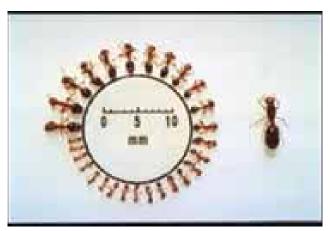


United States Department of Agriculture

Imported Fire Ant Program Manual









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When using pesticides, read and follow all label instructions.



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1

Introduction

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Purpose

Imported fire ants (*Solenopsis invicta* Buren, *S. richteri* Forel, and their hybrid) have become established across the southeastern states and in parts of California and other western States. Imported fire ants (IFA) pose serious threats to people, small animals, crops, and agricultural equipment, and can be moved to new, non-infested areas by hitchhiking on interstate commodities. To prevent artificial movement, the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) regulates the movement of articles that present a risk of spreading the IFA to areas not currently infested. The Federal Imported Fire Ant Quarantine was established May 6, 1958 in an effort to slow or prevent the artificial spread of IFA. Today there are 14 states and the commonwealth of Puerto Rico that are all or partially in the Federal Imported Fire Ant Quarantine regulation.

An interactive map that allows address input and shows date of an area's inclusion in the quarantine is available.

This manual will prepare you to accomplish the following tasks:

- Perform accurate surveys for IFA
- Add new areas to the quarantine
- ◆ Determine the movement (entry) status of regulated and non-regulated articles
- ◆ Facilitate the movement of nursery stock and other regulated articles from regulated to non-regulated areas
- ◆ Take regulatory action when IFA is detected on articles outside the quarantine

Audience

This manual is for use by State and Federal regulatory officers.

Scope

The manual is divided into the following chapters and appendices.

Chapters

- **♦** Introduction
- Survey Procedures
- ♦ Regulatory Procedures

Appendices

- ◆ Appendix A: Contacts for PPQ and State Plant Officials
- ◆ Appendix B: PPQ Forms and Directions
- ◆ Appendix C: Examples of IFA Compliance Agreements
- ◆ Appendix D: Recipe for USDA IFA Bait Attractant Cookies

The Introduction section contains general information on the APHIS IFA program. It identifies the purpose, audience, and scope of the manual. It lists the authority for taking regulatory action and gives an overview of the IFA program, and the distribution, life history and description of IFA.

The Survey section describes procedures for detection and delimiting surveys. In general only detection surveys, using visual techniques, are used for including an area in the IFA quarantine. Delimiting survey techniques, using intensive bait attractant surveys to determine location of colonies, are presented as guidelines for those involved in detection or eradication of small isolated infestations. This section also discusses when to add an area to the quarantine.

The Regulatory section contains directions for regulating the movement of IFA:

- ◆ Inside the quarantine
 - ❖ Identifying, treating and certifying regulated articles
 - ❖ Issuing compliance agreements, including inspecting nurseries under compliance and how to get a "stamp"
- Leaving the quarantine
 - ❖ Determining the movement status of articles at inspection locations
 - Inspecting commodities for IFA at inspection stations and at destination
 - Handling IFA interceptions or violations at transit inspection locations and at destination
 - ❖ Handling IFA infestations outside the quarantine in the environment
- ◆ Policing the quarantine
 - Blitzes, investigations, identification, regulatory incidents, incursions

Also included in the Regulatory section is information on issuing the following forms:

- ◆ Certificates (PPQ Form 540)
- ◆ Limited Permits (PPQ Form 530)
- ◆ Emergency Action Notification (PPQ Form 523)
- ◆ Reports of Violation (PPQ Form 518)
- ◆ Specimen Determination Form (PPQ Form 391)

The Appendices include the following information:

- Federal and State contacts for the IFA program
- ◆ Examples of forms
 - Model compliance agreements
 - Permits and other forms
- ◆ Guidelines for conducting IFA inspections at nurseries
- ◆ List of acceptable residue levels for program chemicals
- ◆ USDA bait cookie recipe
- ◆ SPRO reporting form

Authority

Enabling legislation provides the authority to carry out the mission of protecting American agriculture from plant pests. Legislative Acts are the fundamental authority granted by Congress to the Secretary of Agriculture to promulgate regulations to protect American agriculture. The regulatory authority for taking actions listed in this manual is contained in the following:

- ◆ Plant Protection Act of 2000
- Code of Federal Regulations (CFR)
- Federal Orders
- ♦ Federal Notices

Related Documents

- ◆ 7 CFR 301.81
- ◆ USDA, APHIS, PPQ Treatment Manual, Schedules for Domestic Products
- ◆ "Imported Fire Ant: Quarantine Treatments for Nursery Stock, Grass Sod, and Related Materials" (APHIS 81-25-001 updated Jan 2015)
- ◆ "Beekeepers 2006: Don't Transport Imported Fire Ants" (Program Aid No. 1859)
- Questions and Answers: Moving Baled Hay from Areas under Quarantine for Imported Fire Ant

Distribution

Originally from the Paraguay River floodplain in South America, both species of IFA were accidentally introduced to the United States by the 1930's through the port of Mobile, Alabama. As of 2017, the red imported fire ant, *Solenopsis invicta* infests portions or all of Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and Puerto Rico. In the United States, the black imported fire ant, *S. richteri* is only reported from northeastern Mississippi, northwestern Alabama, and western Tennessee. The *S. invicta* x *richteri* hybrid has typically been found from the middle of both Mississippi and Alabama northward, in eastern Tennessee, and the northwestern corner of Georgia.

Unreported infestations and infestations undergoing eradication may be encountered outside these quarantined areas. Refer to the online Imported Fire Ant Quarantine Map for the most current information.

Life Cycle

The IFA life cycle begins when mating flights of reproductive males and females occur in a short period of time during specific weather conditions. Mating flights frequently occur in spring and fall after a rain event, but will often take place whenever the temperature is between 24 and 33°C (75 and 91°F), humidity is 80% or higher, and the wind is low. The newly mated queen lands, loses her wings, excavates a simple nest consisting of a single one to four inch deep tunnel and seals herself in. Her first batch of 10 to 25 eggs is produced within 28 hours of mating. Without any workers to assist, the queen rears her first batch alone and feeds the larvae from regurgitated liquids.

The first adult workers (minims) emerge about a month after the queen starts her nest. With workers to gather food, protect the nest, tend the brood, and further the nest construction, the queen devotes her time to egg production (75-200/day). At three months, the small nest should have many chambers, and the colony is composed primarily of minor workers and a few of the first major workers. Some reproductive ants (alates) start to appear in the colony by seven months. Also by this time, the mound should be well developed containing between 6,500 to 14,000 workers, with 3% majors. The mound will continue to grow as the colony increases in size with maturity usually reached in two or three years with 100,000 or more workers. IFA do not hibernate, but do decrease activity in cold weather causing brood production to slow or stop depending on environmental severity. Cooler regions thus may have longer colony development times.



Figure 1-1 IFA Queen with Workers Attending Her and Her Brood



Figure 1-2 Left to right: Alates Preparing to Fly; Newly Mated Queen, Minims and Brood (ca 40 days old); Incipient Mound (ca 3-5 months old); Mature Mound (1-3 years old

Description

The following is a description of IFA castes and life stages:

Reproductives

Queens are about 9 mm long with *S. invicta* colored light reddish brown, *S. richteri* dark brown to black with an orange yellow spot dorsally on the gaster, and hybrid queens either looking like one of the parent species or a blend of the two. Males are dark colored and have a much smaller head than queens. Both sexes have wings before mating; queens drop their wings prior to nest building.

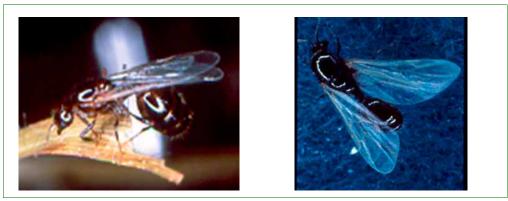


Figure 1-3 Left: Reproductive Alate (winged) Female; right: Reproductive Alate Male

Workers

Workers range from 1.6 mm (minims) to 6 mm (majors), are wingless, possess stingers, and have shorter rounder abdomens compared to the elongate abdomens of the reproductives. Worker coloration is similar to queen coloration, and the larger *S. richteri* workers may also have a pale orange yellow spot on the gaster. Worker ants are the most commonly observed life stage.

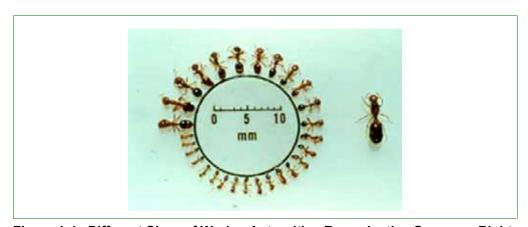


Figure 1-4 Different Sizes of Worker Ants with a Reproductive Queen on Right

Brood

Eggs, larvae, and pupae, collectively called brood, are frequently found warming close to the surface of the mound in the morning. These immature stages cannot move unassisted and are thus reliant on adults to feed and tend to them.

Eggs

Eggs are white in color and at 0.22 mm each look somewhat like finely ground meal.

Larvae

Larvae are dirty white in color, legless, and kidney-shaped with recurved hairs like tiny Velcro®. As they grow, body segments and mouth parts appear. The larval stage of major workers and reproductives takes one or more weeks longer to mature than that of minor workers.

Pupae

Pupae are pale, shiny white in color and about the same size as they will be as adults. At this stage, the adult features of the ant are very distinct.



Figure 1-5 From left to right: egg, larval instars, pupa (next to last); adult worker

Conventions

Conventions are established by custom and are widely recognized and accepted. Major conventions used in the manual follow.

Advisories

Advisories are used throughout the manual to bring important information to the user's attention. Please carefully review each advisory. The definitions coincide with the American National Standards Institute (ANSI) with the goal of making the warnings easy to recognize and understand, thus limiting the human and dollar cost of foreseeable errors and accidents, and are in the format shown below.

DANGER

DANGER indicates imminent risk of death or serious injury.

WARNING

WARNING indicates possible risk of serious injury.

A CAUTION

CAUTION indicates minor to moderate risk of injury.

NOTICE

NOTICE alerts readers of important information or Agency policy.

SAFETY

SAFETY indicates general instructions or reminders related to safety.

Boldface

Boldface type is used to emphasize important words throughout the manual. These words include but are not limited to: **cannot**, **do not**, **does not**, **except**, **lacks**, **must**, **neither**, **never**, **nor**, **not**, **only**, **other than**.

Bullets

Bulleted lists indicate that there is **no** order of priority to the information being listed. Bulleted lists should **always** be in alphabetical order.

Change Bars

A black change bar (see left margin) is used to indicate a change appearing on a revised page. Unfortunately, change bars do not always appear when text is merely deleted. Delete change bars from the previous update when you revise the chapter or appendix.

Chapters

This manual contains the following chapters: Introduction, Survey Procedures, and Regulatory Procedures.

Contents

Every chapter has a table of contents (mini TOC) listing only the first- and second-level headings within the chapter.

Control Data

Control data are located at the top and bottom of each page to help manual users keep track of where they are in the manual and to be aware of updates to specific chapters, appendixes, etc. At the top of each page is the chapter title and first-level heading for that page. At the bottom of each page is the transmittal number (month/year/issue or edition number), manual title, and page number.

Examples

Examples are used to clarify a point by applying to a real-world situation. Examples **always** appear in a box as a means of visually separating them from the other information contained on the page.

EXAMPLE

Examples are graphically placed boxes within the text as a means of visually separating information from other information contained on the page. Examples **always** appear in a box like this.

Footnotes

Footnotes comment on or cite a reference to text and are referenced by number. The footnotes used in the manual include general text footnotes, figure footnotes, and table footnotes.

General text footnotes are located at the bottom of the page after a thin green line half the width of the page and flow numerically throughout a chapter.

When space allows, figure and table footnotes are located directly below the associated figure or table. However, multi-page figures and tables or tables or figures covering the entire length of a page **cannot** accommodate footnote numbers and footnote text on the same page. If a table or figure continues beyond one page, the associated footnotes will appear on the page following the end of the figure or table. Each table's footnotes are individually numbered, e.g., a chapter may have three tables and within each table is a single footnote, then each footnote will be indicated with the number 1.

Heading Levels

Within each chapter there are four heading levels. The first-level heading is indicated by a horizontal line across both the left and right columns with the heading language across the left and right columns directly underneath. The body text after a first-level heading is located inside the margined text area, one line after the heading language. The second- and third-level headings are inside the margined text area with the body text following underneath. The fourth-level heading is inside the margined text area followed by a period and leading into the text.

Hyperlinks to Tables, Figures, and Headings

Figures, headings, and tables are cross-referenced in the body of the manual and are in hypertext (blue) font.

EXAMPLE

See Table 1-1 on page 1-12 to determine how to report problems with the Imported Fire Ant Program Manual.

Indentions

The manual indents content information, lengthy quotes, and entry requirements summarized from CFRs, import permits, or policies.

Italics

Publication names and scientific names are italicized throughout the manual.

Numbered Lists

Numbered lists are used to indicate the specific order in which the information listed is to be followed.

Numbering Scheme

A two-level numbering scheme is used to indicate pages, tables, and figures. The first number represents the chapter. The second number represents the page, table, or figure. This numbering scheme allows for easier updating and adding pages without having to reprint an entire chapter. Dashes are used in page numbering to differentiate page numbers from decimal points.

Transmittal Number

The transmittal number contains the month, year, and a consecutively issued number (beginning with -01 for the first edition and increasing consecutively for each update to the edition). The transmittal number is changed **only** when the specific front matter, chapter, or back matter is updated. If **no** changes are made to a specific chapter, the transmittal number for that chapter remains unchanged. The transmittal number changes for the entire manual **only** when a new edition is issued or changes are made to the entire manual.

EXAMPLE

06/2018-01 is the transmittal number for this update and is located in the control data in the footer area of the pages in this volume.

06 is the month the manual/update was issued. 2018 is the year the manual/update was issued. 01 is the chapter's edition number.

Using the Manual

Review the TOC of the manual to get a feel for the scope of covered material. Use the TOC in each chapter (mini TOC) to find the needed information. If the TOC or mini TOC are **not** specific enough, turn to the index to find the topic and corresponding page number.

Reporting Issues With or Suggestions for the Imported Fire Ant Program Manual

Use Table 1-1 to report problems, disagreements, or improvements that directly affect the contents of the manual.

Table 1-1 Reporting Issues With or Suggestions for the Imported Fire Ant Program Manual

If you:	Then:
 Are unable to access the online manual Have a suggestion for improving the format (layout, spelling, etc.) 	CONTACT PPQ Manuals Unit at 240-529-0350 or by email bruce.n.attavian@aphis.usda.gov
 Disagree with a policy or procedure Have an urgent situation requiring an immediate response 	CONTACT ronald.d.weeks@aphis.usda.gov

Manual Updates

The online Imported Fire Ant Program Manual attempts to capture the most up-to-date information. The manual is electronically issued on the APHIS Web site.

