

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 18 2004

Catherine B. Rice
Regulatory Specialist, Becker Underwood, Inc.
801 Dayton Avenue, PO Box 667
Ames, IA 50010

Dear Ms. Rice:

Subject: Application dated September 26, 2003 for label amendment for product HiStick N/T,
EPA Reg. No. 71840-2

Your application for amendment of the label of the subject product is acceptable under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (FIFRA). The revisions to the label are as follows:

- The FIRST AID section is revised in that
 - The statement for eyes is omitted since the eye irritation study was accorded Toxicity Category IV
 - The statement for skin is revised in accordance with current appropriate language.
 - The statement is added: "Have the product container or label with you when calling a poison control center or doctor, or going for treatment."
- In the PRECAUTIONARY STATEMENTS section, the statement under "Hazards to Humans and Domestic Animals" is revised to include only a statement on dermal sensitization as follows: "Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals."
- In the Personal Protective Equipment (PPE) statement the closed system language is omitted as not applicable, and to the dust /mist filtering respirators description is added the phrase "NIOSH standard of at least N-95, R-95, or P-95."
- In the STORAGE AND DISPOSAL section the discussion of "Product Disposal" is omitted for the amended label since it is inapplicable for the product.
- In the AGRICULTURAL USE REQUIREMENTS box the Restricted Entry Interval (REI) is reduced to four (4) hours. The active ingredient of the product, *B. subtilis* MBI 600 is accorded eligibility for the lower REI.

SYMBOL	7511c	7511c					
SURNAME	BALL	Szohay					
DATE	3/15/04	3-18-04					

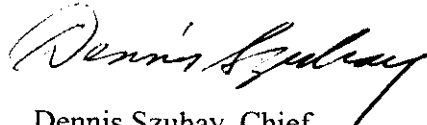
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- The GENERAL INFORMATION section is clarified as follows:
 - 1) In the directions for SLURRY INOCULATION (soybean) paragraph the rate is specified as "2.8 oz per 5.4 fl oz (160 mL)..."; it is directed that dechlorinated water should be used
 - 2) In the DAMP INOCULATION (soybean) paragraph it is specified that dechlorinated water should be used, and
 - 3) In the DRY INOCULATION (soybean, peanut, and dry & snap bean) paragraph it is specified that a stirring device should be used when mixing.
- In the SEED TREATMENT COMPATIBILITY section the word "carbathiin" is changed to "carboxin". The word "carbithiin" is a trade name.
- In the APPLICATION section the recommended rate to be used is expressed only in oz per 100 pounds of seed for each of the various crops or groups of crops. The previous references to amount covered by one package is omitted.

Please send to the Agency three (3) final printed labels before shipment.

A stamped accepted label is enclosed.

Sincerely,



Dennis Szuhay, Chief
 Microbial Products Branch
 Biopesticides and Pollution
 Prevention Division (7511C)

Enclosure

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

HiStick® N/T

A unique seed applied sterile co-inoculant, consisting of a high quality Rhizobial inoculant with a patented biological fungicide for use on soybean, alfalfa, beans (dry/snap), and peanuts

ACTIVE INGREDIENT:

Bacillus subtilis, MBI 600 (not less than 2×10^8 viable spores per gram)..... 0.001%

OTHER INGREDIENTS:..... 99.999%

Total..... 100.00%

Contains a minimum of 2×10^9 viable rhizobial cells/gram acting as a rhizobial inoculant, and 2×10^9 cfu/g *Bacillus subtilis* acting as a biofungicide.

KEEP OUT OF REACH OF CHILDREN
CAUTION
See Additional Precautionary Statements on Side (Back) Panel

EPA Reg. No. 71840-2 EPA Est. No. _____

Another quality biological product from:
Becker Underwood, Inc.
801 Dayton Avenue, PO Box 667
Ames, IA 50010
Tel. (515) 232-5907 (800) 232-5907
www.beckerunderwood.com

Net Contents: _____ Batch Code: _____

ACCEPTED

MAR 18 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act,
as amended, of November 21, 1999, notification January 7, 2003,
registered under
EPA Reg. No. 71840-2

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none"> - Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals
CAUTION: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: A long-sleeved shirt and long pants; waterproof gloves, and shoes plus socks and protective eyewear.

