits] [, nuts] [, vines] [, citrus] [, ornamental flowers] [, shrubs and trees] [, grass lawns] [, and] [houseplants].
- For use on vegetables, [fruits,] [nuts,] [vines,] [citrus,] [ornamentals,] [shrubs and trees,] [grass] [lawns,] [houseplants]
- [For] use in and around home and home garden
- [Can be used] for organic gardening
- [Go ahead,] Spray [right] up to time of harvest
- For [greenhouses][, shade houses][, interior scapes] [and] home garden
- For indoor and outdoor vegetables, ornamentals, flowers, trees, shrubs, container grown plants, and interior scapes.
- [4-in-1] Insect & Disease Control
- 4-in-1 insecticide, fungicide, miticide, nematicide
- Concentrate {if 16 fl. oz. bottle} [- makes up to 20 gallons] {if 8 fl. oz. bottle}[- makes up to 10 gallons]
- Made with cold pressed neem oil
- Cold-Pressed Neem Oil processed without chemicals.
- TNO70 Broad Spectrum is excellent for control of spider mites, aphids, whiteflies, leafhoppers, caterpillars, and other chewing and sucking insects
- [TNO70 Broad Spectrum] prevents black spot, powdery mildew, botrytis, rust, and other listed fungal diseases
- The 4-in1 control for roses and flowers
- For roses and flowers
- For lawn, tree & shrub
- Controls spider mites, aphids, whiteflies, caterpillars, and listed fungal diseases and soil nematodes
- [TNO70 Broad Spectrum is] excellent for control of spider mites, aphids, whiteflies, leafhoppers, caterpillars, and other list chewing and sucking insects.
- Controls insects & diseases on fruit trees
- Use on fruit, citrus and nut trees
- Dormant and growing season applications
- Kills over-wintering insect eggs
- Help prevent disease on fruit trees

{Optional images}

[Aphid]

[Borer]

[Whitefly]

[Spider mite}

{Note: Texts in [ ] are optional language. Texts in { } are notes for reviewers.}

[Rust]

[Gypsy moth]

[Powdery mildew]

{Captain Jacks logo}

TNO70 Broad Spectrum (EPA Reg. No. 88760-10)
Sublabel D: Row Crops

TNO70 Broad Spectrum
[ABN: Socoro]

For control of foliar and soil insects, fungal diseases [and] [nematodes].
For use in cereal grains, corn, cotton, forage, legumes, oilseed crops, soybeans, and other row crops.

FOR ORGANIC PRODUCTION [**OMRI Logo**]

Active Ingredient:
Cold Pressed Neem Oil…….. 70.0%
Other Ingredients..... 30.0%
Total 100.0%

[This product contains 5.37lbs of cold pressed neem oil per gallon.]

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

Shake Well Before Use

[See label booklet for additional precautionary statements, directions for use, storage and disposal statements, and warranty.]

NET CONTENTS: 8 FL. OZ. to 275 GALLONS

EPA Reg. No.: 88760-10
EPA Est. No. 49292-WA-001

Batch No.

Manufactured for:
Terramera, Inc.
6920 Salashan Pkwy D-109
Ferndale, WA 98248

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions are available, wash with detergent and hot water. Keep and store PPE separately from other laundry.

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.

ENVIRONMENTAL HAZARDS

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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

USER SAFETY RECOMMENDATIONS

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

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS. 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 product 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 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), notification to workers and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow 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
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the scope of the WPS 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. For other uses, including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried

PRODUCT MODE OF ACTION

TNO70 Broad Spectrum controls target pests on contact or by ingestion. The modes of action on insects are repellence, anti-feedance and interference with the molting process. Diseases are controlled by inhibition of mycelial growth.

GENERAL INFORMATION

Read all directions before using this product.

TNO70 Broad Spectrum is an emulsifiable concentrate containing cold pressed neem oil for the broad spectrum control of listed pests. **TNO70 Broad Spectrum** is exempted from the requirement of a tolerance and may be applied to listed food and non-food crop up to and including the day of harvest.