Chapter

Survey Procedures

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Area Detection Survey General Survey Pattern General Survey Technique 2-3 Rural Areas Urban and Suburban Areas **Delimiting Survey** 2-6 Supplies 2-6 Procedure Identification 2-8 Reporting of Survey Finding 2-9 When to Quarantine an Area or County 2-10 Guidelines for Deregulation 2-11

Area Detection Survey

The purpose of the detection survey is to find new naturally occurring infestations beyond the regulated or generally infested area. The regulated area may be expanded to include those areas where imported fire ant (IFA) has moved through natural spread. There is limited information on natural spread of IFA. Early field studies indicated that most newly mated queens landed less than one mile from their origin, but in extreme cases they could fly or be carried by wind currents for 7-10 miles (Markin et al. 1971). Vogt et al. (2000) studied flight capability in the laboratory through flight speed, energy consumption, etc. and determined that without wind, newly mated queen flights were limited to less than 3 miles. Taking into account natural and human-assisted spread, Hung and Vinson (1978) estimated that in Texas between 1953 and 1978, IFA moved approximately 30 miles per year. Keep in mind, that as IFA reach the limits of their range, natural spread slows due to limiting environmental factors.



Figure 2-1 IFA Mound at the Base of a Tree in an Urban Landscaped Area

The most common method of detection is by visual survey. This involves scanning rights of ways for fire ant mounds while driving and then making planned stops to get out and look more closely for IFA mounds. Prime areas to survey include open areas such as pastures, parks, pipelines, and power line rights of way. Also, look at sites of new soil excavation and work sites such as malls, new roads, apartment complexes, etc. Other means of locating new infestations include contacting highway maintenance district offices, county extension agents, consulting entomologists, pest control operators, landscape/yard services, utility repair services, livestock industry groups, etc. In areas of greater concern, such as nurseries, warehouses, docks, or railroad yards, detection surveys should be more intensive visual surveys, possibly supplemented with trapping using baits and attractants.



Figure 2-2 IFA Mounds in a Pasture

Surveys will be conducted by state cooperators as outlined in cooperative agreements with PPQ. Decide the intensity and frequency of your survey by determining the distance of the survey point from known areas of infestation and the volume of commerce between the point of inspection and the infested area as well as the amount of time since the last survey. Surveys are best conducted during mid- to late-spring and/or early- to mid-fall, depending on the geographic location. Choose days (or times of the day) with air temperatures above 65°F and below 90°F. Recent rainfall usually makes the mounds more visible.

General Survey Pattern

With modern tools, we can make survey blocks easier than in the past. However, picking a point on a map with GPS tools will not take away from the need to be selective in survey sites—it's useless to survey a paved parking lot or a forest.

Survey the leading edge of quarantine every 2-3 years as resources allow.

General Guidelines

- ◆ **Do not** survey when there has been no rain for several weeks
- Do survey when rain has fallen within previous few days
- ◆ Do survey when temperatures are between 65-90 °F
 - On cooler days, sunny is best
 - On warmer days, cloudy is best
- Do talk to county extension agents—they may know where new IFA populations are located

2-3 Years Since Last Survey

- 1. Use grid of 5x5 miles.
- 2. Survey about 25 miles beyond last known IFA infestation.
- 3. If IFA are found at 25 mile mark, continue another 5 miles until no IFA are found.

4+ Years Since Last Survey

- 1. Use grid of 10x10 miles.
- 2. Survey about 50 miles beyond last known IFA infestation.
- 3. If IFA are found at 50 mile mark, continue another 10 miles until no IFA are found.

General Survey Technique

While driving to grid locations, carefully and safely scan both road shoulders for mounds. If weather has been very hot or dry prior to survey, or if grass is tall, mounds may not be visible from a vehicle. Make stops at predetermined intervals per the grid set up and walk one quarter-mile along each side of the road to visually survey for mounds. Select pastures, orchards, open lands, or other suitable habitat for these stops (along stream banks and ponds or wherever water has been standing). Also, survey any locations within the sector considered highly suspect because of receipt of regulated articles (see areas listed in rural and urban/suburban area sections).

- 1. Walk through the area looking for mounds, small piles of dirt, or soil disturbance in a trail pattern.
- 2. Poke the soil with a shovel or stick.
 - ❖ IFA will "boil" out by the hundreds when disturbed
 - ❖ If the mounds are very small, only 5-50 ants will come out (below left)
 - ❖ If the weather is cold (<50 °F) or hot and dry (>90 °F and no rain for weeks), ants will be very deep in the soil and you may have to dig 6-12" down to find ants; in addition the mounds may be flat and look "dead" (below right)



Figure 2-3 Very Small IFA Mound (left); Flat IFA Mound (right)

Mark the roads on your survey map that you have surveyed and note locations where any IFA mounds are detected. Also note how many active mounds are within each location. This can be done in table format, marking on a survey map, or with a GPS unit.

Rural Areas

In addition to pre-determined survey stops as noted in the general techniques, make survey stops along the way at any location that has received regulated articles or is likely to receive such articles. Examples of regulated articles in rural areas include the following items:

- ◆ Hay
- ♦ Nursery stock
- ◆ Sod
- ◆ Soil moving equipment

These locations often receive regulated articles:

- ◆ Commercial cattle feeding operations
- Golf courses

- ♦ Horse farms
- ◆ Nurseries and retail stores
- Sites under construction
- ◆ Truck and railroad shipping yards

At these sites, walk about one half-mile along on both sides of the road or through the location if the owner has granted permission. Mark the roads on your survey map that you have surveyed and note locations where any IFA mounds are detected. Also, note how many active mounds are within each location. This can be done in table format, marking on a survey map, or with a GPS unit.

Urban and Suburban Areas

Plan to survey the following areas:

- City/county parks and public recreation areas
- ◆ Locations receiving or likely to receive regulated articles, such as new malls/shopping centers, apartment complexes, landscaped office buildings, etc. Pay close attention to areas next to curbs and buildings, around water sources, south side of slopes/hills, etc.
- ◆ Natural gas and high voltage power line rights of way
- Open areas along streams
- Railroad rights of way
- Streets that transect urban and suburban areas

At these sites, walk about one half-mile along on both sides of the road or through the location if the owner has granted permission. Mark the roads on your survey map that you have surveyed and note locations where any IFA mounds are detected. Also, note how many active mounds are within each location. This can be done in table format, marking on a survey map, or with a GPS unit.





Figure 2-4 IFA Mounds in Urban Hardscaped Areas

Delimiting Survey

Delimiting surveys using bait/attractant traps can be used in small area control programs and state eradication programs where IFA have moved through man-assisted or artificial spread. While the Federal IFA Quarantine Program does not provide for control or eradication programs, suggestions for delimiting survey are provided here for information.

Supplies

You will need these materials for the delimiting survey:

- Map of block or site to be surveyed (digital, actual, or hand drawn with landmarks) - mark and number trap locations on grid pattern as specified below
- ◆ 50 mm polystyrene plastic dishes with tight fitting lids (such as Gelman® dishes) to secure ants without use of an additional enclosure. Mark tops and bottoms of dishes with trap location number.
- ◆ Attractant bait The following baits are examples of IFA attractants (others can be used as well):
 - Olive oil
 - Peanut oil
 - Corn oil
 - Soak an index card, filter paper, cotton cosmetic pad (discount store), cotton ball, or something similar cut to fit the dish with enough oil to saturate the substrate, but not run off. You can do this before going to the site, but do not allow the material to sit in a hot car for any extended period of time.
 - ❖ USDA IFA bait attractant cookie (recipe in Appendix D)
 - Corn chips
 - Canned/potted meat
 - Pecan cookie pieces
 - Cut or break solid attractants to fit in dish. Use about 1 g. of chosen material (about the diameter of a penny/dime).
- ◆ Flags use to mark trap locations or corners of blocks as necessary
- ◆ Gloves







Figure 2-5 USDA Cookie Bait in a Modified Gelman® Dish; Modified Gelman® Dish with Lid; Various Traps/Containers for Bait Surveys

Procedure

The trapping grid or transect can be larger or smaller depending on your need and estimated age of the ant population being surveyed. Very small, new colonies (those usually too small to detect visually) will only forage within a few feet of their nest, while older, larger colonies (more than a year old) can forage more than 39 feet from their nest and cover a territory of 537 to 968 square feet (50-90 square meters).

Plan to place bait traps in a grid pattern over your survey area; prepare the grid map based on the information above.

- ◆ Large Areas > 10 acres (with some visible mounds): Place a trap every 200 ft (about 4 traps per acre).
- ◆ Small Areas < 10 acres (with no to few visible mounds): Place a trap every 50 ft (about 25 traps per acre).
- ◆ Irregular areas or specialty areas such as landscaped commercial areas may require use of a transect or other irregular bait placement, rather than a grid. Again, depending on the size of the area to be trapped, use a bait spacing of 50-200 ft. You may need to target newly landscaped areas and place baits within those areas.
- ◆ If you need any suggestions on how to trap a unique area, please contact your PPQ State Plant Health Director for assistance.

Place traps with numbers corresponding to your prepared map. Leave the traps in place for approximately 1 hour.

Place traps when air temperatures are above 65 °F and below 90 °F.

Collect the traps by simply putting top on dish and closing firmly.

Collect all traps and flags from an area when completed (leave corner block flags if necessary).

Back at the office/lab, freeze ants or place each sample in alcohol (labeled properly) until identification can be made. However, if you plan to use the InvictDetectTM discussed below in Identification section, **do not** place ants in alcohol; they can be frozen for this test, but not stored in alcohol.

If ant samples are collected in response to a potential violation, please see Chapter 3 on additional procedures.

Identification

There are several keys available for use to identify *Solenopsis* species:

- 1. Hung, A.C.F., M.R. Barlin and S.B. Vinson. 1977. Identification, distribution, and biology of fire ants in Texas. Texas Agric. Exp. Stat. B-1185, October 1977. 24 pp.
- 2. Trager, J.C. 1991. A revision of the fire ants, Solenopsis geminata group (Hymenoptera: Myrmicinae). J. New York Entomol. Soc. 99: 141-198.
- 3. Wojcik, D.P., W.F. Buren, E.E. Grissell, and T. Carysle. 1976. The fire ants (Solenopsis) of Florida. Fla. Dept. Agr. & Consumer Serv., Div. Plant Ind. Entomology Circular No. 173., November 1976. 4 pp.

There are several online sites that provide taxonomic characteristics and/or ID keys, including:

- 1. Antkey
- 2. Pacific Invasive Ant key
- 3. Ants of the Southeastern U.S.
- 4. eXtension website for Imported Fire Ant

For field identification of red imported fire ants, there is the newly developed InvictDetectTM Immunostrip field kit available from Agdia® Inc; available Fall 2017. This is a lateral flow immunoassay test that can be used in the field to identify red imported fire ants. It will not identify black IFA at this time, but will identify many hybrids as well. Each test kit uses 3-5 worker ants that must be thoroughly macerated with a buffer in a vial. A test strip is then placed in the resulting solution and allowed to develop over 10-30 minutes. A single line indicates the test strip is active, and 2 single lines indicate a positive for red IFA. The test uses venom proteins to identify the ants, thus the need to thoroughly grind up the worker ants. All materials for the test are included in the kit except gloves and forceps for collecting ants. We hope to be able to identify black IFA in a similar manner in 2019.

Samples may need to go to USDA for identification/confirmation if they are first in state or first in county records. You can contact your state agricultural university/extension office for questions regarding identification, as well as the state department of agriculture or the State PPQ office.

Reporting of Survey Finding

The State Plant Regulatory Officer (SPRO) will do the following:

- 1. Provide semi-annual and annual (per cooperative agreement) IFA reports to the State Plant Health Director (SPHD). See Figure B-8 on page B-24 for an example of a report record.
- 2. Submit survey data for entry into NAPIS or IPHIS by the State Survey Coordinator as appropriate.
- 3. Submit changes in the IFA quarantine area based on survey results as needed. Submit these requests with an original signature on official letterhead with attached descriptions and maps to the PPQ SPHD by December 1 of each year so that this may be reported to NOM and NPM by December 31.

The State Plant Health Director will do the following:

- 1. Review cooperative agreement work plans and reports. Timely reports are required to approve federal reimbursement for work performed.
- 2. Provide the National Operations Manager (NOM) with semi-annual and annual reports covering regulatory, survey, and control activities.
- 3. Submit changes in the IFA quarantine to the NOM by December 15 of each year. The NOM will then submit changes to the National Policy Manager by December 31.

When to Quarantine an Area or County

7 CFR 301.81-3(a) states that the APHIS Administrator "will quarantine each State or each portion of a State that is infested" with IFA. When IFA are found in areas that were previously not infested, the State should implement a state quarantine of that area and forward a description of that area to the PPQ State Plant Health Director (SPHD). The SPHD in turn will notify the appropriate PPQ Field Operations staff of these changes which will be published first as a Federal Order and ultimately as an Interim Rule in the Federal Register. This change to the federal quarantine will be written to parallel the State quarantine. Ideally, this process should be done annually. In general, an area should be added to the IFA Quarantine if colonies have been present for three consecutive years, indicating reproducing populations. An area should be immediately quarantined if IFA are found on articles leaving an area that is **not** within the IFA Quarantine.

Decisions regarding when and where to quarantine areas for the IFA Quarantine are often complex, and should be determined by consensus between State and Federal officials. There is no numerical threshold, such as the number of IFA colonies per acre, or other measure that definitively determines if an area should be considered generally infested. Among the questions when deciding if an area should or should not be quarantined are:

- 1. How long have IFA been in the area?
- 2. Was the area infested by the natural spread of IFA or by human-assisted means? If spread is by humans, has the pathway been shut down or can more incursions be expected?
- 3. Can you delimit the area where IFA have become established?
- 4. Can the IFA be successfully eradicated? If so, how long will it take and how much will it cost?
- 5. How big is the risk of IFA moving out of the area if that area is not quarantined?
- 6. Have the people who will be affected within the area being considered for quarantine been informed of what will be expected of them for compliance with the quarantine regulations?

Guidelines for Deregulation

- 1. Areas that would be considered for deregulation would be those areas that are not bounded by IFA infestations on all sides (i.e. the northern/western boundaries of the IFA quarantined areas or areas that are islands of infestation that are under regulation such as NM).
- 2. Three consecutive years of negative survey results following the Imported Fire Ant USDA APHIS Program Manual's survey, bait, and environmental guidelines. Global position coordinates have to be provided for documentation of negative and positive surveyed areas.
- 3. All areas selected for deregulation are required to have a 3-mile buffer zone from the nearest infestation. (i.e. a deregulated area of 1 sq. mile would have a 3 mile regulated buffer along the deregulated area on infested sides).
- 4. The State Plant Regulatory Official would submit a request for areas of deregulation to their State Plant Health Director outlining the boundaries of the requested areas to be considered for deregulation with all the supporting survey documentation.
- 5. Individual nurseries shall **not** be declared deregulated within a quarantined area.

Survey ProceduresDelimiting Survey

Chapter

3

Regulatory Procedures

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Introduction

The Plant Protection Act of 2000 (Statute 7 USC 7701-7758) provides the authority to implement emergency quarantine action. This provision is for interstate regulatory action only; intrastate regulatory action is provided under state authority. State departments of agriculture normally work in conjunction with federal actions by issuing their own parallel hold orders and quarantines for intrastate movement.

If the U.S. Secretary of Agriculture determines that an extraordinary emergency exists and that the measures taken by the State are inadequate, USDA can execute intrastate regulatory action provided that the governor of the State has been consulted and a notice has been published in the Federal Register. If intrastate action cannot or will **not** be taken by a state, then PPQ may find it necessary to quarantine an entire State.

The Federal Imported Fire Ant Quarantine (7CFR 301.81) provides the authority to conduct regulatory activities. In addition to the Federal Quarantine, individual States have established state quarantines to control intrastate movement of regulated material in accordance with federal regulations.

