



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Biopesticides and Pollution Prevention Division (7511P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

95699-2

Date of Issuance:

8/8/2022

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

TS201

Name and Address of Registrant (include ZIP Code):

NewLeaf Symbiotics
 1005 North Warson Road, Suite 102
 St. Louis, MO 63132

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention 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 under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her 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 the 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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when EPA requires all registrants of similar products to submit such data.
2. Submit storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) data as these data requirements are not satisfied. A one-year study is required to satisfy these data requirements. You have 18 months from the date of this registration to provide these data to EPA.

Signature of Approving Official:

**DANIEL
 SCHOEFF** Digitally signed by
 DANIEL SCHOEFF
 Date: 2022.08.08
 17:42:49 -04'00'

Daniel Schoeff, Risk Manger
 Microbial Pesticides Branch
 Biopesticides and Pollution Prevention Division (7511M)
 Office of Pesticide Programs

Date:

8/8/2022

3. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 95699-2."
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

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 by 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 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 EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to 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. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statements of Formula (CSFs):

- Basic CSF dated 05/13/2022
- Alternate CSF #1 dated 05/13/2022
- Alternate CSF #2 dated 05/13/2022

If you have any questions, please contact Alex Boukedes by phone at (202) 566-1511 or via email at boukedes.alexandra@epa.gov.

Sincerely,

DANIEL
SCHOEFF

Digitally signed by
DANIEL SCHOEFF
Date: 2022.08.08
17:42:12 -04'00'

Daniel Schoeff, Risk Manager
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511M)
Office of Pesticide Programs

Enclosure

TS201™ [TS201 logo] [NewLeaf Symbiotics Leaf Image/Logo]

[Alternate Brand Names:]

Biological Insecticide for Use in Corn

ACCEPTED

Aug 08, 2022

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 95699-2

Active Ingredient: *Methyloburum extorquens* strain NLS0042* 2.0%
Other Ingredients:98.0%
Total:100.0%

* Contains not less than 1 X 10⁹ CFU/g of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See ([back] [side] [other] [inside]) ([panel(s)] [booklet]) for additional precautionary information, directions for use, and storage and disposal.

FIRST AID	
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 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 1-800-222-1222 for emergency medical treatment information.	

EPA Reg. No.: 96599-X
EPA Est. No.: XXXXX-XX-XXX

Net weight: xxxxxxx
([Batch] [Lot]) ([ID] [No]): XXXX

Manufactured by:
 NewLeaf Symbiotics, Inc.
 1005 North Warson Road
 St. Louis, MO 63132

Not for Sale or Use After: [Date¹]

¹ Note to reviewer: Date stamped/placed on labeling will be 6 months after the date of manufacture

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: Harmful if inhaled. Avoid breathing dust or spray mist. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of NIOSH-approved particulate filtering facepiece respirator with an N99, R99, or P99 filter; OR a NIOSH-approved elastomeric particulate respirator with any N99, R99, or P99 filter; OR a NIOSH-approved powered air purifying respirator with HE filters. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow the 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 or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d) and (e)], 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 breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/ PPE 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.

ENVIRONMENTAL HAZARDS: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. 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.

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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 4 hours.

EXCEPTION: If the product is soil incorporated or soil injected, 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
- Waterproof gloves
- Shoes plus socks

BASIC USE INFORMATION

TS201™ is a product for the mitigation of corn rootworm larval feeding damage. Apply TS201™ alone or in tank mixes with other registered crop protection products. [Apply TS201™ as a soil drench alone or in tank mixes with other registered crop protection products.] When conditions are conducive to high corn rootworm pressure, use TS201™ ([in combination] [or] [in a rotational program]) with other registered insecticides effective against corn rootworm. Apply TS201™ with equipment commonly used for making ground applications. Heavy rainfall or irrigation shortly after application may require retreatment.

INSECTICIDE RESISTANCE MANAGEMENT AND INTEGRATED PEST MANAGEMENT (IPM)

- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

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- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact company representatives at [phone number inserted here]."

PRE-HARVEST INTERVAL

TS201™ can be applied up to and on the day of harvest.

APPLICATION INSTRUCTIONS

For Soil Surface (Drench), and In-Furrow Applications:

Mix TS201® in the appropriate amount of water per acre according to the mixing instructions and the application rates table. Use the higher rates if the field has a history of heavy corn rootworm pressure, or if minimum/low till programs are in place. TS201™ can be mixed with registered pesticides for soil applications.

