Nimbiosys™
Neem Oil
Biological Insecticide
Anti-Feedant, Insect Repellent, Insect Growth Regulator

For Non-Crop and Crop Uses including vegetables, fruits, nuts, ornamentals and other non-crop plants

KEEP OUT OF REACH OF CHILDREN

CAUTION
See Back panel for additional precautionary statements

READ ALL DIRECTIONS

BEFORE USING THIS PRODUCT
If you do not understand the label, find someone to explain it to you in detail. (Si usted no entiende la etiqueta, busque a alguien que se la explique a usted en detalle.)

Manufactured by:
The Ahimsa Alternative, Inc.
15 Timberglade Road, Bloomington, MN 55437
Toll Free: 877-USE-NEEM (877-683-366)

EPA Reg. No. 84181 - 2
EPA Est. No. 063416-MN-001

Active Ingredient:
Cold Pressed Neem Oil* 100.0%
Other Ingredients: 0.0%
Total: 100.0%

* Contains 0.02503 lb. azadirachtin per gallon (azadirachtin 3000 ppm)

NET CONTENTS: 1 Gallon
**NimBioSys™ Neem Oil**

**BIOLOGICAL INSECTICIDE**
Neem Oil Controls Target Pests on Contact or by Ingestion. The Product Acts on Pests by Way of Repellence, Anti-Feeding Action and Interference with the Metabolism Process. The Buyer or User Is Reminded That the Degree of Efficacy of the Product Is Highly Dependent on Weather Conditions, Intensity of Pest Population, Area of Application, Type of Pest, and Physical Stages of Pests and Crops.

**PRODUCT MODE OF ACTION**

For Neem Crop and Crop Type including vegetables, fruits, nuts, ornamentals and other non-crop plants.

**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 can 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.

**GENERAL INFORMATION**

Read all directions before using this product. Apply NimBioSys™ Neem Oil as directed to any food or non-food crop up to and including the day of harvest, at a maximum rate of 3% (3% Vol. 16 oz.) per acre for row crops. Refer to the Use Site Section for a complete listing of crops. Do not use a concentration above 1.1%. Do not store this product above 104°F or below 20°F for extended periods of time. Keep container tightly closed and in original container when not in use. Do not store exposed to ultraviolet light (sunlight) or moisture. Neem oil clouds and solidifies at temperatures below 59°F. If oil has solidified, gently thaw by exposing...
to temps over 80°F. REFER TO THAWING INSTRUCTIONS BELOW.

Avoid spraying under conditions of high humidity and high temperature (>90°F).

THAWING INSTRUCTIONS

1-Gallon bottles and smaller

If all has solidified, thaw by standing bottle in warm water. Make sure cap is tightly closed. Avoid direct exposure to temperatures over 60°F.

Alternatively, follow instructions #1 or 2 for the 55-gallon drums.

55-Gallon Drums

1. Set the drum (cap tightly closed) on a heated bench, 100°F and over until melted.
2. Do not expose to temps over 60°F. Move to a cool place after oil has melted.

OR

1. Set the drum (cap tightly closed) in a heated room, 100°F and over until melted. Do not expose to temps over 60°F. Move to a cool place after oil has melted.

OR

1. Strip drum heating bands around the drum, either one in the middle or one on top and one below. Set thermostat between 80-90°F.

DO NOT INTRODUCE ANY KIND OF HEATING ELEMENT INTO THE DRUM & OIL. THIS WILL DESTROY ALL THE ACTIVE INGREDIENTS IN THE OIL.

MIXING INSTRUCTIONS

NimBioSys Neem Oil contains cold pressed Neem Oil and requires a surfactant/emulsifier, such as soap (hand or dish soap), a non-ionic surfactant/emulsifier or other emulsifier for dilution with water.

NOTE: Do not attempt application without adding adequate quantity of soap, emulsifier, or surfactant as improper emulsification will result in phytotoxicity such as leaf burn.

* Use a concentration of 0.5% (1 part of NimBioSys Neem Oil to approximately 200 parts of water).