General Regulatory Information

Principle Regulatory Activities

Regulatory activities are directed at implementing and enforcing quarantine provisions governing movement of regulated articles which could result in the human-assisted dispersal of imported fire ants. Typical activities include:

- 1. Identifying persons and establishments whose business or personal activities could result in the further dispersal of *Solenopsis invicta*, *S. richteri* and *S. invicta x richteri* hybrid.
- 2. Contacting by regulatory visit, mail, email, and/or telephone those identified persons or establishments to explain quarantine provisions.
- 3. Determining if provisions of the quarantine (e.g., treatment or processing) may be applied to permit the person or establishment to move regulated articles out of the quarantined area.
- 4. Conducting inspections of regulated articles and monitoring procedures to mitigate pest risk on a shipment by shipment basis, as needed.
- 5. Issuing Limited Permits (PPQ Form 530) to allow movement of regulated articles out of the quarantine area to a specific destination for further processing or treatment.
- 6. Issuing Certificates (PPQ Form 540) to allow movement of regulated articles out of the quarantined area when they have been treated or processed in such a manner that they no longer present a risk for further dispersal of imported fire ants.
- 7. Entering into a Compliance Agreement at the discretion of the inspector with a person or establishment that can demonstrate their ability to meet the provisions of the quarantine.

- 8. Conducting periodic physical site visits to monitor the activities of those persons or establishments placed under a Compliance Agreement to observe and assess treatments or other processes and activities. The periodicity of monitoring is based on risk assessment of the product and the business or individual under compliance.
- 9. Conducting and/or assisting with investigations of suspected violations of the quarantine as necessary and appropriate.
- 10. Recording information about contacts, visits, and compliance agreements and maintaining data on persons or establishments affected by the quarantine in an approved APHIS database.
- 11. Reporting results of regulatory activities to management officials.
- 12. Conducting special regulatory operations.
- 13. Researching local and interstate trade movement to determine pathway risk.

Investigations and Violations

When a potential violation of the Federal IFA quarantine is suspected (IFA found on a regulated item outside the quarantined area, or lack of certification accompanying regulated items outside the quarantined area), State and/or Federal regulatory personnel in the affected state(s) will conduct initial preliminary investigations to determine if a violation of the quarantine has occurred. These investigations will also attempt to identify and trace the source and destination of any other related shipments of regulated materials that have occurred. Preliminary investigations by State and Federal regulatory personnel in the affected state(s) will allow management to determine whether the situation warrants additional formal investigation by USDA-APHIS-Investigation and Enforcement Services (IES) personnel.

In general, penalties for violating the IFA quarantine are tiered. The first instance of an IFA regulatory violation by a nursery will result in a Letter of Information (LOI), particularly if the nursery was making a good faith effort to follow the regulations. This letter re-iterates the regulations and the requirements that the nursery or establishment must follow. A second violation by the same establishment may result in their compliance agreement being revoked and any "stamps" being confiscated, and thus not allowing them to ship outside the quarantined area for a defined period of time or until the deficiencies which led to the violation are corrected. Continued violations or very egregious violations can result in financial penalties as allowed by the Plant Protection Act.

Outreach

Outreach is a vital component of every aspect of the IFA program. Without public support and cooperation, the efficacy of the program is very limited. Regulatory personnel should utilize opportunities during general regulatory activities and special regulatory operations to inform the public about the IFA program and enlist their cooperation.

Special Regulatory Operations

Another aspect of regulatory activity is to identify and conduct special operations to serve as deterrents and quality control for movement of regulated articles. These operations also give unique opportunities to inform the public of the pest and related regulations. The operations may be conducted with state cooperators. Special regulatory operations may include:

- Rest stop and weigh station operations to monitor quality control.
- Special focus operations to concentrate regulatory activities in a smaller area of interest.

Any special regulatory operation should be coordinated with Tribal governments and Federal, State, and local authorities including, but not limited to: Tribal, State, and local police departments, state departments of agriculture, state departments of transportation, and others as appropriate.

Issuing an Emergency Action Notification

After an initial suspect positive detection in a new area outside a quarantined area, an Emergency Action Notification (PPQ Form 523) may be issued to place a hold on regulated material or facilities where regulated material may be found pending positive identification by a USDA APHIS PPQ recognized authority.

An Emergency Action Notification (EAN) may also be issued within the quarantine area to order a hold, treatment, destruction, or other safeguarding action for a regulated material due to a potential pest risk. The EAN may be completed by hand in the field, but must be transferred into the EAN database within 14 days. Authority for EAN issuance is to be determined by each state's command structure.

Regulatory Forms

Templates or examples of regulatory forms are located in the Appendices and discussed later in this chapter:

- Compliance Agreements
- ◆ Letter of Information (LOI)

- ◆ PPQ Form 518 (Report of Violation)
- ◆ PPQ Form 523 (Emergency Action Notification)
- ◆ PPQ Form 530 (Limited Permit)
- ◆ PPQ Form 540 (Certificate)
- Resource materials

Specific Regulatory Information for Imported Fire Ant Quarantine

Regulated Articles

Regulated articles for IFA include the following and require a certificate or limited permit for interstate movement out of a regulated area:

- ◆ Baled hay and baled straw stored in direct contact with the ground
- ◆ Imported fire ant queens and reproducing colonies of imported fire ants (requires an insect permit PPQ-526 available through the PPQ Permits section and will not be covered here)
- ◆ Plants and sod with roots and soil attached, except plants maintained indoors in a home or office environment and not for sale
- ◆ Soil, separately or with other articles, except potting soil that is shipped in original containers in which the soil was placed after commercial preparation
- Used soil-moving equipment, unless removed of all noncompacted soil;
 and
- ◆ Any other article or means of conveyance when:
 - An inspector determines that it presents a risk of spread of the imported fire ant due to its proximity to an infestation of the imported fire ant; and
 - ❖ The person in possession of the product, article, or means of conveyance has been notified that it is regulated under this subpart.

Quarantined Areas

A list of the quarantined areas can be found in 7CFR 301.81-3 and associated Federal Orders which can be found on the USDA-APHIS-PPQ Imported Fire Ant page. A static map and an interactive map can also be found on the above mentioned website.

The quarantine area includes all or part of 14 states and Puerto Rico: all of Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina and Puerto Rico; parts of Arkansas, California, New Mexico, North Carolina, Oklahoma, Tennessee, Texas, and Virginia.

Treatments and/or Management Practices for Regulated Articles

Approved treatments are available for many of the regulated articles. Certification for movement is based on proof of treatment (compliance agreement/observation of treatment/treatment records). Best management practices (BMPs) have been developed for a few regulated articles to assist in sanitizing the article/commodity; the articles may be certified for movement based on inspection. The final bullet of regulated articles above covers any means of conveyance that presents a risk of moving IFA. These articles are regulated and certified on a case-by-case basis, based on handling, treatment and/or inspection.

Approved regulatory treatments are determined by program management and approved through the APHIS-PPQ Treatment Manual process. Detailed specifications for treatments can be found in the current edition of the PPQ Treatment Manual (D301.81-10).

Certifying Regulated Articles

A certificate may be issued for the interstate movement of a regulated article (7CFR 301.81-5) if the article meets any one of these conditions:

◆ Has been grown, produced, manufactured, stored or handled in such a manner that would prevent infestation or destroy all life stages of the imported fire ant;

or

◆ Has been treated in accordance with part 305 as cited by 7 CFR 301.81-5 (see PPQ Treatment Manual section D301.81-10);

or

◆ Is free of an imported fire ant infestation, based on plant inspector's visual examination of the article;

or

◆ If the article is containerized nursery stock, it has been produced in accordance with 7 CFR 301.81-11 (containerized stock may be treated per 7 CFR 305 or produced in accordance with 7 CFR 301.81-11: IFA Free Nursery Program).

Refer to Table 3-1 on page 3-7 to determine certification options for moving IFA items.

Regulated Article	Available Treatments	Management Options	Certification Options
Specifically regulated (7 CFR 301.81-2 a-e)	Approved treatments - nursery stock/sod	Under compliance agreement	Issue annual certificate (PPQ Form 540, rubber stamp, other certificate)
		Not under compliance agreement	Inspect and issue limited permit (PPQ Form 530)
	No approved treatments - baled hay/straw		◆Inspect and issue limited permit (PPQ Form 530)
		-	◆Case by case - contact local State Plant Regulatory Official or USDA, APHIS, PPQ Official
	Approved treatments not feasible - bulk soil	-	Case by case - contact local State Plant Regulatory Official or USDA, APHIS, PPQ Official
Not specifically regulated (7CFR 301.81-2 f)	No approved treatments - apiary equipment	Best management practices followed	◆If bees going to CA check CDFA website for guidance and paperwork required
			◆Inspect and issue certificate/limited permit (PPQ Form 530)
		Best management practices not followed	Case by case - contact local State Plant Regulatory Official or USDA,
	All other means of conveyance	-	APHIS, PPQ Official

Table 3-1 Determining Certification Options for Moving IFA Items

The certificate should accompany the shipping documents, but can also be attached to the regulated article or the outside of the container encasing it. Both the origin and destination establishments should retain the documents for three years. PPQ has authorized the use of several types of certificates to meet the needs of various shipping situations.

Rubber Stamps

Rubber stamps can be issued to establishments that ship regulated articles frequently and in volume. The establishment **must** be under a compliance agreement, and the state cooperator or PPQ Officer **must** inspect the establishment periodically (at least annually) to ensure that requirements for treatments, other safeguards, and use of the certificate are being met. Some states use rubber stamps that are for IFA certification only, and use other rubber stamps that cover certification for all other federal plant pests. Be sure the entity with the stamp understands what it covers. Keep accurate records on what stamps are in circulation and to whom they are issued. If a grower goes out of business, retrieve the stamp and destroy it, and void the number. If a stamp is worn out or lost, please contact your PPQ State Plant Health Director for a new stamp.

The certification is stamped on the shipping documents. The only stamps allowed are those stamps with a state abbreviation and a sequential number (for example, GA 001, GA 002, etc.) in the federal shield. Stamps previously issued with a Southeastern Region number or a Hyattsville, Maryland address are obsolete and the shipment should be considered uncertified. Please contact your PPQ State Plant Health Director with any questions regarding rubber stamp validity.

Paper Regulatory Letter

A few states issue a paper regulatory letter for IFA compliance from the PPQ State Plant Health Director's office in conjunction with a compliance agreement. This letter **must** accompany all shipments. If a letter format is used, there should be an effective date and an expiration date on the letter. The establishment **must** be under compliance agreement, and the state cooperator or PPQ Officer must inspect the establishment periodically (at least annually) to ensure that requirements for treatments, other safeguards, and use of the certificate are being met.

Electronic Stamps or Certificates

These are stickers or shields that are pre-printed on cartons or mailing labels/nursery shipping tags. The establishment **must** be under compliance agreement, and the state cooperator or PPQ Officer **must** inspect the establishment periodically (at least annually) to ensure that requirements for treatments, other safeguards, and use of the certificate are being met. PPQ offices authorize the use of preprinted/embossed certificates.

PPQ Issued Permits/Certificates (PPQ Forms 530/540)

These are documents issued by state/federal personnel upon inspection of a regulated article to be moved and include PPQ Form 530 (Limited Permit) and PPQ Form 540 (Certificate). These are usually issued when a compliance agreement is **not** in place. Directions for completing forms and examples are in Appendix B.

Compliance Agreements

Compliance agreements function as a contract between the regulated entity and PPQ. For detailed information on compliance agreements, see Appendix B.

Entering Into a Compliance Agreement

If an establishment regularly ships large quantities of regulated articles (e.g., nursery stock) outside the regulated area, then the establishment should operate under a compliance agreement. Persons who grow, handle, or move regulated articles interstate may enter into a compliance agreement (PPQ Form 519) if they can meet the following conditions:

- Review with an inspector each stipulation of the compliance agreement
- ◆ Have facilities and equipment to carry out disinfestation procedures or application of chemical materials in accordance with this manual or the PPQ Treatment Manual.
- Meet applicable state training and certification standards as authorized by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Canceling a Compliance Agreement

An inspector may cancel any compliance agreement orally or in writing whenever the inspector determines that the person who has entered into the agreement has **not** complied with the conditions of the agreement (see regulations for details: 7 CFR 301.81-7).

Reviewing a Compliance Agreement

Ideally, a compliance agreement should be reviewed and signed every year. Printed certificates or stamps may be issued to persons under compliance agreements. Ensure stamps are in good condition each year, and replace as necessary (collect and destroy old worn out stamps). Keep accurate records of stamp/certificate number disbursement.

Examples of Compliance Agreements

For examples of compliance agreements (PPQ Form 519), see Appendix C. These examples were compiled from examples submitted by several States.

How to Inspect for IFA at Nurseries under Compliance Agreement

The following information was modified from information prepared for use by plant inspectors with the Florida Department of Agriculture and Consumer Services, Division of Plant Industry.

Procedure

Step 1: Identify yourself.

When you arrive at the nursery, identify yourself to the owner or manager and gain approval to be on the property before conducting the IFA inspection. Have a copy of the current compliance agreement on hand, and review the document for any changes to production and/or shipping patterns that need to be addressed. Is the nursery shipping less material out of the quarantine than in the past and is no longer treating all nursery stock, but only that which is shipping outside the quarantine or vice versa?

Step 2: Check treatment records.

Check the nursery's treatment records to see what approved chemicals, dates and rates of application were used on each shipment. The nursery is required by law to maintain a record for your inspection (if no State law, then recordkeeping per Code of Federal Regulations Title 7 Part 110 pertains; USDA-AMS administers the Federal Pesticide Recordkeeping Program, which requires all certified private pesticide applicators to keep records of their use of federally restricted use pesticides (RUP) for a period of 2 years). Every effort should be made to witness some of the treatments to insure they are being conducted in accordance with approved rates. Document any proof of treatments as needed: copies, photos of records, etc. Please refer to the current PPQ Treatment Manual for appropriate treatments and make sure the nursery understands bulk density and dose rates. Report any violations to your supervisor.

Step 3: Inspect the nursery.

- A. Inspections may be visual or by baiting/trapping. Pond perimeters, ditch banks and culverts, edges of roads, greenhouses, buildings and concrete pads are common locations to find IFA. If using bait vials, see Chapter 2, Delimiting Survey. Place baits in an acceptable configuration around the perimeter, staging/shipping area, plant blocks, along roads, etc. Optimum times for inspections/survey are noted in Chapter 2, so if fall/winter inspections are required, be thorough, as leaves and weather events can mask evidence of IFA.
- B. Start your inspection of the perimeter, looking for debris and weedy areas where IFA can hide and have nests. If IFA can be found on adjacent properties it may be beneficial for the nursery to contact the adjacent property owners to proactively prevent IFA infestations. Also check the shipping area and its surroundings (mapping the nursery will make it easier for you). Remind growers of the importance of inspecting the transportation vehicle (truck/trailer) for IFA prior to loading any nursery stock for shipping.

- C. After the perimeter, start with the nursery's potted material. Check rows for any soil mounds from the bottom of the drainage holes or ant mounds on top of the pots. If you suspect ants, kick the pots to elicit a response from the ants.
- D. For field grown nursery stock, inspect blocks to be harvested this year and balled stock stored for later shipping.
- E. For grass sod, inspect growing sod by walking areas to be harvested this year. Closely examine areas of taller, darker green grass and clumps of weeds.

CAUTION

Be careful where you stand/touch!

Taking an ant sample for ID is helpful. If you see different stages of ant development, collect 5-10 of each life stage present. Put them in a vial of alcohol if sending them to an identifier; if using the InvictDetectTM Immunostrip® kit, do not put them in alcohol, just freeze or chill until you can test them. For steps to obtain identification, see <u>Identification</u> on page 3-25.

Step 4: Contact the owner or manager.

