

Gibberellins (043801,043802,116902) Fact Sheet

Summary

Gibberellins are natural growth enhancers found in plants. They are applied to plants to encourage elongation, growth, and ripening. When used as growth enhancers, these substances do not present any known risks to humans or the environment.

I. Description of the Active Ingredient

Active Ingredient Name: Gibberellic Acid (GA₃)

OPP Chemical Code: 43801; (CAS # 77-06-5)

Active Ingredient Name: Mixture of Gibberellins (GA₄) and (GA₇)

OPP Chemical Code: 116902; (CAS # 8030-53-3)

Active Ingredient Name: Potassium Gibberellate

OPP Chemical Code: 43802; (CAS # 125-67-7)

The three active ingredients above, collectively called "Gibberellins," occur naturally in green plants and in some microbes. In green plants, these natural substances help to regulate growth of the plants. When applied to crops, gibberellins can stimulate dwarf plants to grow to normal size; can promote flowering and elongation of stems and roots; and can stimulate fruit growth and maturation. The three active ingredients are considered together because they are extremely similar in structure, function, and toxicity.

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** Many food and feed crops; ornamentals.
- **Uses:** Growth enhancer to increase both yield and quality of crops.
- **Application Methods:** Gibberellins can be applied using many types of application treatments and equipment.

III. Assessing Risks to Human Health

No adverse effects to humans are expected from use of gibberellins to enhance growth and maturation of crops. The substances are found naturally in plants. Also, the tiny amounts applied to crops do not noticeably increase exposure of humans who eat the treated crops.

IV. Assessing Risks to the Environment

No risks to the environment are expected from use of gibberellins because 1) they do not harm animals or plants in the tiny amounts used, 2) they act as plant growth enhancers, 3) they are naturally broken down in the environment.

V. Regulatory Information

Active Ingredient	Number of End- Use Products (July 2000)	Year First Product Was Registered / Year of Reregistration
Gibberellic Acid (GA ₃)	50	1947 / 1995
Mixture of Gibberellins (GA ₄) and (GA ₇)	7	1979 / 1995
Potassium Gibberellate	2	1960 /1995

VI. Producer Information

Many companies have received registrations for pesticide products that contain gibberellins as active ingredients.

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