* In cases of severe infestation or for aerial spraying applications, the concentration of NimBioSys Neem Oil can be increased to 1.1% (1.1 parts of NimBioSys Neem Oil to approximately 100 parts of water). Do not use a concentration above 1.1% NimBioSys Neem Oil.

Add the soap/emulsifier/surfactant and NimBioSys Neem Oil to a mixing tank with a little water and agitate. Then add remaining water to the spray tank with continuous agitation. Use warm water if water temperature is below 60°F. There should not be oil floating on top.

Complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation whilst spraying. Non-uniform mixing can cause crop injury or result in lowered effectiveness. For tank mixtures add components to the tank containing the NimBioSys Neem Oil spray mixture and agitate
thoroughly. If tank mixtures are allowed to sit, agitation is necessary prior to application. Adjusting the spray
mixture pH between 5.5 and 7 will provide optimal performance. Always use this product promptly after
mixing with water and do not let tank mix oil for any extended period. For optimal efficacy, use within 8 hours
of mixing.

If the water is cold, use a little warm water to premix the oil and soap in a small container. Shake or stir well
till milky and then add the remaining water in the spray tank. Agitate or mix well to make sure the oil is
completely emulsified before spraying. Add more surfactant/emulsifier if needed.

TANK MIX COMBINATIONS
NimBioSys™ Neem Oil in combination with the proper surfactant or emulsifier is known to be compati-
ble with most other tank mix oils including fertilizers such as seaweed, kelp, fish emulsion and adjuvants like
karanja oil, cottonseed oil and castor oil.

Check compatibility by using the correct proportion of the products in a small test container. Test the tank mix
combinations for possible adverse effects (such as settling out, flocculation, etc.) and for phytotoxic effects
on a small sample of plants prior to use. As environmental conditions can alter the interactions between
compounds, it is recommended that compatibility testing be conducted for both new and previously used
combinations. Avoid mixtures of several materials and very concentrated spray mixtures.

Always read and follow the directions for use, precautions and limitations 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 dosage rates of any product.

Do not use if this oil does not form a uniform, milky emulsion. Adjust with addition of warm water or more
emulsifier and agitate before use.

PHYTOXICITY (LEAF BURN)
When used according to label instructions, NimBioSys™ Neem Oil has been evaluated for phytotoxicity poten-
tial on a wide range of crops and ornamentals. However, in order to test for any potential phytotoxicity, test
a small portion of the area to be treated for phytotoxicity before treating the entire area. Further, all possible
mixtures of pesticide sprays, fertilizer, surfactants, adjuvants, have not been tested. Therefore testing
for phytotoxicity of spray mixtures shall be conducted. Spray equipment used to apply NimBioSys™ Neem Oil
must be thoroughly cleaned before use. Tank mix combinations of NimBioSys™ Neem Oil can be incompatible
with oil-based formulations.
USE SITES
CROP USES
Use NeemBioSystem™ Neem Oil on the following crops:

NON-CROP USES
NeemBioSystem™ Neem Oil on non-crop use sites including:
ornamentals, nurseries, and around food crops.