If you find IFA, contact the owner or manager. Point out the problem(s) and discuss options for addressing the problem.

Step 5: Collect samples.

To test for compliance with agreement, collect treated soil/media samples for residue analysis by a state or federal laboratory. If the grower incorporates insecticide into potting media for containerized nursery stock, take soil samples from the soil bin. You may also take soil/media samples from plants in containers for both incorporated or drench treatments, from balled nursery stock and from grass sod (instructions for media sample collection follows this section).

Collecting Soil/Media Samples for Pesticide Residue Analysis

Compliance/Violation

Contact your State plant regulatory official/inspector (see Appendix A) prior to collecting samples to determine where to submit samples and any costs associated with the work.

If the State does not provide specific instructions for sample collection, use the following protocol:

- ◆ Collect potting media from multiple containers/rootballs within the shipment for a total of approximately one-half gallon of media, and place in a heavy duty plastic bag. Do this for each different media type you want pesticide residue determined for. Double bagging is encouraged to ensure against breakage during shipping. If there will be a delay in testing, freeze the samples.
- ◆ If a sample form is not supplied by the State, please include with each sample:
 - Contact person name, phone number, mailing address, and email address;
 - Date sample collected;
 - * Requested service: bulk density determination; and
 - ❖ Any additional remarks or comments, as needed.

Leaving the Quarantine (Movement, Passing Through, Arrival and Post Arrival)

Determining the Movement Status of Articles at Inspection Locations

Use the following decision tables to determine the movement status of articles at inspection locations.

Table 3-2 Determining Movement Status of Articles at Inspection Locations

If the article is:	Then:
Nonregulated for IFA	GO to Table 3-3 on page 3-13
Regulated for IFA	GO to Table 3-4 on page 3-14

Table 3-3 Determining Movement Status of IFA Nonregulated Articles

If the article is:	And is:	Then:
Free of IFA		ALLOW movement
Not free of IFA	Infested ¹ with IFA (presence of queen or reproducing colony)	 CHOOSE one of these options: Return the article to its origin. Follow instructions for Returning Infested Articles to their Origin on page 3-16. Remove and destroy the article. Follow instructions for Removing and Destroying Infested Shipments on page 3-16. Treat the article. Follow instructions for Treating Infested Shipments or Noncertified Regulated Articles on page 3-17.
	Not infested with IFA (presence of worker ants only)	 CHOOSE one of these options: Allow movement Allow movement to destination for inspection. Follow instructions for Allowing Movement of Shipments Suspected to be Infested with IFA on page 3-18.

An article or means of conveyance is considered infested if an IFA queen or a reproducing colony of IFA is present. A reproducing colony is a combination of one or more IFA workers with one or more of the following immature IFA life forms: (1) eggs, (2) larvae, or (3) pupae. However, grass sod and plants with roots and with soil attached are considered infested if any life form of IFA is present, because the soil associated with these articles provides an ideal substrate for colonization.

If the article is: And is: Then: Free of IFA Accompanied **ALLOW** movement by a certificate or permit Not Choose one of these options: accompanied 1. Return the article to its origin. Follow instructions by a certificate for Returning Infested Articles to their Origin on or permit page 3-16. 2. Remove and destroy the article. Follow instructions for Removing and Destroying Infested Shipments on page 3-16. 3. Treat the article. Follow instructions for Treating Infested Shipments or Noncertified Regulated Articles on page 3-17. Not free of IFA 1. Hold the article and check if origin nursery is under compliance agreement. 2. Take soil sample if applicable. 3. Choose one of these options: A. Return the article to its origin. Follow instructions for Returning Infested Articles to their Origin on B. Remove and destroy the article. Follow instructions for Removing and Destroying Infested Shipments on page 3-16. C. Treat the article. Follow instructions for Treating Infested Shipments or Noncertified Regulated Articles on page 3-17.

Table 3-4 Determining Movement Status of IFA Regulated Articles

Inspecting Commodities for IFA at Inspection Stations and at Destination

If the entire load is from one nursery/establishment, inspect 10-20 plants from the load. If the load is made up of plants from several nurseries/establishments, attempt to inspect 5-7 plants from each nursery. Use gloves to protect hands from stings while inspecting. If you are in the back of a trailer, use a flashlight to assist in the inspection. Kick or hit the container/root ball/sod pallet to elicit ant activity. Check the surface of plant containers as well as the drain holes for soil that appears to have been worked by ants. Moving small plants/flats a few inches may also elicit ant activity. Check the top of root balls where the plant exits the burlap for loose soil. Check around the pallets holding grass sod for loose soil. Large boxed trees that have not been moved recently may need to be tipped to inspect underneath for ants and response may not be immediate. If ants are suspected but not visible, place ant bait/attractants (see Chapter 2 for attractants) in the cargo area with the commodity for one hour. Collect ants for identification.

For soil moving equipment, inspect tires, tracks, blades, rippers, buckets, attachments, etc. for loose soil. Use a trowel or other implement to break up loose soil to look for ants. Use a flashlight to look under the carriage of the equipment for areas that soil can loosely pack in.

A

CAUTION

Use extreme caution and always think safety first when inspecting soil moving equipment.



Figure 3-1 Inspectors Looking for IFA on a Nursery Truck

Handling IFA Interceptions/Violations at Inspection Stations and at Nurseries Outside the Quarantined Area

In most cases, IFA finds at an inspection station or at a nursery outside quarantined area, or potential violations due to lack of certification, will initially be handled by state personnel under their statutory authority. The SPRO will notify the SPHD of the incident, who will notify IES as appropriate. The SPRO and SPHD will coordinate contact with the corresponding officials in the state of origin (for all inter-state violations). IFA violations resulting from intra-state movement of items (for those states that are partially quarantined) will be handled by the State, but notification of an incident to the SPHD is requested. An investigation may occur and penalties may be incurred at either the Federal or State level, as appropriate. Options for handling the infested material are detailed below.

Co-Mingled Shipments

Co-mingled shipments present a challenge in all phases of IFA compliance and regulatory actions. If there is a suspected IFA violation within a co-mingled shipment, and clear distinct ownership cannot be determined, there is the potential for all parties to be impacted. Please seek guidance from the SPHD and from the PPQ National Program Manager in these instances.

Holding Shipments

When you detect ants, either at an inspection station or at destination nursery, and send the interception for identification (see Identification), the shipment must remain within the inspection area or designated holding area until results are known. You may use an Emergency Action Notification (EAN), PPQ Form 523, to quarantine the shipment. The owner has the option of applying an approved treatment prior to final identification to expedite movement. If movement is necessary before final determination, control the movement according to procedures for Allowing Movement of Shipments Suspected to be Infested with IFA on page 3-18.

Returning Infested Articles to their Origin

Step 1: Issue an Emergency Action Notification (EAN) (PPQ Form 523). Follow the directions in Appendix B.

Step 2: Safeguard the shipment.

Inform the carrier of actions necessary to minimize risk of spread of IFA on the shipment's return trip to its origin, including routing the return trip directly through the infested area if possible. List these actions on the EAN. Secure the truck with a quarantine tag (PPQ Form 244) and a USDA or state agricultural seal and inform the carrier that the seal can be broken only by a responsible official or designee at the shipment's origin.

Step 3: Issue a Limited Permit (PPQ Form 530).

Follow the directions in Appendix B.

Step 4: Notify the State of origin.

Notify by telephone that you found a shipment in violation. Provide the expected date of arrival and contents of the shipment. For a list of State contacts and phone numbers, see Appendix A. Mail the appropriate copies of the Limited Permit and the EAN to the State contact.

Step 5: Document the violation (PPQ Form 518).

Follow the directions in Appendix B.

Removing and Destroying Infested Shipments

Method of disposal includes treatment followed by destruction of the material. Methods of treatment include heat, freezing or chemical treatment; destruction may include burning or disposal in an appropriate landfill, depending on the material. Occasionally the foreman of an express or freight agency or the driver of the truck may prefer to remove, treat if necessary, and destroy the prohibited material rather than return it to origin. Discourage this action unless the transporting agency is also the owner of the articles. If ants are intercepted at destination during offloading, the receiving nursery/vendor may choose to treat if necessary or destroy the material.

Step 1: Issue an Emergency Action Notification (EAN).

Follow the directions in Appendix B.

Step 2: Collect soil samples.

See Collecting Soil/Media Samples for Pesticide Residue Analysis on page 3-12. If you can determine what group of nursery stock is involved, collect samples from blocks of plants from the same truck load; i.e. collect soil from all one type of plant from the same load or same originating nursery and make a composite sample.

Step 3: Safeguard the shipment.

Inform the carrier of actions necessary to minimize the risk of spread of IFA on the shipment's return trip (either to origin or other site for destruction), including routing the return trip directly through the infested area, if possible. List these actions on the EAN. Monitor removal and disposal of the material. If the disposal site is at a distant location, secure the truck with a quarantine tag (PPQ Form 244) and a USDA or a state agricultural seal and inform the carrier that the seal can be broken only by a responsible official or designee at the shipment's disposal location.

Step 4: Issue a Limited Permit (PPQ Form 530).

If an inspector must meet the shipment at a distant disposal site, issue a Limited Permit. Follow the directions in Appendix B.

Step 5: Notify officials/inspector located in the area of disposal.

Notify by telephone that you found a shipment in violation. Provide the expected date of arrival and contents of the shipment. Disposal in another State **must** be cleared with the State plant regulatory official of that State prior to movement. For a list of State contacts and phone numbers, see Appendix A. Mail the appropriate copies of the Limited Permit and the EAN to the State contact if another State is involved, or to the inspector responsible for monitoring at the disposal site.

Step 6: Document the violation (PPQ Form 518)

Follow the directions in Appendix B.

Treating Infested Shipments or Noncertified Regulated Articles

Methods of treatment include heat, freezing, or chemical treatment. Approved treatments are published in this manual and in the PPQ Treatment Manual. The foreman of an express or freight agency or the driver of the truck may prefer to treat the prohibited material. Encourage notification of the owner before treatment to determine if the shipment would still be accepted after treatment. Treatment at destination would be at the discretion of the receiving nursery/vendor/etc.

Step 1: Issue an Emergency Action Notification (EAN).

Follow the directions in Appendix B.

Step 2: Collect soil samples.

See Collecting Soil/Media Samples for Pesticide Residue Analysis on page 3-12. If you can determine what group of nursery stock is involved, collect samples from blocks of plants from the same truck load; i.e. collect soil from all one type of plant from the same load or same originating nursery and make a composite sample.

Step 3: Safeguard the shipment.

Inform the carrier of actions necessary to minimize the risk of spreading IFA during transport to the treatment site. List these actions on the EAN.

Step 4: Monitor the treatment.

Refer to Appendix C for approved treatments. Make sure that treatments are carried out according to the specific schedules. If the treatment site is at a distant location, secure the truck with a quarantine tag (PPQ Form 244) and a USDA or a state agricultural seal and inform the carrier that the seal can be broken only by a responsible official or designee at the treatment site.

Step 5: Issue a Limited Permit (PPQ Form 530).

If an inspector **must** meet the shipment at a distant treatment site, issue a Limited Permit. Follow directions for use, completion, and distribution in Appendix B.

Step 6: Notify officials/inspectors in the area where the treatment will take place.

Notify the appropriate official by telephone that you found a shipment in violation. Provide information such as expected date of arrival and contents of the shipment. You must clear treatment in another State with the State plant regulatory official of that State before the shipment moves. For State contacts and phone numbers, refer to Appendix A. Mail the appropriate copy of the limited permit and a copy of the EAN to the State contact if another State is involved, or to the inspector responsible for monitoring at the treatment site.

Step 7: Document the violation on Report of Violation (PPQ Form 518). Follow directions for use and completion in Appendix B).

Allowing Movement of Shipments Suspected to be Infested with IFA If you suspect the shipment is infested with IFA, but lack definitive identification, or if reproducing colonies are not readily evident, follow these steps:

Step 1: Issue an Emergency Action Notification (EAN).

Follow the directions in Appendix B. List the conditions for movement and unloading of the shipment on the EAN.

Step 2: Safeguard the shipment.

Inform the carrier of actions necessary to minimize risk of spread of IFA during movement to destination. List these actions on the EAN. Secure the truck with a quarantine tag (PPQ Form 244) and a USDA or a state agricultural seal and inform the carrier that the seal can be broken only by a responsible official or designee at the destination site.

Step 3: Issue a Limited Permit (PPQ Form 530).

Follow directions for use and completion in Appendix B.

Step 4: Notify officials/inspectors in the area where unloading will take place.

Notify the appropriate official by telephone that a shipment requires further inspection. Provide information such as expected date of arrival and contents of the shipment. If the final destination is in another state, notify the state plant regulatory official of that state before allowing the shipment to move. For state contacts and phone numbers, refer to Appendix A. Mail the appropriate copy of the Limited Permit and a copy of the EAN to the state contact if another state is involved, or to the inspector responsible for the inspection at the destination site.

Step 5: Collect soil samples at final destination.

See Collecting Soil/Media Samples for Pesticide Residue Analysis on page 3-12. If you can determine what group of nursery stock is involved, collect samples from blocks of plants from the same truck load; i.e. collect soil from all one type of plant from the same load or same originating nursery and make a composite sample.

What to Do in State of Origin if a Nursery Shipment is Returned

If a shipment is returned because of IFA infestation or lack of certification, be present at the nursery (if possible) when the truck arrives. The truck should have a seal that will need to be broken to unload the plants. Have the plants pulled from the truck, and inspect pots (removing pots to look for nests) etc. Keep these plants segregated until the inspection is complete. If IFA are found, take separate samples of ants to send to the lab. Take a soil sample to submit for chemical analysis (see Collecting Soil/Media Samples for Pesticide Residue Analysis on page 3-12). If the nursery treated the product before shipping, get a copy of their treatment records. Document all work and if necessary, contact a USDA-IES investigator to be present. If necessary issue an Emergency Action Notification (EAN) (PPQ Form 523) to prohibit the nursery from selling outside the regulated area until the issue is resolved.

Nurseries that are under a compliance agreement, and have had an IFA violation, but the shipment was not returned, will need to be inspected and sampled. This includes all saleable plants and the soil bin. Obtain copies of the nurseries' soil receipts or treatment records showing the addition of an approved chemical. Take nursery media samples from existing plants and from the media pile as appropriate to submit for chemical analysis (see Collecting Soil/Media Samples for Pesticide Residue Analysis on page 3-12). The nursery will not be reinstated until all tests for approved chemicals have come back with the appropriate amount of approved chemical incorporated, and Request for Reinstatement letter has been written and approval has been received.

Handling IFA Infestations Outside the Quarantined Area in the Environment

Regulatory incidents include those interceptions directly associated with a shipment of infested regulated material as discussed in Handling IFA Interceptions/Violations at Inspection Stations and at Nurseries Outside the Quarantined Area on page 3-15. However, a regulatory incident can also include IFA detected in a non-regulated area not immediately associated with a specific shipment, such as IFA found in a landscaped area of a commercial or residential area, or in the general environment. It may also include IFA found in a nursery but there is no specific shipment that can be associated with the find.

Step 1: Talk to landowner.

Talk to the landowner regarding recent landscaping, soil moving or other activities that could have moved IFA into the area. If sources are out of state, contact PPQ office to assist with trace backs. If sources are in state, contact sources and determine if they are in the quarantined area or not, or whether they received material from the quarantined area.

Step 2: Survey the site and assist with treatment.