Soil Surface (Drench) Applications at Planting:

Use at planting, seeding, or transplant. Apply finished spray mixture, at a rate to thoroughly soak the growing media through the root zone, as a drench or directed spray using hand-held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler or drip irrigation systems. Apply in a final volume of at least 4 gallons per acre.

- A. Apply this product only through [choose one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border or drip (trickle)] irrigation& system(s). Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. 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.
- E. A person knowledgeable of the chemigation system and responsible for its operation or under the

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supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Shanked-In or Injected Applications:

TS201™ can be shanked-in or injected into the soil prior to-, at-, or post- planting/ transplanting of crops alone or with most types of liquid nutrients.

In-Furrow Applications:

For in-furrow applications, apply TS201™ as an in-furrow spray in the appropriate amount of water per acre for the crop at planting according to the mixing instructions. Mount the spray nozzle so the spray is directed in the furrow just before the seeds are covered.

For Planter Box (Onsite) Applications:

Apply TS201® by dispersing the powder evenly onto seed. Mix well and ensure that seed is uniformly coated. For application rates, see application rates table. Use higher rates if the field has a history of moderate to heavy corn rootworm pressure, [if the regional forecast indicates high expected corn rootworm pressure] or if minimum/low till programs are in place.

For Use as a Seed Treatment:

TS201™ as a seed treatment may be applied as a water-based slurry alone or with other registered seed treatment insecticides and fungicides through standard slurry or mist commercial seed treatment equipment. Under moderate to severe disease pressure, for improved performance, increase rates or use TS201™ in a program with other registered insecticides effective against corn rootworm[for seed treatment].

Do not use treated seed for food or feed purposes or process for oil. Treat only those seeds needed for ([immediate use, minimizing the interval between treatment and planting] [use within 3 months] [use within 6 months] [use within one year]). [Do not store excess treated seeds beyond planting time.]

[Label statement to be included if labeled for seed stored for 3+ months: This product does not contain dye and is not covered by an appropriate tolerance, tolerance exemption, or other clearance under the Federal Food, Drug and Cosmetic Act. To comply with 40 CFR 153.155, therefore, all seed treated with this product must be colored with an EPA-approved dye or colorant of a suitable color to prevent accidental use as food for man or feed for animals.]

MIXING INSTRUCTIONS

For Soil Surface (Drench) and In-Furrow Applications:

Prepare a pre-mix that consists of 1-part TS201™ plus a minimum of 3 parts water. Once the premix is complete, introduce this solution into the full pesticide tank solution. Maintain sufficient tank agitation during the mixing and application operations.

TS201™ must be diluted with water. Partially fill the spray tank with clean, non-chlorinated water and begin agitation. Add the specified amount of TS201™ to the tank, which has been slurred prior to introduction into the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. It is critical that the spray solution be agitated during mixing and application to assure a

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uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods. Maintain a spray solution pH between 5.5 and 7.5.

TS201™ may be tank mixed with other registered pesticides to enhance corn rootworm control or suppression. This product cannot be mixed with any product with prohibition against such mixing. When tank mixing TS201™ with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both TS201™ and the tank-mix partner(s). Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label application rates.

COMPATIBILITY: Do not combine TS201™ in the spray tank with pesticides, surfactants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

TS201™ is compatible with many commonly used pesticides, fertilizers, and non-ionic surfactants but has not been fully evaluated with all of these. TS201™ is not compatible with crop oil concentrate (COC) or methylated seed oil (MSO). To ensure compatibility of tank-mix combinations, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

For Planter Box Applications:

TS201™ may be applied mixed with seed flow lubricants but has not been fully evaluated with all iterations of these. [To ensure TS201™ efficacy, seed should be planted within ([24 hours] [three months] [six months] [one year]) of mixing TS201 with seed flow lubricants and corn seed in the planter box.]

For mitigation of corn rootworm larval feeding, apply according to application rates in table. [Measure a full level scoop (provided in package) of TS201 for the amount of seed to be treated. One scoop treats [insert number] ([unit(s)] [of kernels] at the low rate and [insert number] ([unit(s)] [of kernels] at the highest labeled rate. This package treats [insert number] bags of corn seed at an average of 50 pounds per bag.] Disperse the powder evenly onto seed. Mix well to ensure that seed is uniformly coated.