PESTS
NeemBioSystem™ Neem Oil can be used against the following pests:
Aphids
Cotton Aphid, Cowspea Aphid, Mustard Aphid, Olea Aphid, Pepper Aphid, Rice Aphid
Beetles
Brigal (egg Plant) Scabbed Leaf Beetle, Chick Pea Beetle, Cow Pea Beetle, Colorado Potato Beetle, Cucumber Beetle, Mexican Bean Beetle, Radish
Flea Beetle, Red Pumpkin Beetle, Spotted Cucumber Beetle, Soybean Japanese Beetle
Stink Bugs
Tomato Stink Bugs
Caterpillars
Black Headed Caterpillar, Cabbage Caterpillar, Ear Cutting Caterpillar, Tobacco Caterpillar, Yellow Stary Caterpillar
Leafhoppers
Brown Plant Hopper, Cucumber Leafhopper, Leafhopper, Potato Leafhopper, Rice Brown Plant Hopper, Rice Grasshopper, Rice Green Leafhopper
Leafminers
Leafminers of Ornamental Plants, Tomato Leafminer
Whiteflies
Cotton Whitefly, Sugarcane Whitefly, Banded Wing Whitefly, Citrus Whitefly
Mealy Bugs
Mealy Bugs of Ornamental Plants
Nigidges
Brassica Pod Midge
Mites
Spider Mites
Weevils
Black Vine Weevil
Scales
California Red Scale, Yellow Scale, Coffee Green Scale
Thrips
Peanut Thrip
APPLICATION INSTRUCTIONS
Spray when the onset of pests (see Pest List) is expected or when pests are noticed. When used as a foliar application, spray NimBioSys™ Neem Oil in a suitable high volume sprayer with adequate spray pressure to ensure complete and thorough coverage of the plant surfaces. Ensure that both the top and bottom of leaves are wetted. For optimum results, repeat the applications at intervals of 7-10 days. NimBioSys™ Neem Oils must be effective when applied before insects or eggs are present in large numbers. Repeat application based on pest pressure and field scouting for best results. Use higher rates and increase spray frequency when pest pressure is high. Spray early in the morning or in the evening for best results. Repeat application if rain falls within four hours of spraying.

SPRAY DIRECTIONS
Apply NimBioSys™ Neem Oil as a foliar spray or as soil drench to control insects. When needed, soil dressings can also be used to control soil-borne pests and larvae of pests. When applied as a soil drench, avoid excessive run off. NimBioSys™ Neem Oil can be also be applied through sub-surface soil treatment equipment. Always follow equipment manufacturer’s use directions. NimBioSys™ Neem Oil can be applied using any powered or manual portable application equipment which includes high volume, low-volume, ultra-low volume, electrostatic, and fogging. Follow the original manufacturer’s instructions when using these types of equipment.

RATES
For most pest and crop conditions, use NimBioSys™ Neem Oil at 1-2 pints/acre using a 0.5% concentration of NimBioSys™ Neem Oil in water. Use at least 3-6.5 fl. oz. of surfactant for emulsification.
(1 pint of NimBioSys™ Neem Oil + 3 fl. oz. of surfactant + 25 gallons of water)
(2 pints of NimBioSys™ Neem Oil + 6.5 fl. oz. of surfactant + 50 gallons of water)

In the case of very heavy pest pressure, use up to 3% pints per acre in a 1.1% concentration of NimBioSys™ Neem Oil in water. Use at least 11 fl. oz. of surfactant for emulsification.
(3% pint of NimBioSys™ Neem Oil + 11 fl. oz. of surfactant + 40 gallons of water)

Specific instructions:
For insects, for best results, apply Nim-BioSys Neem Oil at 0.5-1.1% (1.1% only for aerial and trees, other applications 0.5% to 1.0%) plus soap, surfactant or emulsifier in sufficient amounts of water to achieve complete coverage. NimBioSys Neem Oils most effective when applied before insects or eggs are present in large numbers. Repeat application based on pest pressure and field scouting for best results.
### APPLICATION INSTRUCTIONS - Agricultural Insect Control

<table>
<thead>
<tr>
<th>Spray Target</th>
<th>% Concentration (Neem Oil to Water Ratio)</th>
<th>Spray Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus, Pomegranates, Stone and Tropical Fruits</td>
<td>0.5% to 1.0% (1:200 to 2:2:200)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>0.5% to 1.0% (1:200 to 1:100)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Small Fruits and Berries</td>
<td>0.5% to 1.0% (1:200 to 1:100)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Nuts</td>
<td>0.5% to 1.1% (1:200 to 2:2:200)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Legumes and Fruiting Vegetables</td>
<td>0.5% to 1.0% (1:200 to 1:100)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Roots and Tubers and Vegetables</td>
<td>0.5% to 1.0% (1:200 to 1:100)</td>
<td>7 to 14 days</td>
</tr>
<tr>
<td>Vegetable, Cereal Grains &amp; Other Mill Coops</td>
<td>0.5% to 1.0% (1:200 to 1:100)</td>
<td>7 to 14 days</td>
</tr>
</tbody>
</table>

Avoid spraying under conditions of high humidity and high temperature (>90°F).