As a general precaution when exposed to concentrations of living microbial products such as this, all mixers/loaders and applicators must wear a dust/mist filtering respirators meeting NIOSH standard of at least N-95, R-95, or P-95. Follow manufacturer's instructions for cleaning/maintaining PPE. Keep and wash PPE separately from other laundry.

User Safety Requirements:

Users should: wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

- Store below 77°F (24°C) away from direct sunlight, and under no circumstances allow temperatures to exceed 86°F (28°C) for long periods of time.

- Do not use inoculant that has passed its expiration date or that has not been stored properly.
- Keep inoculant and inoculated seed in a cool place out of direct sunlight and plant as soon as possible.
- If not planted within 24 hours, seed must be re-inoculated.
- This product is for use ONLY with crop(s) named on the front panel.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty package into application equipment. Then dispose of package in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke. Dispose of box in the same manner. Do not reuse package or box.

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 and 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

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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 area during the restricted-entry interval (REI) of 4 hours.

Exception: If the product is soil-injected or soil-incorporated, 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, soils, or water, wear:

Coveralls, waterproof gloves, shoes plus socks and protective eyewear.

GENERAL INFORMATION

HiStick N/T is a ready-to-use seed treatment. HiStick N/T has been formulated to provide high numbers of an effective nitrogen fixing bacterial and a unique isolate of the bacterium *Bacillus subtilis* (strain MBI 600) which suppresses fungal root disease organisms such as *Fusarium*, *Rhizoctonia*, and *Aspergillus*. The MBI 600 bacteria colonizes along the developing root system, promoting more effective nodulation by its nitrogen fixing partner, resulting in a more uniform stand with greater yield potential.

HiStick N/T is hermetically sealed. After opening pack, squeeze gently to disperse contents. This inoculant is crop specific. Please refer to the front panel for crop use and application rate. Higher than advised application rates will not adversely affect the crop.

HiStick N/T can be applied using any of the following methods:

SLURRY INOCULATION (soybean): Add HiStick N/T at a rate of 2.8 oz per 5.4 fl oz (160 mL) of clean, dechlorinated water and stir well in a clean container to form a lump-free slurry. Not allowing slurry to settle-out, pour inoculant onto

seed and mix thoroughly to ensure all seed is evenly coated. Allow seed to dry in a shaded area before placing in seed hopper.

DAMP INOCULATION (soybean): Apply just enough dechlorinated water to slightly dampen the seed (1.5 fl oz for 50 lbs seed [approx. 2 mL/kg of seed]). Mix the dampened seed thoroughly with the inoculant so that the seeds are evenly coated.

DRY INOCULATION (soybean, peanut, and dry & snap bean): Pour the correct amount of inoculant onto thin layers (approx. every 3-6 inches) of seed in drill hopper and mix thoroughly by hand using a stirring device to evenly coat seed. For bulk seed handling systems, the product can be metered directly onto augered seed.

SEED TREATMENT COMPATIBILITY

[soybeans] HiStick N/T inoculant is compatible with seed treatment such as Custom Seed Gloss™, Color Coat™, or Custom Color™ and treatment based on ApronMaxx®, Apron XL®, and Maxium 4FS®, carboxin, metalaxyl, captan, thiram, thiabendazole, streptomycin, Vitavax® M (when dry). See our web page or contact your dealer/manufacturer for current details.

[dry & snap beans] HiStick N/T inoculant is compatible with seed treatment such as Custom Seed Gloss™, Color Coat™, or Custom Color™ and pesticide treatment based on ApronMaxx®, carboxin, metalaxyl, captan, thiram, thiabendazole, streptomycin, Vitavax® M (when dry). See our web page or contact your dealer/manufacturer for current details.

[peanuts] HiStick N/T inoculant is compatible with most dry seed treatment products. See our web page or contact your dealer/manufacturer for current details.

APPLICATION

SOYBEANS: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for improved rhizobial nodulation.