Determine the extent of the infestation by survey. See Survey Procedures for survey methods. If you have an unusual situation contact PPQ for assistance with a survey plan. The State will oversee any treatment that is necessary and PPQ and/or local extension staff can provide guidelines for a treatment plan. Conduct follow-up surveys to insure eradication; quarterly or biannually through 1 year from date of treatment.

Step 3: Follow up Investigation

If there is a determination that the infestation resulted from the movement of regulated items from inside the quarantined area to outside the quarantined area, such as grass sod or nursery plants for landscaping purposes, or hay, penalties may be warranted (see Investigations and Violations on page 3-3.

Policing the Quarantine

Blitzes - Staging Weigh Station Blitzes

A blitz is an inspection of trucks carrying IFA-regulated articles at highway weigh stations. The purpose of the blitz is to monitor the movement of regulated articles, both intrastate and interstate.

Protocol

This section sets out some guidelines for conducting the blitzes and spells out the separation of duties between the state PPQ offices conducting the blitz and the PPQ Imported Fire Ant National Operations Manager (IFA NOM) giving oversight to the activities.

State PPQ offices will schedule and organize their own blitzes. They will coordinate with their sister agencies in their state to perform the blitzes. At least one blitz should take place during the peak shipping season.

Important: for the blitz to work properly there must be one head and only one. The agency that organizes the blitz should be in charge. Other agencies, if invited to assist, should follow the lead of the organizing agency.

Although not required, states are encouraged to include Smuggling Interdiction and Trade Compliance (SITC) and IES personnel in their blitzes so the blitz can cover other potential plant violations concurrently with the IFA blitz. Information gathered during blitzes, such as shipping documents and pesticide analysis results, will be forwarded to the PPQ IFA NOM to be disseminated to other states and to be analyzed for trends. This does not mean that states receiving nursery stock can't be immediately contacted by blitz personnel if they feel it is necessary. It is a regional responsibility to work with other state PPQ offices to track down shipments and growers if problems are found.

Suggested Activities during IFA Blitzes

- 1. Visually inspect nursery stock and heavy equipment for live fire ant infestations.
- 2. Check certificates of all nursery stock and make copies of all documents related to the shipment. Forward copies of these documents to the PPQ IFA NOM when the blitz is completed.
- 3. Take soil samples from all nursery stock shipments for laboratory analysis to determine presence/absence/levels of program pesticides. Forward copies of results to the PPQ IFA NOM for dissemination.
- 4. Look for other types of contraband as "targets of opportunity."

Supplies

You will need the following materials to carry out a blitz:

- ◆ Anaphylactic shock sting kit
- Binoculars
- Cameras
- ◆ Cellular telephones
- Clipboards
- ◆ Electronic tablet or other device with access to appropriate database
- Flashlights and headlamps (including batteries)
- Hand cleaner
- Head sets
- ◆ Paperwork/forms
 - Carbon paper if needed
 - Civil penalty matrix
 - Contact information for State Plant Regulatory Officials (SPROs)
 - Copies of state IFA quarantines and maps
 - Copy of 7 CFR 301.81 (IFA quarantine)
 - IFA quarantine map
 - ❖ IFA weigh station blitz form or your state's data collection form
 - List of IFA infested counties
 - PPQ Form 244, Quarantine Tag
 - ❖ PPQ Form 391, Specimens for Determination
 - ❖ PPQ Form 523, Emergency Action Notification
 - ❖ PPQ Form 530/540, Limited Permit/Certificate

- ❖ State highway maps, topographical maps, or atlas showing counties
- Supply of USDA Program Aid No. APHIS 81-25-001 updated January 2015
- Pocket knife
- ♦ Safety vests
- ◆ Sample equipment
 - Alcohol
 - Aluminum foil
 - Bag seals
 - Forms
 - Pesticide residue form for state lab form
 - ⇒ Specimen identification form for federal lab (PPQ Form 391) or state ID form
 - Latex gloves
 - Overnight express mail envelopes
 - Pencils (preferably mechanical)
 - Permanent markers (fine and ultra-fine point)
 - Plastic bags (1-gallon size, with zip seals)
 - Protein bait traps
 - Scrub brush
 - Tape (wide with dispenser)
 - Trash bags (small)
 - Trowels
 - Vials
- Truck seals
- ◆ Two-way radios or other communication devices (including batteries)
- ◆ USDA quarantine tape
- ♦ Warm clothing

Policy and Procedure

We used two sources for development of these guidelines: the East Tennessee IFA Blitz Policy and Procedure from 2004, and the North Carolina IFA Blitz - Policies and Procedures (which was also based on the Tennessee policy). The states of Tennessee and North Carolina routinely conduct IFA blitzes and therefore have the best hands-on experience with conducting IFA blitzes.

Weather and Safety Precautions

A

CAUTION

Come with the mindset of CAUTION. Always be alert to the dangers associated with this aspect of the job. **This is a very dangerous place to work!**

Follow these precautions when working a blitz:

- ◆ Dress for all weather situations, especially rain. It can be rather windy and cold, especially on the walkway
- Protect yourself against windburn/sunburn
- Wear your reflective/safety vest at all times
- ◆ Wear your photo ID at all times

Personnel Positions

There are basically four positions (8 people total) with separate and specific duties:

- 1. Spotter (one person) The spotter is located near the entrance ramp and directional signals and has two main duties in traffic control:
 - A. Watch as the trucks enter the exit ramp to see if there are trucks using the bypass lane that should be checked, and then notify the walkway and investigation crews with a description of the truck.
 - B. Notify the switchboard when the ramp begins to fill up with a "green light" to direct trucks to the bypass and a "red light" to direct trucks back in the stop lane. A folding chair and a light pair of binoculars may be helpful in this position.
- 2. Walkway (three people) The staff on the walkway between the scale and bypass lanes are the interviewers. The duty of the walkway crew is to ask the drivers what they are hauling. If it is live plant material, hay/straw, pine straw, and earth-moving equipment with non-compacted soil, etc. then flag them over to the inspection/investigation crew. Do not detain or question U.S. Mail, express mail couriers, tankers, car haulers, steel carriers, etc., just flag them on through. Under NO circumstances stop a truck in the "By-Pass" lane and question them there; flag the truck over to the investigation crew if need be. DO NOT STOP AND QUESTION THEM IN THE "BY-PASS" LANE!!
 - A. Point Person It is the responsibility of the "point person" to notify the "rear person" what the next truck will be. Identify the truck as to color and type (i.e. Peterbilt, Mack, etc.). Always keep traffic flowing as quickly as possible. The point person is to keep a sharp eye on the By-Pass traffic to alert the rear person if a truck should be flagged over.

- The point person will also query drivers that stop beside him of the contents of their trucks.
- B. Middle Person It is the responsibility of the middle person to query drivers that stop beside him of the contents of their trucks. Always keep traffic flowing as quickly as possible.
- C. Rear Person It is the responsibility of the rear person to always be alert for a call from the spotter and/or the point person that a truck in the by-pass lane needs to be flagged over for investigation. In the event that a by-pass truck must be pulled over, **ALWAYS HOLD THE**TRAFFIC IN THE STOP LANE. The rear person will also query drivers that stop beside him of the contents of their trucks. Always keep traffic flowing as quickly as possible.
- 3. Switchboard (one person) The person assigned to the switchboard works with the Commercial Vehicle Enforcement personnel at the weigh station. The switchboard person will be listening to the "spotter" for the "red-light/ green-light" signal and switch the lights accordingly. The switchboard person's goal is to keep as many trucks as possible rolling through the weigh station without the exit ramp backing up.
- 4. Inspection/investigation (minimum of three) The inspection/investigation crew's first responsibility is to have the trucks park correctly in the designated area. Other duties are to examine the bill of lading and/or invoices, certificates, quarantine compliance stamps, etc. Then fill out your State's IFA Weigh Station Blitz form or State data collection form legibly, accurately, and completely. The investigation crew **must** be familiar with the IFA Quarantine lines (as found in state quarantine maps, and the USDA CFR). This crew will take soil samples from all trucks that contain plants with soil moving from the IFA quarantine area and submit to a state or federal lab for pesticide residue testing.

Identification

The PPQ National Identification Services (NIS) coordinates the identification of plant pests in support of USDA's regulatory programs. NIS collaborates with scientists who specialize in various plant pest groups, including weeds, insects, mites, snails and plant diseases. These scientists are stationed at a variety of institutions around the country, including federal research laboratories, plant inspection stations, land-grant universities, and natural history museums.

For identification by an APHIS-PPQ identifier, submit the sample to the APHIS Identifier along with PPQ Form 391 Specimens for Identification. This may be done through the PPQ State Plant Health Director.

There are several keys available for use to identify *Solenopsis* species:

- ◆ Hung, A.C.F., M.R. Barlin and S.B. Vinson. 1977. Identification, distribution, and biology of fire ants in Texas. Texas Agric. Exp. Stat. B-1185, October 1977. 24 pp.
- ◆ Trager, J.C. 1991. A revision of the fire ants, *Solenopsis geminata* group (Hymenoptera: Myrmicinae). J. New York Entomol. Soc. 99: 141-198.
- ◆ Wojcik, D.P., W.F. Buren, E.E. Grissell, and T. Carysle. 1976. The fire ants (*Solenopsis*) of Florida. Fla. Dept. Agr. & Consumer Serv., Div. Plant Ind. Entomology Circular No. 173., November 1976. 4 pp.

There are several online sites that provide taxonomic characteristics and/or ID keys, including:

- Antkey
- Pacific Invasive Ant key
- ♦ Ants of the Southeastern U.S.
- eXtension website for Imported Fire Ant

For field identification of red imported fire ants, InvictDetectTM Immunostrip® field kit is available from Agdia® Inc. This is a lateral flow immunoassay test that can be used in the field to screen for red imported fire ants. Each test kit uses 3-5 worker ants that must be thoroughly macerated with a buffer in a vial. The test uses venom proteins to identify the ants, thus the need to thoroughly grind up the worker ants. All materials for the test are included in the kit except gloves and forceps for collecting ants. The initial version is **not** able to identify black IFA, but will identify many hybrids. Research continues to develop a kit that will identify all forms of IFA.

As of Fall 2018, APHIS **does not** support the use of InvictDetect[™] Immunostrip® for regulatory purposes. All preliminary IDs must be confirmed by NIS.

Finally, you can also contact your state university/cooperative extension office for questions regarding identification, as well as the State Department of Agriculture or the State PPQ office.



Appendix A

Contacts for PPQ and State Plant Officials

PPQ State Plant Health Directors

For contact information, visit one of these websites:

https://www.aphis.usda.gov/plant_health/downloads/ State-Plant-Health-Directors-Directory.pdf

or

https://www.aphis.usda.gov/aphis/ourfocus/planthealth/ppq-program-overview/ct sphd

State Plant Regulatory Officials

For contact information, visit this website:

http://nationalplantboard.org/membership/

Appendix AState Plant Regulatory Officials

Appendix

Appendix B

PPQ Forms and Directions

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PPQ Form 244: USDA-APHIS Warning Quarantine (Tag)

CONTACT PHONE NUMBER CONTACT PHONE NUMBER		U.S. DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE
DO NOT OPEN, DESTROY, OR REMOVE SEALED COMPARTMENTS, CONTAINERS, OR MATERIAL MUST REMAIN SEALED WHILE WITHIN THE UNITED STATES AND ITS TERRITORIAL WATERS BY ORDER: PLANT PROTECTION AND QUARANTINE PPQ FORM 244 JAN 2009 WARNING: Not for U.S. commerce. In case of emergency, contact the local USDA, APHIS, PPQ Office at: LOCATION OFFICER BADGE NUMBER CONTACT PHONE NUMBER SEAL NUMBER DATE		WARNING!
SEALED COMPARTMENTS, CONTAINERS, OR MATERIAL MUST REMAIN SEALED WHILE WITHIN THE UNITED STATES AND ITS TERRITORIAL WATERS BY ORDER: PLANT PROTECTION AND QUARANTINE PPQ FORM 244 JAN 2009 WARNING: Not for U.S. commerce. In case of emergency, contact the local USDA, APHIS, PPQ Office at: LOCATION OFFICER BADGE NUMBER CONTACT PHONE NUMBER DATE		QUARANTINE
WARNING: Not for U.S. commerce. In case of emergency, contact the local USDA, APHIS, PPQ Office at: LOCATION OFFICER BADGE NUMBER CONTACT PHONE NUMBER BY ORDER: PLANT PROTECTION AND QUARANTINE PPQ FORM 244 JAN 2009 WARNING: Not for U.S. commerce. In case of emergency, contact the local USDA, APHIS, PPQ Office at: LOCATION DATE		
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USDA, APHIS, PPQ Office at: LOCATION OFFICER BADGE NUMBER CONTACT PHONE NUMBER SEAL NUMBER DATE		PPQ FORM 244
		OFFICER BADGE NUMBER CONTACT PHONE NUMBER

Figure B-2 PPQ Form 244: USDA-APHIS Warning Quarantine (Tag)

PPQ Form 391: Specimens for Determination

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	4A. NAME OF SUBMITTER	4	B. NAME	OF COLLE	CTOR		6. T	PE OF PROP		л, RESIDI	ENCE, NURS	SERY. ETC.)		
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5 -	EMAIL ADDRESS OF SUBMIT	TER					LAT	TUDE			LONGIT	UDE		
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	B. Damaging Crops/F					/	F.		Targeted S		st Name			
ζ -	C. Suspected Pest of		ncern (Exp	olain in REI	MARKS)		G.		Smuggling	Interdiction	on/Trade Con	npliance (SIT	C)	
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					,					-	Number			
¥ _	12. PLANT DISTRIBUTION									[Percent	t:		
<u> </u>		_		TS AFFECTED oper Surface					☐ Bulbs,	Tubers, C	orms	☐ Se	eeds	
3	Limited	☐ Leave	s, Lower S	Surface	Bran	ches			Buds					
	Scattered	Petiol	е		Grow	ing Tips			☐ Flower	s				
	Widespread	☐ Stem			Root	s			☐ Fruits	or Nuts				
	14. PEST DISTRIBUTION	15.	I	NSECTS				☐ NEMATO	DES			☐ MOLLU	JSKS	
¥ X	FEW COMMON	NUMBER SUBMITTEI	LAF	RVAE	PUPAE	ADU	LTS	CAST SKINS	EGGS		NYMPHS	JUVS.	-	CYSTS
	ABUNDANT	ALIVE												
_	EXTREME	DEAD												
	16. SAMPLING METHOD		17. T	YPE OF TE	RAP AND LURE				18. TRAP	NUMBER				
19. F	REMARKS											MET MORPHOLO SYMPTOM CULTURE SEROLOGIO PCR SEQUENCII	CAL	
20. 7	TENTATIVE DETERMINATION						DETER	RMINED BY		POSIT	ION AND AF	FILIATION		
	FINAL DETERMINATION AND N				SITION OF SPE	CIMEN/S	SAMPLE					MET MORPHOLO SYMPTOM CULTURE SEROLOGIO PCR		
	,				Ret	ained for ection/St	г	Destroyed	Transfe	rred to:		SEQUENCI	NG	
SIGI	NATURE			DATE	501			B CONFORM	ATION NUM	BER	DATE	RECEIVED		
PPC	Q Form 391				Prev	ious editi	ons are	obsolete.						

Figure B-1 PPQ Form 391: Specimens for Determination

INSTRUCTIONS

Use PPQ Form 391, Specimens for Determination, for domestic collections (warehouse inspections, local and individual collecting, special survey programs, export certification).

