

***Trichoderma hamatum* isolate 382 (119205)**

Fact Sheet

Issued: 09/17/05

Summary

Trichoderma hamatum isolate 382 is a naturally occurring fungus. This and other *Trichoderma* species are ubiquitous, and occur widely in soils, including agricultural soils. Isolate 382 is intended for application to soilless potting media and compost for the production of ornamentals and vegetable plants in greenhouses and nurseries. As such, it provides resistance to certain fungal plant pathogens. Use of *Trichoderma hamatum* isolate 382 as a microbial fungicide applied to soilless potting media and compost in nurseries and greenhouses is not expected to cause any unreasonable adverse effects on human health or the environment.

I. Description of the Active Ingredient

Trichoderma hamatum isolate 382 is a naturally occurring fungus that is widely found in soils, potting media, corn grits, and flour, as well as on root surfaces of various plants, decaying bark, fruits, and vegetables. As a pesticidal active ingredient, *Trichoderma hamatum* isolate 382 will be mixed with or applied to soilless potting media or compost to induce systemic resistance to diseases of roots and aboveground plant parts. It may also suppress the activity of certain soil borne plant pathogens and protect the foliage of some plant species through competition for nutrients and space. No relationships are known between the *Trichoderma* genus and any pathogen of humans, animals, or plants.

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** Application to soilless potting media and compost in nurseries and greenhouse for the production of ornamentals and vegetable plants.
- **Target pests:** For suppression of diseases caused by soil borne plant pathogens such as *Pythium Phytophthora* and *Fusarium* spp., *Rhizoctonia solani*, *Sclerotium rolfsii* and *Thielaviopsis basicola*. On some plant species, it also protects the foliage against powdery mildew, Botrytis blight, Phytophthora blights and dieback diseases, and Botryosphaeria dieback.
- **Application Methods:** Potting mix: Apply 3 to 4 ounces of the product *Trichoderma hamatum* isolate 382 per cubic yard of compost or soilless growing media, prior to seeding or planting seedlings in pots or flats.

Drench: Mix 3 to 4 ounces of the product *Trichoderma hamatum* isolate 382 with 100 gallons of water and apply as a drench to the surface of the potting media at a rate of 1 pint of diluted product per square foot for sixinch tall pots or containers or ½ pint of diluted product per square foot for shallow pots, flats or plugs. Do not apply directly to plants.

Ground Beds or Propagation Benches: If applied to potting mix for use in ground beds or propagation benches, apply 3 to 4 ounces of the product *Trichoderma hamatum* isolate 382 per cubic yard of compost or soilless growing media, and place in ground beds or propagation benches before or when seeding or planting seedlings. If applied as a drench to soilless potting media or compost in ground beds or propagation benches, mix 3 to 4 ounces of the product *Trichoderma hamatum* isolate 382 with 100 gallons of water and apply as a drench at a rate of 1 pint of diluted product per square foot. Do not apply directly to plants.

III. Assessing Risks to Human Health

Based on the required toxicity and pathogenicity tests, no human health risks are expected when the product containing *Trichoderma hamatum* isolate 382 is used according to the label directions. To avoid hypersensitivity, the label requires that mixers and loaders of the end-use product wear a dust/mist filtering respirator meeting National Institute for Occupational Safety and Health (NIOSH) standards of at least N-95, R-95, or P-95. Based on exposure potential and toxicity categories assigned to this end-use product, mixers, loaders, and applicators are also required to wear the following personal protective equipment: long-sleeved shirt, long pants, shoes, socks, and waterproof gloves.

IV. Assessing Risks to the Environment

No risks to non-target organisms (to include federally listed endangered and threatened species) or to the environment are anticipated as a result of the intended uses of *Trichoderma hamatum* isolate 382 as specified on the label. If future uses include uses that increase the possible exposure of non-target organisms, additional data and/or information will be required and reviewed by the Environmental Protection Agency (EPA) for potential risks to those organisms before those uses can be allowed. The label warns the product's users not to contaminate water when cleaning application equipment or disposing of application equipment washwaters or rinsate.

V. Regulatory Information

February 27, 2007 – Interregional Research Project Number 4 (IR-4), Rutgers University, 500 College Road, East, Suite 201W, Princeton, NJ 08540 (on behalf of Sellew and Associates, LLC, 84 Shadybrook Lane, Carlisle, MA 01741) submitted an application for registration of the microbial fungicide *Trichoderma hamatum* isolate 382 and filed a petition to establish an exemption from the requirement of a tolerance for residues of *Trichoderma hamatum* isolate 382.

July 22, 2009 – A Notice of Receipt (74 FR 36215) and a Notice of Filing (74 FR 36200) were published in the Federal Register.

June 1, 2010 - The Agency announced, in a notice posted on the Agency's website, its intent to register *Trichoderma hamatum* Isolate 382. The Agency also requested comments on this proposed action. The comment period closed July 1, 2010. No comments were received.

July 14, 2010 – The Environmental Protection Agency established a permanent exemption from the requirement of a tolerance for residues of the microbial pesticide, *Trichoderma hamatum* isolate 382, in or on all food commodities when applied as a fungicide and used in accordance with good agricultural practices. [40 Code of Federal Regulations (CFR) § 180.1298].

July 14, 2010 – Pursuant to FIFRA section 3(c)(5), an unconditional registration was issued for the enduse product, *Trichoderma hamatum* isolate 382 (EPA Registration Number 74205-3).

VI. Registrant Information

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84 Shadybrook Lane, Carlisle, MA 01741).

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VII. Additional Contact Information

[Ombudsman, Biopesticides and Pollution Prevention Division](#) (7511P)
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