



Prepared by the
Office of Environmental Health Hazard Assessment

Health Questions and Answers for Methyl Eugenol in Insect Bait Traps

This Material is not Applied to Fruit Trees or Food Crops

Q: What is methyl eugenol?

A: Methyl eugenol is a compound naturally found in certain fruits (such as oranges and bananas) and culinary herbs and spices (such as basil and cloves). It is used as a flavor in many food products, as a fragrance ingredient in perfumes, toiletries, and detergents, and as an insect attractant in some pesticide formulations.

The U.S. Food and Drug Administration allows methyl eugenol to be added in small amounts to many food products such as candy, jellies, baked goods, beverages, relish, ice cream, and chewing gum.

Q: How is methyl eugenol used by the California Department of Food and Agriculture?

A: The California Department of Food and Agriculture uses methyl eugenol as an insect attractant for the control of invasive pests such as the Oriental Fruit Fly. To treat the fruit fly, methyl eugenol is mixed with an insecticide and a clay-like material to form a thick paste. This paste, in small quantities, is applied to tree trunks or utility poles 6-8 feet above the ground. Male fruit flies are attracted by methyl eugenol to the dried paste and killed by the insecticide in the paste.

Q: What are the potential health risks of methyl eugenol from its use as an insect attractant?

A: No adverse health effects are expected when methyl eugenol is used in the way described. The main route of exposure is inhalation of methyl eugenol vapor released from the bait. The California Department of Pesticide Regulation monitored methyl eugenol vapor released from baits and found the levels were very low; it estimated that the exposure is much less than amounts currently allowed as food additives.

Methyl eugenol is recognized as a carcinogen under California's Proposition 65 law; however, the cancer risk associated with the inhalation of methyl eugenol vapor from its use in bait traps is expected to be negligible due to the low exposure.

Q: What happens to methyl eugenol in the environment?

A: Methyl eugenol evaporates readily. Sunlight causes methyl eugenol vapor to degrade over a period of several hours.

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Q: What precautions should I take when baits containing methyl eugenol are applied to trees or utility poles in my neighborhood?

A: Do not touch the bait or try to remove it from the trees or poles. Wash your skin or clothing in the unlikely event that you come in contact with the bait. Follow instructions provided by the California Department of Food and Agriculture.

Q: Can I eat fruits and vegetables harvested from areas treated with baits containing methyl eugenol?

A: Yes. Just like any produce purchased from the market, wash the produce before consumption.

Q: What should I do if I feel sick after exposure to insect baits containing methyl eugenol?

A: It is very unlikely that methyl eugenol is making you feel sick, but the bait contains an insecticide. Call the California Poison Control System hotline at (800) 222-1222 or consult with your physician.

For further information, please contact:

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