- Thorough coverage is key to providing good insect, mite and disease control.
- For best results maintain constant agitation in spray tank and apply immediately.
- For optimal performance, follow the Mixing Instructions.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.
- Application in early morning/late evening is recommended to minimize the potential for leaf burn.
- Do not apply under high humidity and temperature conditions >90°F.
- Do not apply to wilted or stressed plants and newly germinated or transplanted crops prior to root establishment.
- Use with care on plants with tender tissue. Test on a small area prior to broader use.
- Weather conditions, intensity, type and physical stages of the pests, and treated crop can influence the degree of product efficacy.
- DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur.
- DO NOT apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

FOLIAR RATES FOR ANNUAL CROPS

Insecticide, Miticide & Fungicide Foliar Applications

- For insect & disease control in spray volumes of 100 gallons or less per acre, rates up to 230 fl oz/acre can be used. A spray volume above 100 gallons per acre may be used in annual crops. However, the maximum rate of product cannot exceed 230 fl oz per acre.

Insecticide and Miticide Foliar Applications Only:

- Use a concentration of 0.625 -1.25% v/v for normal pest and crop conditions.
- Use a concentration 1.8% v/v **for heavier infestations.**

Fungicide Foliar Applications Only:

- Use a concentration of 1.25 -1.8% v/v.

Rate & Dilution Table for Foliar Applications in Annual Crop

v/v %	Pest	Pest Pressure*	Product Rate (fl oz/ac)					
			5 ga Spray	**10 ga spray**	**20 ga spray**	**40 ga spray**	**50 ga spray**	**100 ga spray**
1.25%	Disease	[Low -] Medium	**8 fl oz/ac**	**16 fl oz/ac**	**32 fl oz/ac**	**64 fl oz/ac**	**80 fl oz/ac**	**160 fl oz/ac**
1.80%	Disease	High	**11.5 fl oz/ac**	**23 fl oz/ac**	**46 fl oz/ac**	**92 fl oz/ac**	**116 fl oz/ac**	**230 fl oz/ac**
0.625%	Insects/Mites	Low	**4 fl oz/ac**	**8 fl oz/ac**	**16 fl oz/ac**	**32 fl oz/ac**	**40 fl oz/ac**	**80 fl oz/ac**
1.25%	Insects/Mites	Medium	**8 fl oz/ac**	**16 fl oz/ac**	**32 fl oz/ac**	**64 fl oz/ac**	**80 fl oz/ac**	**160 fl oz/ac**
1.80%	Insects/Mites	High	**11.5 fl oz/ac**	**23 fl oz/ac**	**46 fl oz/ac**	**92 fl oz/ac**	**116 fl oz/ac**	**230 fl oz/ac**

[SOIL APPLIED RATES

Soil Applications:
- Use a concentration of 1.25-2.4% v/v.
- Up to maximum use rate of 7.25 quarts (230 fl oz) of **TNO70 Broad Spectrum** per acre.]

MIXING INSTRUCTIONS

TNO70 Broad Spectrum is an emulsifiable concentrate and requires only water for the appropriate use dilution. Additional surfactant is not required.

Always shake container well before use [as per Shaking Instructions below].

TNO70 Broad Spectrum Alone:

- Add **TNO70 Broad Spectrum** to a clean spray tank half-filled with water and agitate.
    - For best emulsion, it is recommended to premix the product with warm water at a ratio of 1:1. Then add the emulsion to the spray tank.
- Next, add additional water to final spray volume, while maintaining continuous agitation.
- Best results are achieved by using a spray water with a temperature of 45°F or warmer.
- Agitate continuously during mixing and application to prevent separation of the emulsion. Inadequate agitation can cause a non-uniform dilution resulting in crop injury and/or reduced efficacy.
- Always use the spray solution promptly after mixing and do not allow mixture to sit for extended periods of time. If allowed to sit, agitate thoroughly before resuming application.
- The recommended pH range of the spray water is between 5.5 – 7 for optimal performance. If needed, adjust by adding a pH modifier.