BLOCK		INSTRUCTIONS
		or each collection using your own numbering convention or use the beginning with the year, followed by the collector's initials and the
1	EXAMPLE	In 2014, Brian K. Long collected his first specimen of the year for determination. His first collection number is 14-BLK-001
	2. Enter the collection	on number
2A-2B	Enter dates	
3	Check block to indica	te Agency submitting specimens for identification
4A	Enter name of submit	tter
4B	Enter name of collect	or
5	Enter address of sub	mitter
6	Enter type of property	specimen obtained from (farm, nursery, residence, etc.)
7	Enter name and addr	ess of property owner
8A-8H	Check all appropriate	blocks
9	Leave Blank	
10	Enter scientific name	
11	Enter quantity of host	and plants affected
12		te distribution of plant
13		ocks to indicate plant parts affected
14	Check block to indica	
15		block to indicate type of specimen
10		imens submitted under appropriate column
16	Enter sampling method	
17	Enter type of trap and	d lure
18	Enter trap number	
19		nation if Prompt or URGENT identification is requested
20	Enter a tentative dete	ermination and who made it
21	Leave blank	

Distribution of PPQ Form 391

Distribute PPQ Form 391 as follows:

- Send Original along with the sample to your Area Identifier or for national confirmation.
 Retain and file a copy for your records.

PPQ Form 391 Reverse

Figure B-2 PPQ Form 391: Specimens for Determination Instructions

PPQ Form 518: Report of Violation

	VICE SERIAL NO.
PLAN PROTECTION AND QUARANTINE	1. DATE VIOLATION DISCOVERED 2. VIOLATED · REG/COMPL. AGREEMENT
REPORT OF VIOLATION 3. WHERE INTERCEPTED (City or port, and State; also county if domestic)	A. ORIGIN OF ARTICLE (Include county if domestic)
5. ARTICLE MOVED IN VIOLATION OF REGULATIONS	6. IDENTITY OF ARTICLE (Serial No., Waybill No., description, etc.)
 NAME AND BUSINESS ADDRESS OF VIOLATOR (Shipper, caterer, cleaner servicing agent, broker, ship's agent, etc. Identify which) 	Compliance agreement? Yes No Permit? Yes No
	9. IF NO, VIOLATOR WAS AWARE OF REGULATION? Yes No Unknown
	If "Yes." how informed and when?
IO. NAME AND BUSINESS ADDRESS OF CARRIER	11. CARRIER WAS AWARE OF REGULATION? Yes No Unknown
	If "Yes," how informed and when?
12. IDENTITY OF CARRIER	13. NAME AND BUSINESS ADDRESS OF CONSIGNEE
PLANE Acft. No Flight No.	
SHIP Flag Name	
ROAD VEHICLE License No.	
16. VIOLATOR OR CARRIER'S STATEMENT OF VIOLATION (Attach additio	tional sheet, if needed . Identify who gave statement)
17 OFFICER'S STATEMENT. Must attach a detailed signed a	and dated statement. State how the action violated the regulations or compliance agreement cited in ary through disposition of pest risk including when, who, what, and where.
Item 2. Describe fully the facts of the violation from discovery	
Item 2. Describe fully the facts of the violation from discovery	19. PRINTED NAME OF OFFICER AND WORK UNIT 20. DATE REPORT COMPLETED
Item 2. Describe fully the facts of the violation from discovery	
Item 2. Describe fully the facts of the violation from discovery 18. SIGNATURE OF INITIATING OFFICER 19	
Item 2. Describe fully the facts of the violation from discovery 18. SIGNATURE OF INITIATING OFFICER 19. 21. OFFICER IN CHARGE COMMENTS (Attach additional sheet, if needed)	

Figure B-3 PPQ Form 518: Report of Violation

PPQ Form 518: Report of Violation Directions

Document the violation on PPQ Form 518: Report of Violation. The Report of Violation records and documents violations and problems that you have during inspections at transit locations or regulated establishments. Each time you issue an EAN for a violation or for requiring corrective actions, you should also complete a Report of Violation. Documentation is very important with repeat offenders. When penalties are sought, the quality of the documentation will determine whether Investigative and Enforcement Services (IES) will accept the case and successfully prosecute it. **Fill in all blocks!** If the block does not apply, enter "N/A." Unlike the EAN, you may or may not complete the Report of Violation at the site of the violation. Think ahead and gather the information you need to complete all the blanks and the statement.

Preparation

- ◆ Block 1: Enter the date you discovered the violation. If you discovered the violation after it occurred, explain in Block 15.
- ◆ Block 2: List the regulation violated, for example, 7 CFR 301.81, Imported Fire Ant.
- ◆ Block 3: Enter the city, state, and county in which you discovered the violation.
- ◆ Block 4: Enter the city, state, and county.
- ◆ Block 5: List the quantity, type of container (boxes, barrels, pots) and article moved in violation.
- ◆ Block 6: Identify invoice number, brand name on cartons, and any distinguishing marks.
- ◆ Block 7: List correctly spelled name and complete business address. Identify type of business.
- ◆ Block 8: If compliance agreement (CA), enter type of CA, date signed, and last review date.
- Block 9: Self-explanatory.
- ◆ Block 10: If applicable, list correctly spelled name and complete address.
- ◆ Block 11: Self-explanatory.
- ♦ Block 12: If applicable, self-explanatory.
- ◆ Block 13: List correctly spelled name and complete address of person who receives the shipment.
- ♦ Block 14: Enter what actions you took to eliminate the pest risk, such as safeguarding or confiscation.
- ◆ Block 15: Provide a brief history including previous warnings, violator's attitude. Be objective and provide your recommendation.

- ◆ Block 16: Ask the violator to provide an explanation of the incident. Also obtain statements from the carrier and agent when possible. Identify the person making the statement by name and title.
- ♦ Block 17: Your statement in this block is very critical. The statement provides all the facts and describes the violation. Write your statement so that an uninvolved reader can tell what has occurred from reading the information in the statement. Your statement may be used by lawyers to present their case. Identify who, what, where, when, and why you were there. The statement tells a story.
 - ❖ Who? (Give name and title or position.)
 - ❖ What? (Describe how the article in PPQ Form 518, Block 5 violates the regulation listed in Block 2.)
 - Where? (Self-explanatory)
 - When? (Self-explanatory)
 - Why were you there? (Did you receive a hot tip? A request? Or a routine compliance check?) Start at the beginning. Give the complete story. These are the necessary questions to answer. The remaining information helps your supervisor or the lawyers.
 - ❖ Determine the violator's awareness and explanation.
 - ❖ Document making the violator aware. Provide information on the quarantine or explain the violation.
 - Document issuance of a PPQ Form 523.
 - ❖ Include disposition of the pest risk and final action if available.
 - Document any other parties involved in the violation and whether any follow-up is necessary. Sign, enter your title, and date.
- ◆ Blocks 18, 19, and 20: Self-explanatory.
- ♦ Block 21: The PPQ State Plant Health Director lists the following:
 - Any previous warning letters and dates sent
 - ❖ The date and amounts of any previous civil penalties
 - * Recommendation for warning letter, civil penalty, or criminal penalty
- ◆ Blocks 22, 23, and 24: PPQ State Plant Health Director completes.

Collect evidence to corroborate the violation such as bills of lading, invoices, packing lists, manifests, and permits.

Distribution

Attach the statement and any additional supporting documentation to the PPQ Form 518 and pass the entire package to your supervisor/ State Plant Health Director for completion of Blocks 21 through 24. The State Plant Health Director should then forward the package to APHIS Investigative and Enforcement Services for investigation and/or civil penalties.

PPQ Form 519: Compliance Agreement

According to the Paperwork Reduction Act of 1995, an agency may unless it displays a valid OMB control number. The valid OMB control 0322, 0337, 0346, 0363, and 0369. The time required to complete for reviewing instructions, searching existing data sources, gathering	not conduct or sponsor, and a p ol numbers for this information of this information collection is esti g and maintaining the data neede	erson is not required to respor ollection are 0579-0054, 0088, nated to average 1.25 hours p id, and completing and reviewi	d to, a collection of information 0129, 0198, 0257, 0310, 0317, er response, including the time ng the collection of information.	OMB APPROVED 0579-0054/0088/0129/ 0198/0257/0310/0317/ 0322/0337/0346/0363/ 0369 and 0383
UNITED STATES DEPARTMENT OF AGRICU ANIMAL AND PLANT HEALTH INSPECTION S PLANT PROTECTION AND QUARANTII	SERVICE	COMPLIAN	CE AGREEMEN	т
1. NAME AND MAILING ADDRESS OF PERSON OR FIF	RM 2. LOCAT	ION		
3. REGULATED ARTICLE(S)				
4. APPLICABLE FEDERAL QUARANTINE(S) OR REGU	LATIONS			
5. I / WE AGREE TO THE FOLLOWING:				
6. SIGNATURE	7. TITLE		8. DATE SIGNED	
			8. DATE SIGNED 9. AGREEMENT NUMBE	ER .
6. SIGNATURE The affixing of the signatures below will validat effect until canceled, but may be revised as nec	e this agreement which	shall remain in noncompliance.		
The affixing of the signatures below will validat	e this agreement which	shall remain in noncompliance.	9. AGREEMENT NUMBE	
The affixing of the signatures below will validat effect until canceled, but may be revised as nec	e this agreement which	noncompliance.	9. AGREEMENT NUMBE	
The affixing of the signatures below will validat effect until canceled, but may be revised as nec 11. PPQ/CBP OFFICIAL (NAME AND TITLE) 13. SIGNATURE	e this agreement which essary or revoked for	12. ADDRESS	9. AGREEMENT NUMBE	
The affixing of the signatures below will validateffect until canceled, but may be revised as necessary to the second of the sec	e this agreement which essary or revoked for	noncompliance.	9. AGREEMENT NUMBE	

Figure B-4 PPQ Form 519: Compliance Agreement

Guidance on the Development and Use of Compliance Agreements

The following information is from the PPQ Sharepoint site for Compliance and Enforcement and is available to PPQ staff only.

Purpose of a Compliance Agreement

Plant Protection and Quarantine (PPQ) makes wide use of compliance agreements in both domestic and international programs. Compliance agreements function as a contract between the regulated entity and PPQ. Conditions for handling and movement of regulated articles are detailed in compliance agreements. By signing a compliance agreement a regulated entity agrees that they understand the regulatory requirements that must be met to handle and move regulated articles in the specified manner. In return, that entity is allowed to conduct their activities with reduced levels of oversight and monitoring than otherwise would be possible. In many cases the regulated entity is also given permission to self-issue movement instruments such as Limited Permits and Federal Certificates. The reduced level of regulatory oversight and required PPQ presence at the regulated facility afforded by compliance agreements lowers regulatory burdens on affected entities while simultaneously reducing the resources PPQ must invest in regulatory oversight.

Preparing a Compliance Agreement

Compliance agreement templates have been created for many of the frequently encountered types of regulated activities. When a template exists it must be used. New and unique situations may require a compliance agreement be drafted that addresses the particulars of that situation after consultation with the appropriate Regional and National Program managers. All compliance agreements must use PPQ Form 519. In addition, care should be taken to maintain consistency in the requirements, stipulations, and general format for all compliance agreements across a particular program for a given regulated activity.

When compliance agreements are being drafted care must be taken that they are properly founded in the regulations they implement. If those regulations contain a high degree of specificity regarding applicable mitigations and procedures the compliance agreement must not deviate from or alter those requirements. When the regulations are less specific, due consideration and reference must be given to program manuals, the Treatment Manual, the Manual for Agricultural Clearance and other existing relevant documents. All stipulations and requirements must be detailed in Box 5 on PPQ Form 519. If those stipulations and requirements cannot be adequately captured within Box 5, appendices may be referenced and attached to the 519. Standard operating procedures or other appendices that detail how requirements will be met at a

particular facility may also be part of a compliance agreement, but must not add to or eliminate regulatory requirements. PPQ Form 519 and any attached appendices form the compliance agreement for a particular facility, location or entity and originals must be maintained in the originating office. This information can then be provided as part of the case file history to show the historical record of compliance for the alleged violator.

Compliance Monitoring Visits to Regulated Establishments

Regulated entities **must** be visited by authorized PPQ staff at appropriate intervals to ensure compliance with regulatory requirements contained in compliance agreements. During each visit paperwork and records will be reviewed and collected as needed. The facility should be inspected to ensure the regulated entity can meet regulatory requirements. The PPQ official should discuss the specific terms of the compliance agreement and associated regulations with appropriate staff at the establishment. Each visit **must** be documented, noting the date and time of the visit, the PPQ staff participating, the name and title of facility personnel who participated in discussions, and any problems discovered during the visit. If problems are noted, corrective actions must be stipulated in writing including time frames in which corrections will be made. This written document must be dated and signed by the appropriate PPQ staff and a properly authorized official at the regulated establishment.

Talking Points

- ◆ A compliance agreement (CA) serves as a contract between the Agency and a regulated entity
 - ❖ The regulated entity agrees that employees understand and will follow applicable regulatory requirements
 - ❖ The CA lowers regulatory burdens for regulated entities and resource requirements for PPQ
- CAs **must** be tied to the regulations they implement
- ◆ CAs should be uniform and consistent across a program for a given regulated activity
 - Where templates exist, they should be used
 - New or unique situations may require preparation of a new compliance agreement; this should be done in consultation with Regional and National Program Managers
- Compliance monitoring visits **must** occur at appropriate intervals
 - Paperwork and other relevant records must be reviewed and/or collected

- The facility should be inspected to ensure necessary equipment and other required resources are available and working properly
- Any problems and needed corrective actions **must** be discussed with facility management, documented in writing, and signed and dated by the PPQ official and the appropriate facility official

PPQ Form 523: Emergency Action Notification

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of in information is 0579-0102. The time required to complete this information collection is estimated to average pathering and maintaining the data needed, and completing and reviewing the collection of information.	1 hour per response, including the time for reviewing	g instructions, searching existing data sources OVED - OMB NO. 0579-0102
U.S. DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE	SERIAL NO.	
PLANT PROTECTION AND QUARANTINE EMERGENCY ACTION NOTIFICATION	1. PPQ LOCATION	2. DATE ISSUED
3. NAME AND QUANTITY OF ARTICLE(S)	4. LOCATION OF ARTICLES	
	5. DESTINATION OF ARTICLES	
6. SHIPPER	7. NAME OF CARRIER	
	8. SHIPMENT ID NO.(S)	
	o. c	
9. OWNER/CONSIGNEE OF ARTICLES	10. PORT OF LADING	11. DATE OF ARRIVAL
Name:	12. ID OF PEST(S), NOXIOUS WEEDS,	OR ARTICLE(S)
		• •
Address:	12a. PEST ID NO.	12b. DATE INTERCEPTED
	13. COUNTRY OF ORIGIN	14. GROWER NO.
PHONE NO. FAX NO.	15. FOREIGN CERTIFICATE NO.	
SS NO. TAX ID NO.		
	15a. PLACE ISSUED	15b. DATE
AFTER RECEIPT OF THIS NOTIFICATION, ARTICLES AND/OR CARRIERS HE AN AGRICULTURE OFFICER. THE LOCAL OFFICER MAY BE CONTACTED AT 16. ACTION REQUIRED TREATMENT: RE-EXPORTATION: DESTRUCTION: OTHER: Should the owner or owner's agent fail to comply with this order within the tagent cost of any care, handling, application of remedial measures, dispodestruction, or removal.	T: ime specified below, USDA is author	rized to recover from the owner o
WITHIN (Specify No. Hours or No. Days):		
ACKNOWLEDGMENT OF RECEIPT OF EN I hereby acknowledge receipt of		
SIGNATURE AND TITLE:	DATE AND TI	ME:
19. REVOCATION OF	NOTIFICATION	
ACTION TAKEN:		
SIGNATURE OF OFFICER:	DA	ATE:

Figure B-5 PPQ Form 523: Emergency Action Notification

PPQ Form 523: Emergency Action Notification Instructions

Authorized officials can issue an EAN, PPQ Form 523 (Figure B-5), requiring treatments, safeguards, or other remedial measures for regulated articles moving interstate. Specific corrective actions to be taken by the violator are stated on the form.

