

FOR INFORMATION
DA-2012-21
August 14 2012

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

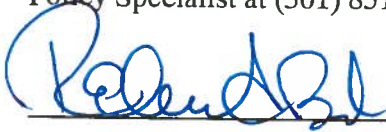
TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

This Federal Order updates and replaces the previous *Tuta absoluta* Federal Order DA-26, dated May 5, 2011, updates the trapping requirements for tomato leafminer, *Tuta absoluta*, for detection and surveillance, and establishes new requirements for tomato imports. Pursuant to this Federal Order, *T. absoluta* host material from affected countries must meet the conditions below. This Federal Order is effective September 13, 2012.

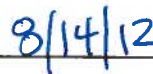
This Federal Order amends the current trapping requirements by reducing the minimum trapping rate of 5 traps per hectare to 2 traps per hectare because new research indicates that a minimum of 2 traps per hectare is sufficient to detect *Tuta absoluta* in the pest exclusionary structures. APHIS will also require that tomatoes imported under a systems approach from *Tuta absoluta*-infested countries not contain vines, stems or calyces to prevent the introduction and establishment of *T. absoluta*. All requirements are described in detail in the attached Federal Order.

APHIS will continue to prohibit the entry of plants for planting of *Solanum* spp., *Datura* spp. and *Nicotiana* spp., which are also hosts of *T. absoluta*, from countries where the tomato leafminer is known to occur 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 Claudia Ferguson, Regulatory Policy Specialist at (301) 851-2352, or via email at claudia.ferguson@aphis.usda.gov.



Rebecca A. Bech
Deputy Administrator
Plant Protection and Quarantine



Date

Attachment:
Federal Order

FEDERAL ORDER

Tomato leafminer, *Tuta absoluta* (Meyrick)

August 14, 2012

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, May and December of 2009, April of 2010, and April and May of 2011 that placed restrictions on admissible tomato fruit (green, pink or red) from the infested countries of Algeria, Belgium, Chile, Cyprus, France, Greece, Israel, Italy, Morocco, Netherlands, Poland, Portugal (including the Azores), Spain (including the Canary Islands and Balearic Islands), United Kingdom (including Bermuda, Cayman Islands, Montserrat, regions of England, Orkney Islands, Scotland, Wales and the Channel Islands), and Panama to prevent the introduction or the dissemination of *T. absoluta* into the United States. Since these countries are currently authorized to export tomatoes to the United States, they must meet additional import requirements for tomato fruit. Specifically, this Federal Order requires tomato fruit from these countries to be imported without vines, stems or calyces unless they meet certain production, treatment and inspection criteria. This Federal Order also amends the current trapping requirements by reducing the minimum trapping rate of 5 traps per hectare to 2 traps per hectare because new research indicates that a minimum of 2 traps per hectare is sufficient to detect *Tuta absoluta* in the pest exclusionary structures.

The APHIS 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 affected 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 **September 13, 2012**.

This Federal Order is issued pursuant to the 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 APHIS Administrator has determined that the introduction and establishment of *T. absoluta* poses a serious threat to 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 tomato fruit and plants for planting.

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 its 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. Larval feeding on fruits causes fruits to develop galleries that can be infected by secondary pathogens causing fruit rot. Pupation can be either in the soil, on the leaf surface, on or under the fruit calyx.

The moth is widely distributed in South America, including Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. In 2006, it was reported from Spain, in 2008 from Algeria, France, and Morocco, in 2009 from Albania, Bahrain, Greece, Italy, Kuwait, Malta, Netherlands, Portugal (including the Azores), Switzerland, Tunisia, and United Kingdom, in 2010 from Cayman Islands, Egypt, Hungary, Iraq, Israel, Lebanon, Jordan, Kosovo, Libya, Qatar, Palestinian Authority (West Bank), Russia, Saudi Arabia, Senegal, Syria, Turkey, and Western Sahara, and the additional European Union countries of Bulgaria, Cyprus, and Germany, and in 2011 from Ethiopia, Iran, Panama and Sudan.

Accordingly, the following countries are currently considered infested with *Tuta absoluta*: Albania, Algeria, Argentina, Austria, Bahrain, Belgium, Bolivia, Brazil, Bulgaria, Chile, Colombia, Cyprus, Czech Republic, Denmark, Ethiopia, Ecuador, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Iraq, Ireland, Israel, Italy, Jordan, Kosovo, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Malta, Morocco, Netherlands, Palestinian Authority (West Bank), Panama, Paraguay, Peru, Poland, Portugal (including the Azores), Qatar, Romania, Russia, Saudi Arabia, Senegal, Slovakia, Slovenia, Spain (including the Canary Islands and Balearic Islands), Sudan, Sweden, Switzerland, Syria, Tunisia, Turkey, United Kingdom (including Bermuda, Cayman Islands, Montserrat, regions of England, Orkney Islands, Scotland, Wales and the Channel Islands), Uruguay, Venezuela, and Western Sahara.

The main host for *T. absoluta* is tomato (*Solanum lycopersicum*), and the insect is considered a serious pest of all plant parts of tomato causing major damage if left untreated. However, it has also been reported to feed on potato (*Solanum tuberosum*) leaves and tuber, eggplant (*Solanum melongena*) leaves and fruit, common bean leaves (*Phaseolus vulgaris*), and sweet pepper leaves (*Capsicum* spp.).

