

# **COTTON**

## General Information

### PRODUCT INFORMATION

Avicta Duo COT202 is a cotton seed treatment nematicide/insecticide that contains the active ingredients abamectin and thiamethoxam. When Avicta Duo COT202 is applied to cotton seed, seedlings are protected from early season nematode damage and damage from the insect pests specified in the Crop Use Directions.

To add early season disease protection, the seed treatment fungicides specified in the Crop Use Directions are approved for use on cotton seed and may also be mixed with Avicta Duo COT202. Follow the most restrictive requirements and precautions for all products used in all mixtures.

### RESISTANCE MANAGEMENT

Avicta Duo COT202 contains thiamethoxam, a Group 4A insecticide, and abamectin, a Group 6 insecticide. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists. Abamectin belongs to the avermectin class of chemistry which affects nerves and muscles.

Insect populations may contain individuals naturally resistant to Group 4A or 6 insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

In order to maintain susceptibility to these classes of chemistry:

- Use products at their full, recommended doses.
- Use appropriate, well-maintained equipment. Use recommended water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern.

Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.

- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

Syngenta encourages responsible product stewardship to ensure effective long term control of the insect pests on the label.

For additional information on Insect Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at:  
<http://www.irac-online.org/>

#### APPLICATION INSTRUCTIONS

- Consult the Syngenta Seed Treatment representative or the manufacturer of the application equipment you plan to use regarding the suitability of this application and equipment calibration and operating instructions.
- Always treat seed in a well-ventilated area. Refer to the Precautionary Statements section of the label for personal protective equipment requirements and other safety precautions.
- Prepare no more mixture than is needed for the immediate operation.
- Avicta Duo COT202 must be thoroughly recirculated in its original container before using. (See Mixing Instructions.)
- Apply Avicta Duo COT202 as a water-based slurry utilizing standard slurry seed treatment equipment that will provide uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of nematode and insect control.
- Thoroughly mix the required amount of Avicta Duo COT202 and other seed treatment products desired with the amount of water required for the slurry treater and the dilution rate. (See Avicta Duo COT202 in Tank Mixtures.)

Follow the most restrictive requirements and precautions for all products used in mixtures.

- Use an EPA-approved dye or colorant that imparts an unnatural color to the seed.

- Allow seed to dry before bagging /filling containers, and store treated seed away from feed and foodstuffs.

## REQUIRED SEED CONTAINER STATEMENTS

User is responsible for ensuring that the seed container meets all requirements under the Federal Seed Act.

The Federal Seed Act requires that the container of seed treated with Avicta Duo COT202 shall be labeled with the following statements:

- This seed has been treated with abamectin nematicide and thiamethoxam insecticide.
- Do not use treated seed for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on the container of cottonseed treated with Avicta Duo COT202

- Store away from food and feedstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- Wear long-sleeved shirt, long pants, and rubber gloves when handling treated seed.
- Plant Avicta Duo COT202-treated cottonseed based upon the local planting dates and soil temperatures that are recommended by your state agricultural extension agent.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Treated seed exposed on soil surface may be hazardous to wildlife; cover or collect treated seed that are spilled during loading and in areas such as row ends.
- Dispose of all excess treated seed by burying seed away from bodies of water.
- Do not contaminate bodies of water when disposing of planting equipment wash water.

- Dispose of seed packaging in accordance with local requirements.
- Ground Water Advisory: This product has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- Pollinator Precautions: Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Do not use at a rate that will result in more than 0.075 lb thiamethoxam per acre per year (34.0 grams ai/A/yr) as a seed treatment application. This seed has been treated with thiamethoxam at 0.375 mg ai/seed.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by- products that are used in agronomic practice.
- In areas with a history of high thrips pressure or for cotton grown in North Carolina, South Carolina, and Virginia, apply a foliar insecticide, that is approved for thrips control, when cotton is between the 1st and 3rd leaf stage.
- Allow a minimum of 45 days after planting Avicta Duo COT202 treated cottonseed before treating the cotton with a neonicotinoid insecticide.
- In the event of crop failure or after harvest of cotton grown from Avicta Duo COT202 treated cottonseed, the following crops may be replanted immediately:

Root Vegetables Crop Subgroup 1A (including sugarbeet); Tuberous and Corm Vegetables (Except Potato) Crop Subgroup 1D; Leafy Vegetables (Except Brassica Vegetables) Crop Group 4; Head and Stem Brassica Crop Subgroup 5A; Leafy Brassica Greens Crop Subgroup 5B; Legume Vegetables (Succulent or Dried) Crop Group 6 (including soybean); Fruiting Vegetables (Except Cucurbits) Crop Group 8; Cucurbit Vegetables Crop Group 9; Cereal Grains Crop Group 15 (including barley, buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice (dry-seeded), rye, sorghum, teosinte, triticale, wheat, and wild rice); Alfalfa; Canola; Cotton; Dry Bulb Onions; Mint (Peppermint and Spearmint); Oilseed crops (Borage, Crambe, Flax Seed, Mustard Seed, Rapeseed and Safflower); Peanuts; Potato; Strawberry; Sunflower; and Tobacco.

For any other crop, the minimum plant back interval is 120 days from the date the Avicta Duo COT202 treated cottonseeds were planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

## Limitations, Restrictions, and Exceptions

### Cottonseed

Avicta Duo COT202 is a seed treatment for the seed of delinted cotton. Avicta Duo COT202 will provide cotton seedlings early season protection from damage caused by nematodes and the insects. Tank mixing Avicta Duo COT202 with Dynasty CST fungicide will add early season disease protection.

Cotton fleahopper and Plant bugs: Avicta Duo COT202 only provides suppression of these pests. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

Rates: 0.15 mg abamectin / 0.375 mg thiamethoxam per seed

### Instructions

To control early season nematodes and these insect pests apply the amount of Avicta Duo COT202 specified in the center column.

NOTE:

- 1 fl oz of Avicta Duo COT202 contains 3.93 grams of abamectin and 9.84 grams of thiamethoxam.

- The typical density of Avicta Duo COT202 is 9.93 lb per gallon.

Disease Protection - Early Season

- To add early season disease control in cotton, cottonseed may be treated with a mixture of Avicta Duo COT202 plus Dynasty CST. Follow the most restrictive requirements and precautions for all products used in mixtures.

Method

[Seed Treatment](#)

Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

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Timings

[N.A.](#)