[Shaking Instruction:
- {For 1 gallon or smaller containers} Shake container vigorously up and down for 30 – 60 seconds before use.
- {For 2.5 gallon container} Hold container horizontally with two hands and shake vigorously from side to side for 30 – 60 seconds before use.]

Thawing Instruction:
Due to its fatty acid content, neem oil can thicken at temperatures below 60 °F. For optimal use experience, store at 60 °F or above. If the product has started to solidify, expose container to temperatures over 80°F and shake well intermittently, until product is completely liquified before use. Refer to “Mixing Instructions” section for additional information.

Mixing Order for Tank Mixes:

- Fill clean spray tank with water to 1/3 of the required spray volume.
- Start agitation.
- Add different formulation types in the following order: 1) water dispersible granules, 2) wettable powders.
- Maintain agitation and add water to ¾ of final spray volume.
- Next add **TNO70 Broad Spectrum,** other emulsifiable concentrates, water-based solutions, adjuvants, surfactants, oils and/or fertilizers.
- Agitate to achieve complete emulsification. Do not use if a uniform, cloudy emulsion is not formed.
- Continue adding water and agitating to desired final spray volume.
- Always use the spray solution promptly after mixing with water.
- Do not let tank mixture sit for an extended period of time. If tank mixture is allowed to sit, agitate thoroughly again prior to and during application. Sparger line agitators are preferred.
- Tank-mix combinations can alter the pH of the finished spray solution. Adjusting the spray mixture pH to a range between 5.5 and 7.0 will provide optimal performance.

TANK MIX COMPATIBILITY:

To determine the physical compatibility of **TNO70 Broad Spectrum** with other products, test as described below before mixing.

> **Jar Compatibility Test:** Using a quart jar, add the proportionate amounts of products to be tank mixed to 1 quart of water in the following order. Add wettable powders and water-dispersible granular products first, then add liquid flowables, then add emulsifiable concentrates and solutions last. After thoroughly mixing by agitation, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. All possible tank mixes on all crops have not been tested. Growers must test tank mix combinations for phytotoxicity on a sample of plants prior to use. Do not use mixtures of incompatible products as it may cause phytotoxicity or result in lowered effectiveness.

Always read and follow the directions for use, precautions and limitations for use on all product labels used in combination. Applications must follow the precautions and limitations of the most restrictive product label in the mixture. Do not exceed the dosage rates of any product. Check compatibility by using the correct proportion of the products in a small test container.

DO NOT tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur.

APPLICATION DIRECTIONS

Apply **TNO70 Broad Spectrum** as a foliar spray (by ground, air, or overhead sprinkler system) or as soil treatment (soil drench, in-furrow, banded, or drip-applied) using thoroughly clean equipment. Applications can be made with any powered or manual pesticide application equipment including high volume, low volume, ultra-low volume,

electrostatic, air blast, and fogging equipment. When applied as a foliar application use a spray volume that ensures complete coverage of the plant surfaces, but avoid pooling or run off. Consult with an application specialist for recommendations on nozzle types, spacing and set-up that provide complete crop canopy coverage. Follow the original equipment manufacturer's instructions.

INSECTICIDE/MITICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before or around the onset of insects, mites or their eggs (see Pests Section) or as soon as they are detected.
- Spray in intervals of 7 to 10 days for optimal results
- To control listed insects, apply **TNO70 Broad Spectrum** in sufficient amount of water and with adequate spray pressure to achieve thorough coverage of plant surfaces
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90°F).
- Use higher rates and increase spray frequency when pest pressure is high and/or dense crop canopies exist.

FUNGICIDE FOLIAR USE

- **TNO70 Broad Spectrum** is most effective when applied before the onset of disease development.
- Spray intervals: 10 to 14 days all crops
- To control listed diseases, apply **TNO70 Broad Spectrum** in sufficient amount of water and with adequate spray pressure to achieve thorough coverage of plant surfaces.
- Spray early in the morning or in the evening for best results.
- Repeat application if it rains within four hours of spraying.
- Avoid spraying under conditions of high humidity and high temperature (>90°F). Do not apply elemental sulfur products within 14 days of a **TNO70 Broad Spectrum** application.

