

***Bacillus pumilus* strain GB 34 (006493) Fact Sheet**

OPP Chemical Code: 006493

Summary

Bacillus pumilus strain GB34 is a naturally occurring bacterium that is especially common in soil and on dead plant tissue. When applied to soybean seeds, the bacterium protects the roots of the soybean plant against certain fungi. No harm to humans or the environment is expected from use of *Bacillus pumilus* strain GB34 as a pesticide active ingredient.

I. Description of the Ingredient

Bacillus pumilus strain GB34 occurs in soil, water, air, and decomposing plant tissue. It is often found on the developing root system of soybean plants; it does not harm the plants. Rather, the bacterium prevents germination of the spores of the target fungi *Rhizoctonia* and *Fusarium*, and the bacterium may subsequently grow on the fungal spores.

II. Use Sites, Target, Pests, and Application Methods

- **Use Sites:** Soybean seeds.

- **Target Pests:** The fungal pests *Rhizoctonia* and *Fusarium*, which attack developing soybean roots.

- **Application Methods:** The single registered end product, "GB 34 Concentrate Biological Fungicide" is applied as a water slurry to soybean seeds by companies using specified mechanical seed-treating equipment.

III. Assessing Risks to Human Health

No harmful health effects to humans are expected from use of *Bacillus pumilus* strain GB34 as a pesticide active ingredient. No evidence of toxicity or infectivity was found in animal laboratory studies. Furthermore, the use 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 *Bacillus pumilus* strain GB34 are used according to label instructions. Laboratory studies and a literature search found no evidence indicating that *Bacillus pumilus* strain GB34 is harmful to insects, birds, mammals, plants, or marine species. In addition, exposure to wildlife is not expected to increase from pesticide use of this bacterium.

V. Regulatory Information

February 6, 2002 EPA grants Experimental Use Permit (EUP) to "GB 34 Concentrate."

March 13, 2003 EPA grants registration (approval for sale and distribution) to two products containing *Bacillus pumilus* strain GB34 as the active ingredient:

1. GB 34 Technical Biological Fungicide
2. GB 34 Concentrate Biological Fungicide (end product)

VI. Registrant Information

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VII. Additional Contact Information

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