



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave NW
Washington, D.C. 20460

EPA Reg. Number:
228-573

Date of Issuance:
MAY 02 2008

Term of Issuance: Conditional

Name of Pesticide Product:
Mantra™ 5G Greenhouse and
Nursery Insecticide

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Mr. George Meindl
Nufarm Americas, Inc.
150 Harvest Drive, Suite 200
Burr Ridge, IL 60527

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B).

- 1. Revise the EPA Registration Number to read, EPA Reg. No. "228-573".

Signature of Approving Official:

Dani Daniel
Insecticide-Rodenticide Branch
Registration Division (7505P)

Date:

MAY 02 2008

2. Update the **Precautionary Statement** with the language following language:

Causes moderate eye irritation. Avoid contact with eyes or clothing. [Wear protective eyewear.] Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirts, long pants, socks, shoes and chemical resistant gloves.

3. Make the following changes on page 3 using more definitive language as is now required by the Agency :

- Remove General from the heading "**General Information**". An example of more definitive language would be "**Information Specific to this Product.**" You may chose to select another heading using definitive language.
- In the first sentence of the last paragraph delete the word "**should**" and replace it with more definitive wording; an example would be using the word "**must**" or rewrite the statement as "**Do not make applications when grassy areas are waterlogged...**"

4. On pages 4 and 5 move the word "**Recommended**" from each of the headings. Under the heading "**Restrictions**", on page 5, remove or change the word "should" in the last sentence to the word "must" or chose other definitive language such as **observe a 12-month plant back interval or a 12 month plant back interval much be observed.**"

5. You must generate studies for the guidelines 830.6314 (oxidation-reduction), 830.6315 (flammability), 830.6316 (explodability), and a one year Storage Stability study (830.6317) and Corrosion Characteristics study (830.6320) and submit them to the Agency. The Agency recommends that observations be made at 0, 3, 6, 9, and 12 months for guidelines 830.6317 and 830.6320.

6. Submit two copies of your final printed label before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitute acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions regarding this notice, please contact me (703) 305-5409.

Enclosure:

Mantra™ 5G

Greenhouse and Nursery Insecticide

FOR SYSTEMIC INSECT CONTROL ON ORNAMENTAL PLANTS IN GREENHOUSES, NURSERIES AND INTERIOR PLANTSCAPES.

ACTIVE INGREDIENT:		
Imidacloprid		5.0%
OTHER INGREDIENTS:		95.0%
	TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN
CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-
EPA EST. NO.

MANUFACTURED FOR
NUFARM AMERICAS INC.
150 HARVESTER DRIVE
BURR RIDGE, IL 60527



NET CONTENTS

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAY 02 2008

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

228-573

000228-00000.20071215.EPA.NEW
NUQ-05054

[Faint, illegible text]

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks.
- Protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS: 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.

USER SAFETY RECOMMENDATIONS	
Users Should:	
<ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. 	

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and flush slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
No specific antidote is available. Treat the patient symptomatically.	

ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. 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 washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If this product is applied by drenching, the Worker Protection Standard, under certain circumstances allows workers to enter the treated area if there will be no contact with anything that has been treated.

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:

- Coveralls
- Chemical-resistant gloves made of waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks
- Protective eyewear

GENERAL INFORMATION

This product is for insect control on ornamental plants in nurseries, greenhouses and interior plantscapes. This product is a systemic product and will be translocated upward within the plant. To assure optimum effectiveness, the product must be placed by incorporation where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runoff from containers for at least three irrigations or 10 days whichever is longer.

Resistance: Some insects are known to develop resistance to Insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. Consult your Cooperative Extension Service for resistance management strategies and recommended pest management practices for your area.

Incorporation: Incorporation of this product can be achieved by cultivation, irrigation, rainfall, mechanical placement or by using mechanical soil or media mixing equipment.

Woody Perennials: Onset of protection is slower than in herbaceous species. A delay of 2 or more weeks should be expected. Longer delays may be expected with larger plants. Application should therefore be made in advance of expected insect activity.

Bark Media: Media with 30% or more bark content when treated with this product may confer a shorter period of protection.

APPLICATION TO GRASSY AREAS IN NURSERIES

This product can be used for the control of soil inhabiting pests of grassy areas or nurseries, such as Northern and Southern masked chafers, Cyclocephala borealis, C. immaculata, and/or C. lurida; Asiatic garden beetle, Maladera castanea; European chafer, Rhizotrogus majalis; Green June beetle, Cotinis nitida; May or June beetle, Phyllophaga spp.; Japanese beetle, Popillia japonica; Oriental beetle, Anomal orientalis; Billbugs, Spherophorus spp.; Annual blugrass weevil, Hyperodes spp.; Black turfgrass ataenius, Ataenius spretulus and Aphodius spp. and mole crickets, Scapteriscus spp. This product can also be used for suppression of cutworms and chinchbugs. This product can be used as directed on nursery grass in sites such as under or around field or container grown plants, on roadways or other grassy areas in or around nurseries.

This product has sufficient residual activity so that applications can be made in early spring through the egg laying activity of the target pests. High levels of control can be achieved from early spring or when applications are made during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Applications should not be made when grassy areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Application cannot exceed a total of 8 pounds of product (0.4 lb. of active ingredient) per acre per year.