[NEMATICIDE AND OTHER SOIL USE

- To control listed nematodes, apply as a preventative treatment (see Pests Section for Nematodes) or control treatment after nematodes and other listed pests have been detected.
- When applied as a soil drench, avoid excess run off.
- For best results repeat the applications as necessary.]

CHEMIGATION INSTRUCTIONS

GENERAL INFORMATION FOR CHEMIGATION

1. Apply this product only through in-furrow, drip (trickle) systems, or sprinkler systems [including center pivots, lateral move, end tow, side wheel roll, solid set, hand move irritation systems].
2. Do not apply this product through any other type of irrigation system.
3. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
4. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
5. 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.
6. 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.

GENERAL REQUIREMENTS FOR CHEMIGATION

1. When using a chemical supply tank, ensure that the tank is free of rust, fertilizer, sediment, and other foreign materials including previously applied pesticides and equipped with an in-line strainer situated between the tank and the injection point.
2. When using a supply tank, start by filling the tank with the required water and then adding product as required. Determine the treatment rate as indicated in the Directions for Use and make the proper dilution based on the method (Sprinkler, or Furrow or Drip) of chemigation as stated below.
3. 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 back flow.
4. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
5. The pesticide injection pipeline must 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.
6. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
7. 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.
8. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
9. To ensure uniform mixing of the product in the water line, inject into the center of the pipe diameter and/or prior to passing through an elbow or tee in the irrigation line so that the turbulence created at those points will assist in mixing. The

injection point must be located after all backflow prevention devices on the water line.

SPECIFIC REQUIREMENTS FOR CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

1. 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 out of the year.
2. Chemigation systems connect to public water systems must contain functional, reduced-pressure zone, backflow preventer (RPZ) or functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the (RPZ), the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. Do not apply when wind speed favors drift beyond the area intended for treatment.
4. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100-200 gallons of water. Up to 230 fl oz can be applied per acre. Frequent agitation is necessary. For solid set lines, apply in the second half of the water application. For continuously moving systems, inject the product continuously and uniformly into the irrigation water line as the sprinkler is moving.

SPRINKLER CHEMIGATION REQUIREMENTS

1. **General Information for Chemigation** and **General Requirements for Chemigation** as listed above must be followed.
2. Do not apply when wind speed favors drift beyond the area intended for treatment.
3. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100~200 gallons of water. Up to 230 fl oz can be applied per acre. Frequent agitation is necessary. For solid set lines, apply in the second half of the water application. For continuously moving systems, inject the product continuously and uniformly into the irrigation water line as the sprinkler is moving.

FURROW CHEMIGATION REQUIREMENTS

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
2. Systems utilizing a pressurized water and pesticide injection system must follow the **General Information for Chemigation** and **General Requirements for Chemigation** as listed above.
3. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 7.25 quarts per 100~200 gallons of water. Frequent agitation is necessary. Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

DRIP CHEMIGATION REQUIREMENTS

1. Systems utilizing a pressurized water and pesticide injection system must follow the **General Information for Chemigation** and **General Requirements for Chemigation** as listed above.
2. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 6 quarts per 100~200 gallons of water. Frequent agitation is necessary. Apply in the second half of the water application to deliver **TNO70 Broad Spectrum** to the soil pests.

PHYTOTOXICITY

To avoid plant damage, test for crop response by applying the spray solution on a small portion of the area to be treated before applying to the entire area. Make foliar applications in conditions that favor fast drying. Avoid applications during hot temperature conditions >90°F. Make applications early morning/late afternoon to avoid leaf burn. Do not tank mix with elemental sulfur products such as wettable sulfur or dusting sulfur and/or apply within 14 days of an elemental sulfur application. Not all possible mixtures of pesticide sprays, fertilizers, surfactants, and adjuvants have been tested. Therefore, it is the responsibility of the user to test spray mixtures to small areas to ensure crop safety before treating the entire area.

USE SITES

TNO70 Broad Spectrum is exempted from the requirement of a tolerance and may be applied to the following food and non-food crop groups up to and including the day of harvest.