On Old Rotated Soybean Land:

- On pesticide treated seed or untreated seed, use at the rate of 2.8 oz per 100 lbs of seed.

On New Soybean Land:

- On seed that has not been pesticide treated (or that has been treated with Syngenta products such as Apron Maxx RTA, Apron XL, or Maxim 4FS), use at a rate of 5.6 oz per 100 lbs of seed.
- With other pesticide treated seed, use at a rate of 11.2 oz per 100 lbs of seed.

DRY & SNAP BEANS (NAVY, KIDNEY, PINTO, GREAT NORTHERN, CRANBERRY, PINK, AND BLACK TURTLE, SNAP & STRING BEANS (*PHASEOLUS VULGARIS*): For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for improved rhizobial nodulation.

Use at a rate of 7 oz per 100 lbs of Phaseolus seed. Can be used with or without water (if water is used, it must be dechlorinated).

Open pack, squeeze to disperse contents, and pour the inoculant directly onto the seed in the plants box and mix gently.

PEANUTS: For suppression of root diseases caused by *Rhizoctonia*, *Fusarium*, and *Aspergillus*, and for improved rhizobial nodulation.

Use at a rate of 7 oz per 100 lbs of peanut seed. Some growers have increased yields by using higher application rates – higher rate does not adversely affect the crop. A double rate application is advisable under adverse planting conditions (hot/dry soils) and on land not previously planted to this legume.

Open pack, squeeze to disperse contents, and pour the inoculant directly onto the seed in the plants box and mix gently.

SEED LABELING

This seed is treated with rhizobial inoculant at the manufacturer's recommended rate. Do not use treated seed for food, feed, or oil purposes. On soybeans, do not graze or feed livestock on forage

and hay in treated areas." Add appropriate information for any other chemical treatments.

WARRANTY DISCLAIMER

Becker Underwood, Inc. warrants that this product conforms to the specifications set out on this label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Becker Underwood, Inc. and the sellers of this product MAKE NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, AS TO THE CONDITION, QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PERPUSE OF THIS PRODUCT.

Inherent Risks of Use: It is impossible to eliminate all risks associated with the use of this product. Lack of performance, injury, or other unintended consequences may result because of such factors as: use of the product contrary to strict label instructions and established safe practice, abnormal climatic conditions (such as excessive rainfall, drought, and Acts of God), unfavorable soil conditions, use in combination with other products, the manner of application, storage conditions, or other factors, all of which are beyond control of Becker Underwood, Inc., and the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Becker Underwood, Inc.'s election, one of the following: (1) replacement of the amount of product used; or (2) refund of the purchase price paid for the product; PROVIDED THAT Becker Underwood, Inc.'s provision of (1) or (2) is conditioned on its first being promptly notified of such loss or damage in writing. Becker Underwood, Inc. and the sellers of this product SHALL NOT BE LIABLE to the buyer or any other party claiming by, through, or under the buyer for any

other losses or damages resulting or relating to this product, including but not limited to any DIRECT, INDIRECT, SPECIAL, PUNITIVE, ECONOMIC, INCIDENTAL, OR CONSEQUENTIAL DAMAGES or loss of profits, whether in contract, tort, or otherwise. Becker Underwood, Inc. neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale, storage, use, or handling of this product other than as expressly set forth herein.

ACKNOWLEDGEMENT: IN PURCHASING THIS PRODUCT, THE BUYER AND ALL PARTIES CLAIMING BY, THROUGH OR UNDER THE BUYER, ACKNOWLEDGE THAT AND AGREE TO THE TERMS AND CONDITIONS SET FORTH ON THIS LABEL AND FURTHER ACKNOWLEDGE THAT THEY FORM PART OF THE CONTRACT OF SALE BETWEEN THE SELLER AND BUYER OF THIS PRODUCT.

HiStick® N/T, Custom Seed Gloss, Color Coat, and Custom Coat are trademarks of Becker Underwood, Inc.

ApronMaxx, Apron XL, and Maxim 4FS are registered trademarks of Syngenta Crop Protection.

Vitavax is a trademark of Uniroyal Chemical Company.