RECOMMENDED APPLICATIONS FOR USE							
For systemic insect control on greenhouse, interior plantscapes and nursery ornamentals grown in flats, benches, beds and container.							
PEST	USE PATTERN	DOSAGE					REMARKS
		Container size (inches)	Bulk Application		Topical Application		
			Pots/cu. yd. of mix	Bulk Rate lbs.cu. yd.	Topical Rate level teaspoon	Grams/pot	
Adelgids	Herbaceous Species (one or two plants per pot)	2.0 to 3.0	900 to 640	1.4 to 0.7	1/8 to 1/4	0.1 to 0.2	Bulk Rate Application: Mix the required amount of this product per cubic yard of medium. Mix thoroughly before filling pots and transplanting.
Aphids		3.5 to 5.0	320 to 260	0.8 to 0.6	1/4 to 1/3	0.2 to 0.3	
Armored scale (suppression)		5.5 to 7.0	180 to 80	0.4 to 0.2	1/3 to 1/2	0.3 to 0.4	
Fungus gnats (larvae only) ¹		8.0 to 10.0	40 to 32	0.2 to 0.16	1/2 to 2/3	0.4 to 0.6	
Japanese beetles (adults)	Woody Perennial Species	11.0 to 12.0	16 to 12	0.16 to 0.1	2/3 to 1	0.6 to 0.8	Topical Application: May be made at transplanting, repotting, or on established containerized plants. Irrigate moderately after application to move the active ingredient into the root zone. Do not allow significant leaching and runoff for at least 3 irrigations or 10 days, whichever is longer.
Lacebugs		2.0 to 3.0	900 to 640	1.8 to 1.4	1/4 to 1/3	0.2 to 0.3	
Leaf beetles (including Elm and Viburnum leaf beetles)	Herbaceous Species (Three or more plants per pot)	3.5 to 5.0	320 to 260	1.2 to 0.8	1/3 to 1/2	0.3 to 0.4	Use the above Woody Perennial Species rates
Leafhoppers (including glassy-winged sharpshooter)		5.5 to 7.0	180 to 80	0.5 to 0.4	1/2 to 2/3	0.4 to 0.6	
Leafminers	Ornamental plants grown in flats, benches, or beds	8.0 to 10.0	40 to 32	0.3 to 0.2	2/3 to 1	0.6 to 0.8	Apply as a broadcast treatment and incorporate into the soil or media before planting, irrigate moderately after application to move the active ingredient into the root zone. Minimize leaching and runoff for at least 3 irrigations or 10 days, whichever is longer.
Mealybugs		11.0 to 12.0	16 to 12	0.2 to 0.16	to 1-1/2	0.8 to 1.2	
Psyllids		Apply 3 ounces per 1000 square feet					
Root Weevil Complex (such as Black Vine Weevil, Apopka Weevil)							
Citrus Root Weevil ²	Containerized plants	1 Gallon	52 to 46	1.0 to 0.5	1/4 to 1/2	1.0 to 2.0	For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.
Soft scale		2 Gallon	25 to 20	0.9 to 0.4	1/2 to 1	2.0 to 4.0	
Thrips (suppression) ³		3 Gallon	12 to 14	0.7 to 0.3	3/4 to 1-1/2	3.0 to 6.0	
Whiteflies		5 Gallon	10 to 6	0.4 to 0.2	1 to 2	3.7 to 7.4	
1 level teaspoon of this product = 4.1 grams 3 teaspoons = 1 tablespoon							
White Grub larvae (such as Japanese Beetle, Chafer, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	¹ Fungus gnat larvae in the soil will be controlled by incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant. ² Citrus Root Weevil: For use on non-bearing citrus nursery stock. ³ Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.						

RECOMMENDED APPLICATIONS FOR USE			
For use only on nursery ornamentals.			
PEST	USE PATTERN	DOSAGE	REMARKS
White grub larvae (such as Japanese beetle, Masked Chafers, European Chafer, Oriental beetle, Asiatic Garden beetle)	Field and Forest Nurseries	Apply as a uniform band on either side of row using a band six (6) inches wider than the actual root ball diameter to be dug. Do not allow bands in adjacent rows to overlap. Use 9 ounces per 1000 feet or row or 3000 square feet For grub control in areas of turf, apply as a broadcast application using 9 ounces per 3000 square feet.	Vegetation in the area to be treated should be mowed to a height of 3 inches or less prior to application. Mowing to the lowest possible height will insure greater consistency of control. Apply March through July. For optimum control, treatment should be followed by rainfall or irrigation.

RESTRICTIONS

Do not graze treated areas or use clippings from treated areas for feed or forage.

Do not apply to soils which are water-logged, or saturated. This condition will not allow the penetration of water into the root zone of the plants.

For outdoor ornamentals grown in beds or turf, applications of this product cannot exceed a total of 8 pounds per acre per year.

On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

Food Crops: Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.

For crops not listed on any imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12 month plant-back interval should be observed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, or feed. Store in original containers and out of the reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide is a violation of Federal law.

CONTAINER DISPOSAL: Do not use container in connection with food, feed, or drinking water. Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.

SPILLS: If the container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material.

Do not walk through spilled material. Dispose of as directed for pesticides above, or apply uncontaminated product according to Directions For Use. Keep unauthorized people away. For chemical spill, leak, fire, or exposure, you may contact CHEMTREC at 800-424-9300.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(NEW)

Mantra is a trademark of Nufarm Americas Inc.