Fill in all blocks! If the block does not apply, enter "N/A."

Preparation:

- ◆ Block 1: PPQ Location responsible for establishment or area.
- ◆ Block 2: Enter date that EAN was issued.
- ◆ Block 3: Provide description: article category, article name, quantity; unit of measure, APHIS Permit number.
 - Article Category select a category (plant product or miscellaneous).
 - Article Name this drop down list is determined by the previous selection.
 - Quantity enter the numerical quantity of the shipment.
- Unit of Measure select the most descriptive term.
- ❖ Wood packing material check the appropriate box.
- ◆ Block 4: Location of the articles: the place where the shipment is located when it is inspected.
- ◆ Block 5: The final destination of shipment. Avoid use of intermediate parties such as freight forwarders.
- ◆ Block 6: Name of person or entity shipping articles.
- ◆ Block 7: Name of trucking firm and trailer license number.
- ◆ Block 8: Identify invoice number, other identifying number or distinguishing marks.
- ◆ Block 9: Name, mailing address, and phone number of the party who owns the premises or material.
- ◆ Block 10: Port of lading city and country.
- ◆ Block 11: Date article(s) arrived at their current location.
- ◆ Block 12: Select "pest."
- ◆ Block 12a: Number assigned within Pest ID database.
- ◆ Block 12b: Date pest was found.
- Block 13: Select United States of America.
- ♦ Block 14: N/A.

- ♦ Block 15: Select "Not Required."
- ◆ Block 15a: N/A.
- ◆ Block 15b: leave blank.
- Enter phone number of local officer.
- ◆ Block 16: Select treatment schedule, explanation text, seal text if necessary, CFR regulation.
- ◆ Block 17: Enter length of time allow for corrective action to be completed.
- ◆ Block 18: Inspecting officer's name, first and last name and title of person accepting EAN.
- ◆ Comments: If user has any additional comments to make, they should be recorded here. **Do not** repeat information that has previously been provided. **Do not** enter any pest name in this location. NOTE: These comments will print on the paper EAN.
- ♦ Block 19: Enter action taken, officer name and date.

Limited Permits and Federal Certificates

Limited Permits (PPQ Form 530) and Federal Certificates (PPQ Form 540, rubber/electronic stamps, etc.) are instruments used to allow the movement of regulated articles out of quarantined areas. Limited Permits allow for movement to a restricted set of locations, often a single location. Restrictions on movement are detailed on the Limited Permit issued to the article in question. Federal Certificates allow regulated articles to move to any destination in the United States. Both instruments will contain additional details on the mode of transport and the type and quantity of the article being moved.

Common forms of the Limited Permit include PPQ Form 530. In all cases, the Limited Permit remains the property of USDA APHIS. In the IFA Program, PPQ Forms 530 are generally used to certify single shipments of regulated items being shipped to locations outside the quarantined area. The shipper may or may not be under a compliance agreement and must meet specific conditions governing this movement as directed by the inspector and 7CFR 301.81. Limited Permits are also issued for noncompliant commodities being returned to the State of origin during the course of regulatory actions taken in response to quarantine violations.

Federal Certificates can be issued in several forms, including PPQ Form 540, preprinted packaging materials, and rubber or electronic stamps. The IFA Program uses PPQ Form 540 as well as rubber and electronic stamps. Regulated articles are eligible for interstate movement when accompanied by a Federal Certificate when they have been processed or treated at a facility operating under a compliance agreement. Specific conditions governing

movement of these articles are contained in the compliance agreement relating to the article in question.

Prior to issuance of a Limited Permit or Federal Certificate, eligibility of the article for interstate movement **must** be assured. This assurance is accomplished by entering into a compliance agreement with the person or establishment moving the article, or by the onsite presence of an authorized inspector. If the latter situation occurs, the inspector is responsible for ensuring that all necessary conditions have been met, and for signing and issuing the Limited Permit or Federal Certificate.

PPQ Form 530: Limited Permit

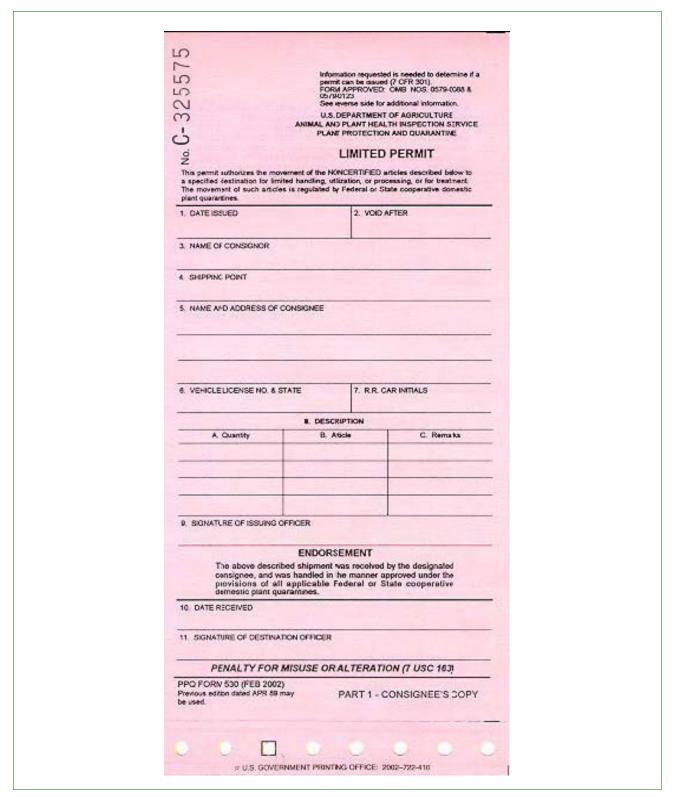


Figure B-6 PPQ Form 530: Limited Permit

PPQ Form 530: Limited Permit Directions

Limited Permits authorize the movement of regulated articles to specified destinations for processing, treatment, or utilization. As with certificates, Limited Permits can be stamped on regulated articles by rubber stamp or preprinted on labels and cartons when authorization is given. For most border interceptions, use the Limited Permit long form PPQ 530. Destination checks at the time of receipt are optional.

Writing **must** be legible and accurate. If you make a mistake in entering quantities or dates, void the Limited Permit and make out another. Limited Permits are also numbered. If you void one, leave it intact in the booklet. Cross out minor errors but initial the change.

Press down firmly so that all information appears on all copies. Fill in all blocks. If the block does not apply, enter "N/A."

Preparation

- ◆ Block 1: Self-explanatory.
- ◆ Block 2: **Important**! Be sure that you allow sufficient, but not extensive, time for the shipment to reach destination. An intercepting officer should note the void date and if there is a question, contact the issuing officer.
- ◆ Block 3: Person or business selling.
- Block 4: Location where sold. Use physical address only. Do not use P.
 O. Box numbers.
- ◆ Block 5: Person or business buying. Use physical address only. The intercepting office may be unaware of the location of the business should a follow-up inspection be necessary. Also, the mailing address may not be the same as the physical location to which the articles will be shipped. **Do not** use P. O. Box numbers.
- Blocks 6 and 7: Identity of means of transporting articles.
- ◆ Block 8: Provide adequate description for intercepting inspector to identify the article at the delivery point.
- ◆ Block 9: Issuing inspector's signature.
- ◆ Blocks 10 and 11: To be completed by the destination inspector and returned to the issuing inspector.

Distribution

◆ The original accompanies the shipment. Attach the original to the shipping documents that the consignee receives.

- ♦ Forward the first carbon on the day of issue to the responsible official at destination. The destination inspector will complete Blocks 10 and 11 of the PPQ 530 and return the form to the issuing inspector. Establish advance communication to assure that adequate utilization, processing, or treatment can be accomplished at destination.
- ♦ Keep the second carbon and match it with the first carbon upon its return from the destination inspector.

PPQ Form 540: Certificate

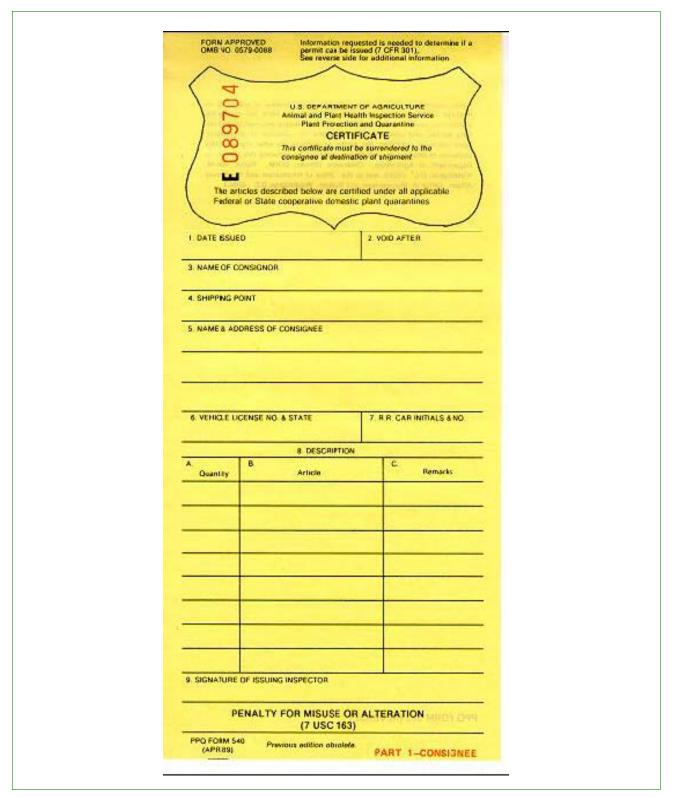


Figure B-7 PPQ Form 540: Certificate

PPQ Form 540: Certificate Directions

At certain locations you may use the master certificate PPQ Form 540. In these situations when remedial actions are required, monitor each treatment and issue a PPQ Form 540 when all requirements are met.

Your writing must be legible and accurate. If you make mistakes in entering quantities or dates, void the certificate and make out another. Certificates are numbered. If you void one, leave it intact in the certificate booklet. You may cross out minor errors, but be sure to initial the change. Press down firmly so that all information appears on all copies. Fill in all blocks. If the block does not apply, enter "N/A."

Preparation

- ◆ Block 1: Self-explanatory.
- ◆ Block 2: **Important**! Be sure to allow sufficient, but not extensive time for the shipment to reach its destination. An intercepting officer should note the void date and if there is a question, contact the issuing office.
- ◆ Block 3: Person or business selling.
- ♦ Block 4: Location where sold. Use physical address only. No P.O. Box numbers.
- ♦ Block 5: Person or business buying. Use physical address only. The intercepting office may be unaware of the location of the business should a follow-up inspection be necessary. Also, the mailing address may not be the same as the physical location to which the articles will be shipped. No P.O. Box numbers.
- ♦ Blocks 6 & 7: Identity of means of transporting articles.
- ◆ Block 8: Provide adequate description for intercepting inspector to identify the article at delivery point.
- ♦ Block 9: Issuing inspector's signature.

Distribution

- Original: Accompanies the shipment and is attached to the shipping documents that the consignee receives.
- ◆ First carbon: Forwarded, at the discretion of the issuing inspector, to destination plant regulatory officials to alert them of the shipment.
- Second carbon: Kept by the issuing officer.

Letter of Information (LOI) Template

Examples are available to PPQ staff only at the PPQ Compliance and Enforcement SharePoint site.

DATE ADDRESSEE

Dear:

The mission of the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) is to safeguard agriculture and natural resources from the entry, establishment and spread of invasive plant pests; and to support trade and exports of U.S. agricultural products. To accomplish this mission, Congress granted APHIS the authority to administer regulations that establish detailed rules and procedures to be uniformly carried out by the Agency.

On (insert date), I visited your facility and spoke with (insert name and title, if available, or the role of the employee you met with). During my visit, I observed (briefly describe what you observed: regulated material that didn't appear to be in compliance, material not being safeguarded according to a regulation or compliance agreement, etc. Describe when and how the company or individual allegedly failed to comply with the regulation(s), including the name of the person(s) involved, date(s) of the noted non-compliance, and type and volume of regulated articles involved. Include a description of any relevant documents, such as permits, compliance agreements, or orders issued. Recount the event(s) clearly, succinctly, and chronologically).

This material is regulated under (cite the specific regulation and statute, such as: Title 7, Code of Federal Regulations (CFR) Part 301.45; Title 9, Code of Federal Regulations (CFR) Parts 94-96; the Plant Protection Act of 2000; the Animal Health Protection Act of 2002; permit number, or your compliance agreement, issued under [cite specific regulation/statute governing the compliance agreement]). These requirements are in place to safeguard U.S. agriculture and natural resources. Non-native invasive species (including insects, plant and animal diseases, and some plant and animal species) cause billions of dollars in damage each year, necessitate burdensome Federal and State regulations, disrupt foreign and domestic commerce, impact our ability to enjoy our environment and natural resources, and increase the price we pay for our food as our ability to produce food diminishes. (if you know or can easily find the information also include a description of the resource being protected such as the \$_____ citrus industry).

To comply with our regulations, you need to (Identify the actions that need to be taken to come into compliance and, if appropriate, define a reasonable time line for corrective action and/or submission of additional information. Clearly indicate if the actions are required (for example, using terms such as "must" instead of "should"). If you order specific, prescriptive actions, explain how the subject can request alternative actions, dispute any action, or request an

extension of the time line for corrective action. Be sure that you do not impose any requirements that are beyond or outside of the scope of the regulations).

If you need additional information on the (regulation, statute, compliance agreement, etc.) or the (name the program – ex: Asian Longhorned Beetle, Citrus Health Response Program, etc.), please refer to the following website (insert URL) and/or refer to the enclosed material. (Note: if no material is available on the program, omit this section and simply include contact information). You may also contact me (or insert a designee) between the hours of (insert your regular business hours) at (insert office phone and e-mail information). I am committed to helping you comply with our regulations and will be pleased to answer any questions you may have or provide any guidance you may need.

Your compliance with APHIS regulations is important to safeguarding U.S. agriculture and natural resources. We will continue to monitor your activities to ensure there are no additional instances of noncompliant activity. No additional action will be taken to address this matter at this time. We will maintain a copy of this letter on file should you (and/or your company) be found in violation of APHIS regulations in the future. Be aware that we take violations of our statutes and regulations very seriously. The importance of these statutes and regulations was underscored by Congress when they granted the authority, under the (Plant Protection Act or Animal Health Protection Act, as appropriate) to impose civil penalties of up to \$300,000 per violation. The statute also provides for criminal penalties in some circumstances. (APHIS also has the authority to revoke or modify permits and compliance agreements to ensure adequate safeguards.) We are hopeful that the information provided will ensure your compliance with our regulations in the future.

Letter of Information Guidelines

Go to the PPQ Compliance and Enforcement SharePoint site for more information on LOIs. This website is available to PPQ staff only.

Report Record for SPRO Cooperative Agreement

The State Plant Regulatory Official (SPRO) will provide semi-annual and annual (per cooperative agreement) IFA reports to the State Plant Health Director (SPHD). See Figure B-8 on page B-24 for an example of an SPRO IFA Cooperative Agreement Reporting Table.

