

# Extract of *Chenopodium ambrosioides* near *ambrosioides* (599995) Fact Sheet

## Summary

Extract of *Chenopodium ambrosioides* near *ambrosioides* is registered as a biochemical pesticide. It is derived from the flowering plant *Chenopodium ambrosioides* near *ambrosioides*, commonly known as American Wormseed. The leaf has been consumed as a green and herb in traditional Mexican cooking. The extract has a long history of use as a folk medicine, and more commercially, as a nematicide for humans and livestock in the late 19th and early 20th century. As a registered pesticide, it is intended for use as an insecticide and acaricide on field and container-grown non-food ornamental plants in commercial nurseries, greenhouses, and lath- and shade houses. Agency reviews indicate that the use of this extract poses no significant risk to human health or the environment.

## I. Description of the Active Ingredient

Extract of *Chenopodium ambrosioides* near *ambrosioides* is a blended extract derived from the flowering plant of that name. It is an amber liquid that is semi-volatile, and has a fruity, woody, aromatic smell. The extract is composed of many constituent ingredients, the properties of which have been assessed in Agency reviews. It has had many historical medicinal uses, and is cited in the "US Pharmacopoeia." As a biopesticide, the extract is used for its properties as an insecticide and acaricide. It is classified a biochemical pesticide because of its natural origin and its "non-toxic" mode of action. It is purported to work through a physical mode of action whereby the Extract of *Chenopodium ambrosioides* near *ambrosioides* softens cuticles in target insects, resulting in a disruption of insect respiration.

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

- **Use Sites:** Applied to field and container-grown ornamentals, trees, Christmas trees, shrubs, flowers, annual and perennial bedding plants, potted flowers, and tropical plants not destined for human or animal consumption.
- **Target pests:** For control of aphids, plant-feeding mites, whiteflies, mealy bugs, leafminers, thrips, fungus gnats, and tarnished plant bugs.
- **Application Methods:** Applied with commonly used ground equipment, hose-end, pressurized, greenhouse, and hand-held sprayers. It is diluted to create a 0.5 to a 1% solution. Upper and lower leaves are sprayed to the point of saturation. It is applied on a 7- to 14-day schedule as necessary.

## III. Assessing Risks to Human Health

No significant human health risks are expected when the pesticide is used in accordance with the label directions. The human health assessment for the Extract of *Chenopodium ambrosioides* near *ambrosioides* notes the following:

1. data show the extract has a very low mammalian toxicity;
2. the active ingredient is naturally occurring;
3. people are regularly exposed to the components of the active ingredient in food additives and cosmetics without known incidents;
4. pesticidal applications of the extract are only for non-food uses so exposure is limited to occupational workers;

5. no edible commodity is present at the time of pesticidal application; and
6. pesticidal residues resulting from the intended method of application have been shown to rapidly degrade.

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

Data and information submitted to the Agency indicate that the pesticide should pose no significant risk to the environment if used in accordance with label directions. The use of Extract of *Chenopodium ambrosioides* near *ambrosioides* is limited to controlled environments that are not prime habitats for wild species of plants or animals. And data show that the residues of the extract do not persist in the terrestrial environment. The extract typically degrades within 10 minutes of its application to plants. With particular regard to risks posed to threatened and endangered species, the reviews confirm the broader finding of negligible risk, noting that the proposed uses of Extract of *Chenopodium ambrosioides* near *ambrosioides* are “Not Likely to Adversely Affect (NLAA)” threatened and endangered species.

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

Extract of *Chenopodium ambrosioides* near *ambrosioides* was registered as an active ingredient in April, 2008. There are two registered products that contain this species of extract as an active ingredient. An extract for a related species, Saponins of *Chenopodium quinoa*, was registered with the Agency in 2005 to aid seeds and seedlings in resisting fungi, bacteria and viruses.

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

AgraQuest, Inc.  
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#### **VII. Additional Contact Information**

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