

FOR INFORMATION
DA-2009-65
December 24, 2009

SUBJECT: Federal Import Quarantine Order for Host Materials of Tomato Leafminer,
Tuta absoluta (Meyrick)

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

This Federal Order updates the list of countries where the tomato leafminer, *Tuta absoluta*, is known to occur, and replaces SPRO#: DA-2009-64, dated December 18, 2009. Federal Order, *T. absoluta* host material from affected countries must meet the conditions below. This Federal Order is effective on February 1, 2010.

- APHIS will require that shipments of tomato fruit from affected countries meet additional import requirements to prevent the introduction and establishment of *T. absoluta*. Those requirements are described in detail in the attached Federal Order.
- APHIS will prohibit the entry of plants for planting of *Solanum* spp., *Datura* spp. and *Nicotiana* spp., which are also hosts of *T. absoluta*, from affected countries pending the completion of a Pest Risk Analysis (PRA) and the implementation of appropriate mitigation measures.

For additional information regarding this Federal Order, please contact Phillip B. Grove, Plant Protection and Quarantine, Animal and Plant Health Inspection Service at (301) 734-6280, or philip.b.grove@aphis.usda.gov.

/s/ John H. Payne for

Rebecca A. Bech
Deputy Administrator
Plant Protection and Quarantine

1 Attachment:
Federal Order

FEDERAL ORDER

Tomato leafminer, *Tuta absoluta* (Meyrick)

The purpose of this Federal Order is to prevent the entry or introduction of the harmful plant pest, the tomato leafminer, *Tuta absoluta* (Meyrick, 1917), from foreign countries into the United States. The Animal and Plant Health Inspection Service (APHIS) issued Federal Orders in February and May of 2009 that placed additional restrictions on currently admissible tomato fruit (green, pink or red) from the infested countries, Algeria, France, Italy, Morocco, and Spain to prevent the introduction or the dissemination of *T. absoluta* into the United States. This Federal Order updates the list of countries currently infested with *T. absoluta* by adding Albania, Greece, Netherlands, Portugal, Switzerland, and Tunisia. Of those countries, only Greece, Netherlands, and Portugal are currently authorized to export tomatoes to the United States. In addition, the Administrator has determined that it is necessary to prohibit the entry of plants for planting of *Solanum* spp., *Datura* spp. and *Nicotiana* spp., which are also hosts of *T. absoluta*, from all the above countries pending the completion of a Pest Risk Analysis (PRA) and the implementation of appropriate mitigation measures. This Federal Order supersedes all previous Federal Orders relating to requirements for importing hosts of *T. absoluta* from countries that are considered infested with the pest. This Federal Order is effective on February 1, 2010.

This Federal Order is issued pursuant to the plant pest authority provided by the Plant Protection Act (PPA) of June 20, 2000, as amended, Section 412(a), 7 U.S.C. 7712(a), which authorizes the Secretary of Agriculture to prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, article, or means of conveyance, if the Secretary determines that the prohibition or restriction is necessary to prevent the introduction into the United States or the dissemination of a plant pest or noxious weed within the United States.

This action is necessary because the Administrator of APHIS has determined that the introduction and establishment of *T. absoluta* poses a serious threat to the United States agriculture including certain fruits or vegetables grown in the United States. These restrictions to prevent the introduction and establishment of *T. absoluta* are immediately needed and warranted to address plant pest risks associated with currently admissible tomatoes.

T. absoluta is a small moth in the family Gelechiidae, Order Lepidoptera. Other serious insect pests in this family include: the angoumois grain moth, *Sitotroga cerealella*; the pink bollworm, *Pectinophora gossypiella*, and the potato tuber moth, *Phthorimaea operculella*. *T. absoluta* has a high reproductive potential. The adult female is approximately 7 mm in length and lays about 260 eggs during their lifetime. The oval eggs are laid on the aerial parts of their host plants. Depending on environmental conditions the life cycle is completed from 29 to 38 days and there may be 10 to 12 generations per year. The larvae feed, and develop on all plant parts above ground. On

leaves, larvae feed between the epidermal layers causing irregular mines that may later become necrotic. Upon feeding fruits develop galleries and can be infected by secondary pathogens causing fruit rot. Pupation can be either in the soil, on the leaf surface, or within mines.

The moth is widely distributed in South America including; Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Uruguay and Venezuela. In 2007, it was reported in Spain, in 2008 from Algeria, France, and Morocco, and in 2009 from Albania, Greece, Italy, Netherlands, Portugal, Switzerland, and Tunisia. Accordingly, the following countries are currently considered infested with *Tuta absoluta*: Albania, Algeria, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, France, Greece, Italy, Morocco, Netherlands, Paraguay, Portugal, Spain, Switzerland, Tunisia, Uruguay, and Venezuela.

