

# Plant Extract 620 (169007) Fact Sheet

## Summary

This mixture of four plant extracts is applied to soil to control parasitic nematodes and certain fungal infections. The extract also enhances a plant's growth by helping it resist other harmful organisms. The extract is approved for use on food and feed crops, turf, and ornamentals for both commercial and residential use. Products containing PE 620 are safe for humans, wildlife, and the environment, so long as they are not used or disposed of in water environments.

### I. Description of the Active Ingredient

PE 620 is a mixture of substances extracted from four kinds of plants (Southern red oak, fragrant sumac, red mango, and prickly pear cactus). The extract has several desirable effects. First, it controls parasitic nematodes, tiny organisms that feed on plant roots. Second, it enhances the ability of plants to resist several common fungal diseases. Third, it acts as a growth stimulator to increase yields, although some of this effect may be due to control of nematodes and fungal diseases.

Scientists have suggested several mechanisms to explain how PE 620 works. The extract might prevent the nematodes from making cholesterol and fatty acids, eventually leading to lethargy and death. It might also interfere directly with nematode feeding and reproductive behavior. By enabling plants to resist pathogenic root fungi, PE 620 may decrease the amount of damaged root tissue available as entry points for parasitic nematodes.

### II. Use Sites, Target Pests, And Application Methods

- **Use Sites:** Agricultural crops; turf and ornamentals; residential gardens but not residential lawns.
- **Target pests:** Parasitic nematodes and certain infectious microbes.
- **Additional use:** Increases growth rate of plants
- **Application Methods:** Apply to soil by spray, drip or chemigation early in the growing season. Can be applied 6-10 times per season, depending on type of plant.

### III. Assessing Risks to Human Health

No risks to humans are expected from use of products containing Plant Extract 620 as the active ingredient. Tests in rats showed no harmful effects. Eye irritation was seen with the pure active ingredient, but not with the end products, where the active ingredient is greatly diluted. There is no known risk from eating treated crops, given that no oral toxicity was seen in rats and the amounts of Plant Extract 620 used are extremely low.

#### **IV. Assessing Risks to the Environment**

Products with Plant Extract 620 are not harmful to birds, mammals, or freshwater fish when ingested. Because the active ingredient is somewhat toxic to aquatic invertebrates, products containing Plant Extract 620 cannot be applied to bodies of water.

#### **V. Regulatory Information**

**Year products with Plant Extract 620 were initially registered (licensed for sale):**  
1997

**Number of end use products (January 2001):** 2

#### **VI. Registrant Information**

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#### **VII. Additional Contact Information**

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