- **[Crop Group 1 –] Root & Tuber Crops such as:** Potatoes, Sugar Beets, Sweet Potato, Yam
- **[Crop Group 3 –] Bulb Vegetable Crops such as:** Onion
- **[Crop Group 6 –] Legume Crops such as:** Bean, Chickpea, Guar, Lentil, Pea, Soybean
- **[Crop Group 15 –] Cereal Grain Crops such as:** Barley, Corn, Millet, Oats, Rice, Rye, Sorghum(Milo), Triticale, Wheat, Wild Rice
- **[Crop Group 18 –] Forage Crops such as:** Alfalfa, Clover, Lupin, Sainfoin, Trefoil, Vetch
- **[Crop Group 20 –] Oilseed Crops such as:** Canola, Cotton, Safflower, Sunflower
- **Miscellaneous Crops:** Peanut, Sugar Cane, Tobacco
- **[Other crop:** hemp]

- **Other Use Sites:** Fence Rows, Pastures

PESTS: INSECTS, MITES, [NEMATODES,] AND DISEASES

(1) Insects and Mites:

- **Aphids such as:** Cereal, Corn Leaf, Cotton, Cowpea, Green Peach, Pea, Sorghum Soybean, Sugarcane
- **Beetles such as:** Bean Leaf, Corn Flea, Corn Sap, Flea, Japanese, Spotted Cucumber, Striped Cucumber
- **Borers such as:** European Corn, Stalk, Stem
- **Caterpillars/Moths/Worms such as:** Armyworm, Budworm, Cloverworm, Cutworm, Diamondback Moth, Earworm, Gypsy Moth, Leafroller, Looper, Rootworm
- **Flies/Gnats such as:** Fruit Fly, Fungus Gnat, Midge
- **Grasshoppers such as:** Carolina, Rice
- **Leafhoppers such as:** Potato
- **Leafminer such as**: Soybean, Vegetable
- **Maggots/Grubs such as:** Onion Maggot, Seed Corn Maggot, White Grub
- **Mealy Bugs such as:** Madeira, Striped
- **Mites such as:** Pacific Spider, Red Spider, Spider, Two Spotted Spider
- **Psyllids such as:** Potato
- **Thrips such as:** Flower, Onion, Soybean, Western Flower
- **True Plant Bugs such as:** Chinch, Lygus, Phylloxera, Spittle, Stink Bug (Brown, Green)
- **Weevils such as:** Black Vine, Boll, Pepper, Sweet Potato
- **Wireworms such as:** Field/Wheat, Corn/Tobacco, Potato, Sugar beet
- **Whiteflies such as:** Cotton, Greenhouse, Silverleaf

(2) Diseases:

- **Foliar Fungal Diseases:** Alternaria, Anthracnose, Blight (early, late leaf), Botrytis, Downey Mildew, Molds, Powdery Mildew, Rust, Scab, Stem Mildew, Southern Blight
- **Soil Fungal Diseases**: Fusarium Oxysporum, Pythium, Rhizoctonia Solani

[(3) Nematodes such as: Dagger, Lance, Lesion, Reniform, Root Knot, Soybean Cyst, Sting]

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by pesticide storage or disposal.

PESTICIDE STORAGE: Due to its fatty acid content, neem oil can thicken at temperatures below 60°F. For optimal use experience, store at 60 °F or above. If product has started to solidify, refer to "Thawing Instruction". Store in tightly closed original containers away from ultraviolet light (sunlight) or moisture when not in use. Store in such a manner to prevent cross contamination with other pesticides, fertilizers, food and feed.

PESTICIDAL 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).

CONTAINER HANDLING:

{For 5-Gallon or Smaller Containers} 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. 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 dispose of in trash or in a sanitary landfill or by incineration.

{For Containers Larger than 5 Gallons} 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. 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 the 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 dispose of in trash or in a sanitary landfill or by incineration.

{For 250 or 275-gallon Refillable Containers} Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Seller. All such risks shall be assumed by the user or buyer.
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[Optional Marketing Claims for Sublabel D]

- [Can be used] for organic production