The main host for *T. absoluta* is tomato (*Solanum lycopersicum*), and it is considered a serious plant pest of tomato causing major damage if left untreated. However, it has also been reported to feed on potato leaves (*Solanum tuberosum*) and eggplant leaves (*Solanum melongena*). Nevertheless, since leaves and plant parts are not allowed to be entered with imported fruit, the pest is not likely to be in the pathway on potatoes or eggplant fruit.

In addition to cultivated *Solanum* spp. host plants, this pest also attacks wild hosts of *Solanum* spp., *Datura* spp., and *Nicotiana* spp., such as black nightshade (*Solanum nigrum*), jimson weed (*Datura stramonium*) and tree tobacco (*Nicotiana glauca*), and therefore plants for planting in these genera are considered a pathway for the entry of this pest.

Currently, Algeria, Chile, France, Greece, Italy, Morocco, Netherlands, Portugal, and Spain are the only countries infested with *T. absoluta* that are authorized to export tomatoes to the United States, and tomatoes that are harvested green currently are admissible from these countries. In addition, pink, or red tomatoes are admissible from the Netherlands. APHIS already has regulations in place that enable Chile to export tomatoes, whether green or any stage of ripeness, to the U.S. despite the presence of *T. absoluta* provided they are either fumigated with methyl bromide in an established preclearance program as per requirements listed in 7 CFR 319.56-28(d)(1) or grown in accordance with the systems approach outlined in 319.56-28(d)(2).

Pursuant to this Federal Order, plants for planting of the genera *Datura* spp., *Nicotiana* spp., and *Solanum* spp. (including *Lycopersicon* spp.)¹ are prohibited entry pending a PRA from Albania, Algeria, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, France, Greece, Italy, Morocco, Netherlands, Paraguay, Portugal, Spain, Switzerland, Tunisia, Uruguay, and Venezuela.

In addition, we will require that shipments of tomatoes from Algeria, France, Greece, Italy, Morocco, Netherlands, Portugal, and Spain must meet one of the two following import requirements:

¹ Plants for planting of *Solanum* spp. are already prohibited entry pending a PRA to prevent the introduction of the pathogens, Tomato torrado virus and Tomato severe leaf curl.

- A phytosanitary certificate accompanying the tomato shipment which must also include an additional declaration that the tomatoes in this shipment originate from an area recognized as free of *Tuta absoluta*, as per conditions listed in 7 CFR 319.56-5, **or**
- A phytosanitary certificate accompanying the tomato shipment which must also include an additional declaration that the tomatoes in this shipment have been produced in accordance with an APHIS approved systems approach (as described below) and have been inspected and are free of *Tuta absoluta*.

APHIS approved systems approach for shipments of admissible tomatoes from Algeria, France, Greece, Italy, Morocco, Netherlands, Portugal and Spain **shall** include **all** of the following:

- The tomatoes must be grown in approved production sites that are registered with the National Plant Protection Organization (NPPO) of the country.
- Tomato production sites must include a Pest Exclusionary Structure which must have double self closing doors and have all other openings and vents covered with 1.6 mm (or less) of screening.
- Registered production sites must conduct regular inspections for *T. absoluta* throughout the harvest season and find these areas free of *T. absoluta* evidence (e.g., eggs or larvae). If within 30 days of harvest, two *T. absoluta* are captured inside the greenhouse or a single *T. absoluta* is found inside individual fruit or in a consignment of the fruit, shipments from the production site will be suspended until APHIS and NPPO determine that an appropriate level of risk mitigation has been achieved.
- The NPPO must maintain records of *T. absoluta* captures for one year following the date of the capture for APHIS review. The NPPO must maintain an APHIS approved quality control program to monitor or audit the program. APHIS must be notified when a production site is removed or added to the program. APHIS will conduct routine site visits to monitor the program.

As provided in 7 CFR 305, methyl bromide treatment schedule T101-c-3-1, is an approved treatment for green, red, or pink tomatoes produced in areas infested with *T. absoluta*. This treatment can only be applied in a preclearance program. Of the countries known to be infested with *Tuta absoluta*, only Chile has an established preclearance program. Any country desiring establishment of a preclearance program should contact Plant Protection and Quarantine, APHIS.

/s/ John H. Payne for

Rebecca A. Bech
Deputy Administrator
Plant Protection and Quarantine