For Use as a Seed Treatment:

MIXING: TS201™ may be mixed with other registered pesticides. This product cannot be mixed with any product with prohibition against such mixing. When mixing TS201™ with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both TS201™ and the mix partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label application rates.

To mix when using with other chemical insecticide or fungicide seed treatments: first add the chemical insecticides or fungicides to the slurry mix with approximately 10% of the required water. Slowly add the TS201™ to the slurry until a suspension is obtained. Add the remainder of the water and maintain continuous agitation. Do not store mixed slurries for more than 4 hours.

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To mix when using only TS201™ seed treatment: Add 10% of the required water to the slurry mix. Slowly add the TS201™ to the slurry until a suspension is obtained. Add the remainder of the water and maintain continuous agitation. Do not store mixed slurries for more than 4 hours.

COMPATIBILITY: Do not combine TS201™ in the slurry with pesticides, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective, and non-injurious under your use conditions.

TS201™ is compatible with many commonly used pesticides, and but has not been fully evaluated with all of these. See application rate tables for more detailed application instructions.

Under moderate to severe insect pressure, for improved performance, increase rates or use TS201™ in a tank-mix or rotational program with other registered insecticides.

Application Rates of TS201™				
Crops	Insect	Rate for Soil Surface (Drench), In-Furrow, Shanked-in/ Injected Application (oz/ acre)	Rate for Seed Treatment (oz per 100 lb of seed)	Rate for Planter Box Application (oz per 100 lb of seed)
Corn Sweet Corn Popcorn Seed Corn Silage Corn Field Corn	Mexican Corn Rootworm[*] Northern Corn Rootworm[*] Southern Corn Rootworm[*] Western Corn Rootworm[*]	4 - 10	0.25 - 2	0.25 - 10

[*Not registered for use in California]

SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing seeds treated with this product shall be labeled with the following information:

- This seed has been treated with *Methyrorubrum extorquens* strain NLS0042.
- Do not use for feed, food or oil purposes. Store away from feed and food stuffs.

User is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use. Do not store at temperatures above 78°F (25°C). Pesticide 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

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facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

[For plastic bags] - Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

[For fiber drums with liners] - Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

[batch codes are sticker applied to the front panel of every label on every product container]

CONDITIONS FOR SALE AND WARRANTY

IMPORTANT: READ BEFORE USE

Read the Directions for Use, the Conditions, Disclaimer of Warranties, Limitation of Liability, and License set forth below. If the following terms are not acceptable, please return the product immediately for a refund of the purchase price. Otherwise, use by buyer or any other user constitutes acceptance of the following terms.

Conditions: The directions for use of this product are believed to be adequate and must be followed carefully. It is impossible, however, to eliminate all risks inherently associated with the use of this product. Weather or crop conditions; the presence of other materials; the manner of use or application; any use, storage or handling that is contrary to the Directions for Use; and other such factors that are beyond the control of NewLeaf Symbiotics, Inc. ("NLS") may cause ineffectiveness or other unintended consequences. User assumes all such risks.

Disclaimer of Warranties: NLS warrants that this product conforms to the biological or 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. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NLS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR NONINFRINGEMENT.

Limitation of Liability: To the extent consistent with applicable law, NLS or the seller disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product, and the buyer and user waive any right that they may have to such damages. Except to the extent prohibited by applicable law, NLS or seller's exclusive liability and 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 NLS's election, the replacement of product.

License and Prohibition of Re-Sale: NLS hereby grants buyer or user the right under the patents listed on the label to use this product solely in accordance with the label Directions for Use for applications to plants, including plant parts such as seed, or to soil, where the treated plants or the

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plants grown in treated soil are intended for sale, in whole or in part, or are intended for public or personal use. The buyer or user does not have the right to de-formulate this product or to isolate and/or culture its active ingredient for any purpose. Unless specifically granted in writing, the buyer or user does not have the right to re-sell this product in any form; e.g., this product may not be re-sold in combination with other products or other active ingredients or in a diluted form, unless combinations are prepared and delivered to the end-user for immediate application to plants, plant parts or soil solely in accordance with the label Directions for Use.

NLS and Seller offer this Product and buyer and user accept it subject to the foregoing Conditions, Disclaimer of Warranties, Limitation of Liability and License, which may only be modified by a written document signed by a duly authorized representative of NLS.

NLS® is a registered trademark of NLS, Inc. TS201™ is a trademark of NLS, Inc.
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