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, Belgium, Chile, Cyprus, France, Greece, Israel, Italy, Morocco, Netherlands, Panama, Poland, Portugal (including the Azores), Spain (including the Canary Islands, and Balearic Islands), United Kingdom (including Bermuda, Cayman Islands, Montserrat, regions of England, Orkney Islands, Scotland, Wales and the Channel Islands) and Western Sahara 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 Belgium, Cayman Islands, Cyprus, France, Israel, the Netherlands, and Panama. 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.) are prohibited entry pending a PRA from Albania, Algeria, Argentina, Austria, Bahrain, Belgium, Bolivia, Brazil, Bulgaria, Cayman Islands, Chile, Colombia, Cyprus, Czech Republic, Denmark, Ecuador, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Iraq, Ireland, Israel, Italy, Jordan, Kosovo, Kuwait, Latvia, Libya, Lithuania, Luxembourg, Malta, Morocco, Netherlands, Palestinian Authority (West Bank), Panama, Paraguay, Peru, Poland, Portugal (including the Azores), Romania, Russia, Saudi Arabia, Slovakia, Slovenia, Spain (including the Canary Islands), Sweden, Switzerland, Syria, Tunisia, Turkey, United Kingdom (all regions), Uruguay, Venezuela, and Western Sahara.

In addition, we will require that shipments of tomato fruit from countries that are infested with *Tuta absoluta* and currently permitted to export tomato fruit to the United States (Algeria, Belgium, Chile, Cyprus, France, Greece, Israel, Italy, Morocco, Netherlands, Panama, Poland, Portugal (including the Azores), Spain (including the Canary Islands and Balearic Islands), United Kingdom (including Bermuda, Cayman Islands, Montserrat, regions of England, Orkney Islands, Scotland, Wales and the Channel Islands)) and Western Sahara must meet one of the three following United States import requirements:

1) Pest-free Area

Tomato fruit must be imported as commercial consignments only.

Each consignment of tomatoes must be accompanied by a Phytosanitary Certificate (PC) of inspection issued by the National Plant Protection Organization (NPPO) of the country of origin bearing the following Additional Declaration (AD): "Tomato fruit in this consignment originate from a pest-free area that meets the requirements of 7 CFR 319.56-5, and are free of *Tuta absoluta*".

2) Systems approach

Tomato fruit must be imported as commercial consignments only. Each consignment of tomatoes must be accompanied by either:

- A Phytosanitary Certificate (PC) of inspection issued by the NPPO of the country of origin bearing the following Additional Declaration (AD): "Tomato fruit in this consignment have been produced in accordance with an APHIS approved systems approach, and have been visually inspected and found free of *Tuta absoluta*." (The APHIS approved systems approach is described below), **or**
- A Re-export PC accompanied by a copy of the PC from the country of origin that includes the following AD: "Tomato fruit in this consignment have been produced in accordance with an APHIS approved systems approach, and have been visually inspected and found free of *Tuta absoluta*."

3) Treatment

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 APHIS, Plant Protection and Quarantine.

An APHIS approved systems approach for shipments of admissible tomatoes from Algeria, Belgium, Cyprus, France, Greece, Israel, Italy, Morocco, Netherlands, Panama, Poland, Portugal (including the Azores), Spain (including the Canary Islands and Balearic Islands), United Kingdom (including Bermuda, Cayman Islands, Montserrat, regions of England, Orkney Islands, Scotland, Wales and the Channel Islands)) and Western Sahara shall include all of the following:

- Tomato fruit must be imported as commercial consignments only.
- Tomato fruit must be imported without vines, stems or calyces.
- The tomatoes must be grown in pest exclusionary structures (PES), for example greenhouses or screen houses that are registered and approved by APHIS and the NPPO of the country of origin.
- The PES must be equipped with double self-closing doors, and any vents or openings in the PES (other than the double closing doors) must be covered with 1.6 mm or less screening in order to prevent the entry of quarantine pests into the PES.
- The PES must be equipped with pheromone baited traps for *T. absoluta* at a minimum rate of 2 traps per hectare or equivalent and with no less than two traps per PES for detection/monitoring.
- All traps must be placed at least two months prior to harvest and be maintained throughout the growing season and be monitored and serviced weekly.
- The registered PES must be inspected by the NPPO or its designee throughout the growing season for evidence of *T. absoluta*. The NPPO must maintain trapping records of *T. absoluta* throughout the growing season for APHIS review.
- If within 30 days of harvest, two *T. absoluta* are captured inside the PES or a single *T. absoluta* is found inside the fruit or in a consignment, shipments from the PES will be suspended until APHIS and the NPPO of the country of origin determine that risk mitigation is achieved.
- The NPPO must maintain an APHIS approved quality control program to monitor or audit the program. A list of approved PESs should be provided to APHIS and must also notify APHIS when a PES is removed or added to the program. APHIS will conduct periodic site visits to monitor the program.
- After harvest, tomatoes must be safeguarded by an insect-proof mesh, screen, or plastic tarpaulin while in transit from the PES to the packing house and while awaiting packing.
- Tomatoes must be packed within 24 hours of harvest in a pest exclusionary packing house.
- When the packing house is packing tomatoes for export to the United States, it must accept tomatoes only from registered PES's.
- Tomatoes must be packed in insect-proof cartons or containers, or covered with insect-proof mesh or plastic tarpaulin for transit to the United States. These safeguards must remain intact until the arrival of the tomatoes in the United States; otherwise the consignment may be refused entry into the United States.