### STORAGE AND DISPOSAL

**WARNING:** Contamination of water, food, or feed by pesticide storage or disposal. Open dumping is prohibited. Do not reuse container.

**PESTICIDE STORAGE:** Do not store the product above 104°F or below 34°F for extended periods of time. Keep container tightly closed and colorful container when not in use. Do not store exposed to direct light or other light source. Never store in a place near a heat source or in an area where the temperature exceeds 104°F. Do not store at temperatures below 34°F. If oil has solidified, gently thaw by placing in a refrigerator or over 40°F. Shawn in such a manner to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** To avoid hazards, use all material in this container by application according to label directions. If waste cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (where such programs are authorized by state or local governments). By industry).

**CONTAINER/DISPOSAL:** Non-refillable container. Do not reuse or refill this container. Single-use container for application. Promptly after application, dispose of container as follows: Empty the remaining contents into application equipment or a waste tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour contents into application equipment or a waste tank or store material for later use or disposal. Shelf for 10 seconds after the flow begins to stop. Repeat this procedure two more times.
### Precautionary Statements

**Hazards to Humans and Domestic Animals**

**Caution**
Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

<table>
<thead>
<tr>
<th>Route of Entry</th>
<th>First Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhaled</td>
<td>Move the person to fresh air. If person is not breathing, call 911 or an ambulance and then give artificial respiration, preferably mouth-to-mouth if possible. Call a doctor or poison control center for treatment advice.</td>
</tr>
<tr>
<td>On skin or clothing</td>
<td>Remove contaminated clothing, rinse skin immediately with plenty of water for about 15 minutes. Call a doctor or poison control center for treatment advice.</td>
</tr>
<tr>
<td>In eyes</td>
<td>Hold eye open and rinse slowly and gently with water for about 15 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. Call a doctor or poison control center for treatment advice.</td>
</tr>
<tr>
<td>Swallowed</td>
<td>Call a poison control center or doctor immediately for treatment. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by a poison control center or doctor.</td>
</tr>
</tbody>
</table>

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

**Personal Protective Equipment (PPE)**
Applicators and other handlers must wear:
- Long sleeved shirt and long pants
- Chemical resistant gloves
- Shoes with 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. Discard clothing and other contaminant materials that have been drenched or heavily contaminated with this product's concentration. Do not reuse them. When handlers are closed systems, enclose clothing or equipment in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40CFR190.240). The handler PPE requirements may be reduced or modified as specified in the WPS. IMPORTANT: When using PPE, wash hands after handling. PPE must be provided all PPE specified above for "applicators and other handlers" and have PPE immediately available for use in an emergency, such as a spill or equipment breakdown.
ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water bodies. Do not contaminate water when cleaning equipment or disposing of waste. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or runoff.

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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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, nurseries and greenhouse, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also includes specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box 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 12 hours.

PPE required for entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with a pesticide that has been tested, such as paint, soil, or water inc.

- Gloves
- Chemical resistant gloves
- 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, nurseries, and greenhouses. For otherwise, including all classes of other non-agricultural use, do not enter treated areas without protective clothing until spraying has stopped.

NOTICE ON CONDITIONS OF SALE

By using this product, user or buyer accepts the following conditions. Disclaimer of Warranties and Limitation of Liability: Condition of sale of the product are designed to be adequate and must be followed carefully. However, if it is impossible to estimate all risks associated with the use of this product. Coping with the limitations or other mentioned conditions, or consequences of any kind, it takes into account that all factors such as weather conditions, performance of related 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: This extent consistent with applicable law, Seller makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extends beyond the statements made on this label. The agent of Seller is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein, to the extent consistent with applicable law, Seller 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 the product, whether or not product, warranty, tort, conspiracy, accident liability or otherwise, shall not exceed the purchase price paid for at Seller election, the replacement of product.

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