

Bacillus pumilus strain QST 2808 (006485) Fact Sheet

OPP Chemical Code: 006485

Summary

Bacillus pumilus strain QST 2808, commonly found in soil, is sprayed on crops to control many fungal pests. On oaks and other trees, it suppresses the organism that causes sudden oak death syndrome. No harm to humans or the environment is expected from use of Bacillus pumilus strain QST 2808 as a pesticide active ingredient.

I. Description of the Active Ingredient

Bacillus pumilus strain QST 2808 is a common bacterium found in soil and water. It acts as a fungicide by preventing the development of fungal spores on plants. It forms a physical barrier between the plant leaf and the fungal spores, and then colonizes the spores. Like several other strains of B. pumilus, this strain may also stimulate the plant's own resistance system by inducing systemic acquired resistance (SAR).

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** Many food and non-food crops, including trees susceptible to sudden oak death syndrome. For use outdoors, including nurseries, landscapes, and rights-of-way, and for use in greenhouses.

- **Target Pests:** Fungal pests such as molds, mildews, blights, rusts.

- **Application Methods:** Ground, aerial, or chemigation spray. Instructions vary by crop.

III. Assessing Risks to Human Health

No harmful health effects to humans are expected from use of Bacillus pumilus strain QST 2808 as a pesticide active ingredient. No evidence of toxicity or infectivity was found in animal laboratory studies or in the literature. Use of this bacterium in pesticide products will not increase the exposure of humans beyond normal background levels.

IV. Assessing Risks to the Environment

No adverse environmental effects are expected when products containing this active ingredient are used according to label instructions. Laboratory studies and a literature search found no evidence indicating that *Bacillus pumilus* strain QST 2808 is harmful to insects, birds, mammals, plants, or marine species when used as directed. Exposure to wildlife is not expected to increase from pesticidal use of this bacterium.

V. Regulatory History

August 20, 2003 EPA announces approval of an Experimental Use Permit (EUP) for the first product containing *Bacillus pumilus* strain QST 2808 as the active ingredient.

October 14, 2004 EPA registers (approves for sale and distribution) the first two pesticide products containing *Bacillus pumilus* strain QST 2808 as the active ingredient.

"QST 2808 MUP" (EPA Reg # 69592-6) for manufacturing use only.

"Sonata™ ASO" (EPA Reg # 69592-13) as an end product.

"Sonata™ ASO" (EPA Reg # 69592-13) as an end product.

VI. Registrant Information

AgraQuest, Inc.
1530 Drew Avenue
Davis, CA 95616
530-750-0150
agraquest@agraquest.com

VII. Additional Contact Information

Ombudsman, Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460