ACTIVITY: REGULATORY	
Number of Regulated Establishments Visited	
Number of CAs¹ in Your State (Issued and/or Renewed):	
Percentage of CAs Reviewed Annually	
Number of Regulatory Blitzes in Your State	
Number of Violations/Finds in Regulated Articles in Commerce ²	
Number of Incidents Reported to APHIS, IES (Investigative & Enforcement Services)	
Number of Incidents Handled with LOIs ³ or between states	
ACTIVITY: SURVEY (See PPQ IFA Program Manual for guidance)	
Number of Years since Last Survey in State	
Number of Sites Surveyed/Inspected	
Number of new isolated infestations in plant nurseries, garden centers, etc. (>20	
miles outside regulated areas)	
Number of new isolated infestations in the environment (>20 miles outside regulated	
areas)	

Figure B-8 State Plant Regulatory Official IFA Cooperative Agreement Reporting Table

 $^{^{1}}$ CA = Compliance Agreement; CAs should be renewed annually 2 Please report all incidents/violations including non-compliant paperwork and infested articles to your SPHD to ensure IES involvement.

³ LOI = Letter of Information



Appendix C

Examples of IFA Compliance Agreements

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Containerized Ornamental Nursery Stock – Treatment Options C-3
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Commercial Turfgrass and Sod – Treatment Options C-6
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Soil: Bulk or Samples C-9
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Container Nursery Stock Compliance Agreement from NM C-17 Bamboo Dip Compliance Agreement from TN C-18

Containerized Nursery Stock

unless it displays a valid OMB control number. The v 0322, 0337, 0346, 0363, and 0369. The time require for reviewing instructions, searching existing data so	valid OMB control numbers for the	collection is estimated to average 1.25 hours	8, 0129, 0198, 0257, 0310, 0317, per response, including the time	OMB APPROVED 0579-0054/0088/0129/ 0198/0257/0310/0317/ 0322/0337/0346/0363/ 0369
UNITED STATES DEPARTMENT ANIMAL AND PLANT HEALTH INS PLANT PROTECTION AND O	SPECTION SERVICE	COMPLIAN	NCE AGREEMEN	Т
1. NAME AND MAILING ADDRESS OF PER	RSON OR FIRM	2. LOCATION		
Registration Number:		Block Number:		
3. REGULATED ARTICLE(S) Containerized Nursery Stock				
4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS			
Imported Fire Ant Quarantine 7				
5. I / WE AGREE TO THE FOLLOWING:				
,	ir employees in the over regulated article permits and certifications pection such reconditions, treatment to be eligible egulated articles cafor regulated article are non-transferable at the permitted of the permitted article of the permitted article are non-transferable of the permitted article at the permitted article art	ates in accordance with instants as may be required for onts, precautions and sanitate for certification. In the found online in the AF is not moved outside of the second articles	or the regulated article rovision of applicable particle for tructions. The period of at least ry measures which are PHIS-PPQ Treatment I	s. blant 2 years. e attached
Stamp/Imprint Number:	(imprint	of stamp to the right)	8. DATE SIGNED	
		of stamp to the right)		
6. SIGNATURE	7. TITLE		8. DATE SIGNED 9. AGREEMENT NO.	
	7. TITLE	ment, which shall remain in		ENT
6. SIGNATURE The affixing of the signatures below	7. TITLE will validate this agree ised as necessary or re	ment, which shall remain in	9. AGREEMENT NO.	:NT
6. SIGNATURE The affixing of the signatures below effect until canceled, but may be revi	7. TITLE will validate this agree ised as necessary or re	ment, which shall remain in evoked for noncompliance.	9. AGREEMENT NO.	ENT
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6. SIGNATURE The affixing of the signatures below effect until canceled, but may be revi 11. PPQ/CBP OFFICIAL (NAME AND TITLE 13. SIGNATURE	7. TITLE will validate this agree ised as necessary or re	ment, which shall remain in evoked for noncompliance.	9. AGREEMENT NO.	NT

Figure C-1 Compliance Agreement for Containerized Nursery Stock

Containerized Ornamental Nursery Stock – Treatment Options

Containerized Ornamental Nursery Stock – Treatment Options

See USDA, APHIS Website USDA, APHIS, PPQ Treatment Manual for more details $https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf\\$

INCORPORATION OF GRANULAR INSECTICIDES:

Approved insecticides: Bifenthrin, Fipronil (no current label available), Tefluthrin (no current label available) treatment rates not shown for fipronil or tefluthrin

Mix thoroughly to distribute the insecticide evenly throughout the soil or potting media. After potting, containers must be watered to the point of saturation.

Application rates and certification periods

Dose Rate (ppm) 10 ppm Certification period (months) 6 months 12 ppm 15 ppm 12 months 25 ppm Continuous'

DRENCH APPLICATION OF INSECTICIDES:

Approved insecticides: Bifenthrin, Chlorpyrifos

The volume of the treating solution must be at least 1/5 (20%) the volume of the container.

Application rates and certification periods

Dose Rate (ppm/other)
25 ppm
4 fl oz 4EC per 100 gal of water Certification period (days) Insecticide Chlorpyrifos 30 days

IMMERSION OF CONTAINERIZED NURSERY STOCK IN INSECTICIDE:

Approved insecticides: Bifenthrin, Chlorpyrifos

Containers must remain in solution until bubbling ceases

Application rates and certification periods

Certification period (days) Insecticide Dose rate (ppm/other) 0.125 lb ai/100 gal of water 30 days Chlorpyrifos 0.115 lb ai/100 gal of water 0.05 lb ai/100 gal of waer 180 days Bifenthrin 120 days Bifenthrin 0.025 lb ai/100 gal of water

TOPICAL APPLICATION OF INSECTICIDES:

Approved insecticides for 3- and 4-quart containers only: Bifenthrin

Prepare a mix with the appropriate amount of bifenthrin in 1,000 oz of water based on container size and bulk density of potting media as shown in the chart below. Then apply 1 fl oz of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers thoroughly after treatment.

Application rates and certification periods

Insecticide Dose rate (ppm) 25 ppm Certification period (days) Bifenthrin 180 days

IFA FREE NURSERY PROGRAM: for details see: 7CFR301.81-11

- - Nursery owner must visually survey for IFA twice a month and maintain survey records
- Authorized inspector will conduct inspection twice a year
- Control
 - Implement a treatment program with labeled baits and chemicals

 - All premises, including growing and holding areas must be free of IFA
 All exposed soil surfaces where plants are grown or held must be treated with an approved bait twice a year
 Follow-up treatments with a contact insecticide must be applied to eliminate colonies.
 - Exclusion
 - Plants grown on premises require treatment of potting media with approved granular insecticide prior to planting
 - Plants received from other sources must be obtained from IFA certified nurseries or drench treated with an approved insecticide upon delivery
- Enforcement
 - Records must be maintained for treatments conducted, surveys conducted, outside source certification, and
 - shipping records
 Records must be made available to authorized inspectors upon request

The IFA Free Nursery Program is not mandatory for movement of regulated articles. Plant may be certified for movement using any of the approved treatment options.

Figure C-2 Containerized Ornamental Nursery Stock – Treatment Options

^{*}continuous certification is only allowed when all provisions of the IFA Free Nursery Program are met

Field Grown Balled and Burlapped Nursery Stock

for reviewing instructions, searching existing data source	complete this information coll	nsor, and a person is not required to re information collection are 0579-0054, 0 ection is estimated to average 1.25 hon he data needed, and completing and rev	urs per response, including the time	OMB APPROVED 0579-0054/0088/0129/ 0198/0257/0310/0317/ 0322/0337/0346/0363/ 0369
UNITED STATES DEPARTMENT OF ANIMAL AND PLANT HEALTH INSPE PLANT PROTECTION AND QU	CTION SERVICE	COMPLIA	NCE AGREEMEN	т
1. NAME AND MAILING ADDRESS OF PERSO	ON OR FIRM	2. LOCATION		
Registration Number:		Block Number:		
3. REGULATED ARTICLE(S) Field Grown Balled and Burlapped	d Nursery Stock			
4. APPLICABLE FEDERAL QUARANTINE(S) of Imported Fire Ant Quarantine 7CF				
5. I / WE AGREE TO THE FOLLOWING:	1301.01			
 D. To maintain and offer for ins E. To carry out all additional co and included with this docur F. Approved treatments for reg G. Treatment is not required fo H. Compliance agreements are I. Certification (stamp/imprint) must be attached to or acco and be included on shipping to shipping destination. 	nditions, treatment nent to be eligible f ulated articles can r regulated articles e non-transferable. authorizing moven mpany all regulate	es, precautions and sanit for certification. be found online in the A not moved outside of the nent d articles	ary measures which ar	e attached
Stamp/Imprint Number:		stamp to the right)		
6. SIGNATURE	7. TITLE		8. DATE SIGNED	
	I		9. AGREEMENT NO.	
The affixing of the signatures below will effect until canceled, but may be revise			10. DATE OF AGREEM	ENT
onout and ouncoina, but may be revised		12. ADDRESS		
11. PPQ/CBP OFFICIAL (NAME AND TITLE)		12. ADDITEGO		
		12. ASSINESS		
11. PPQ/CBP OFFICIAL (NAME AND TITLE)	ICIAL (NAME AND TITLE			

Figure C-3 Compliance Agreement for Field Grown Balled and Burlapped Nursery Stock

Turfgrass and Sod

According to the Paperwork Reduction Act of 1995, an unless it displays a valid OMB control number. The val 0322, 0337, 0346, 0363, and 0369. The time required for reviewing instructions, searching existing data source.	id OMB control numbers for the to complete this information	his information collection collection is estimated	on are 0579-0054, 0088 to average 1.25 hours	s, 0129, 0198, 0257, 0310, 0317, 0198/0257/031
UNITED STATES DEPARTMENT OF ANIMAL AND PLANT HEALTH INSP PLANT PROTECTION AND QU	ECTION SERVICE		COMPLIAN	ICE AGREEMENT
1. NAME AND MAILING ADDRESS OF PERS	ON OR FIRM	2. LOCATION		
Registration Number: 3. REGULATED ARTICLE(S) Turfgrass and Sod 4. APPLICABLE FEDERAL QUARANTINE(S)	OR REGULATIONS	Block Number:		
Imported Fire Ant Quarantine 7C 5. I/WE AGREE TO THE FOLLOWING:	FR301.81			
quarantines. C. To safeguard and use all pr D. To maintain and offer for in: E. To carry out all additional cr and included with this docu F. Approved treatments for reg G. Treatment is not required ff H. Compliance agreements ar I. Certification (stamp/imprint) must be attached to or accordand be included on shipping to shipping destination.	spection such reconditions, treatme ment to be eligible gulated articles cap regulated article e non-transferable) authorizing move ompany all regulated	ords as may be noted to the control of the control	e required for ns and sanitar on. Iline in the AP	the period of at least 2 years. y measures which are attached HIS-PPQ Treatment Manual.
Stamp/Imprint Number:	(imprint	of stamp to the	right)	
6. SIGNATURE	7. TITLE			8. DATE SIGNED
	<u> </u>			9. AGREEMENT NO.
The affixing of the signatures below w effect until canceled, but may be revised				10. DATE OF AGREEMENT
11. PPQ/CBP OFFICIAL (NAME AND TITLE)			12. ADDRESS	
13. SIGNATURE				
13. SIGNATURE 14. U.S. GOVERNMENT/STATE AGENCY OF	FICIAL (NAME AND TIT	LE)	15. ADDRESS	
	FICIAL (NAME AND TIT	LE)	15. ADDRESS	

Figure C-4 Compliance Agreement for Turfgrass and Sod

Commercial Turfgrass and Sod – Treatment Options

Commercial Turfgrass and Sod - Treatment Options

See USDA, APHIS Website USDA, APHIS, PPQ Treatment Manual for more details https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf

Approved insecticides: **Bifenthrin, Chlorpyrifos and Fipronil** no chlorpyrifos available in 2018

Apply insecticide by broadcast application method.

Water area immediately after treatment.

Application rates and certification periods Certification Exposure period Application Rate (lb ai/acre) period* Insecticide 16 weeks 28 days Bifenthrin 0.2 lb ai/acre X 2 applications 1 week apart 8 lb ai/acre (1 application only) 2 days 6 weeks Chlorpyrifos 20 weeks 0.0125 lb ai/acre X 2 applications 1 week apart 30 days Fipronil

Figure C-5 Commercial Turfgrass and Sod – Treatment Options

^{*}exposure period begins after last application of full treatment

Greenhouse Grown Nursery Stock

unless it displays a valid OMB control number. The valid 0322, 0337, 0346, 0363, and 0369. The time required to for reviewing instructions, searching existing data source:	OMB control numbers for this in complete this information collect	ction is estimated to average 1.25 hours per	129, 0198, 0257, 0310, 0317, response, including the time	OMB APPROVED 0579-0054/0088/0129/ 0198/0257/0310/0317/ 0322/0337/0346/0363/ 0369
UNITED STATES DEPARTMENT OF ANIMAL AND PLANT HEALTH INSPE PLANT PROTECTION AND QUA	CTION SERVICE	COMPLIANC	E AGREEMEN	Т
1. NAME AND MAILING ADDRESS OF PERSO	N OR FIRM	2. LOCATION		
Registration Number: 3. REGULATED ARTICLE(S)	<u> </u>	Block Number:		
Greenhouse Grown Nursery Stock 4. APPLICABLE FEDERAL QUARANTINE(S) C				
Imported Fire Ant Quarantine 7CF				
E. To carry out all additional column and included with this docum Approved treatments for reg G. Treatment is not required for Compliance agreements are Certification (stamp/imprint) in the state of the column and be included on shipping	nent to be eligible for ulated articles can be regulated articles ro non-transferable. authorizing movement mpany all regulated	or certification. se found online in the APH not moved outside of the tree ent articles	S-PPQ Treatment	
to shipping destination.				
Stamp/Imprint Number:		stamp to the right)		
•	7. TITLE	nt, which shall remain in	8. DATE SIGNED 9. AGREEMENT NO. 10. DATE OF AGREEM	ENT
Stamp/Imprint Number: 6. SIGNATURE The affixing of the signatures below will	7. TITLE	nt, which shall remain in	9. AGREEMENT NO.	ENT
Stamp/Imprint Number: 6. SIGNATURE The affixing of the signatures below will effect until canceled, but may be revised 11. PPQ/CBP OFFICIAL (NAME AND TITLE) 13. SIGNATURE	validate this agreeme d as necessary or revo	nt, which shall remain in ked for noncompliance.	9. AGREEMENT NO.	ENT
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Figure C-6 Compliance Agreement for Greenhouse Grown Nursery Stock

Greenhouse Grown Nursery Stock – Treatment Options

Greenhouse Grown Nursery Stock - Treatment Options

See USDA, APHIS Website USDA, APHIS, PPQ Treatment Manual for more details https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf

GREENHOUSE GROWN STOCK:

Greenhouse-grown plants are certifiable without insecticidal treatment if the inspector determines that the greenhouse is constructed of fiberglass, glass, or plastic in such a way that IFA are physically excluded and cannot become established within the enclosure. Slat houses, shade houses, or open greenhouses do not qualify as physical barriers. Plants grown in structures that do not qualify as physical barriers must be treated with an approved insecticide before they can be certified for movement.

Figure C-7 Greenhouse Grown Nursery Stock - Treatment Options

Soil: Bulk or Samples

0322, 0337, 0346, 0363, and 0369. The time required to of for reviewing instructions, searching existing data sources,	OMB control numbers for the complete this information of	ponsor, and a person is not required to res is information collection are 0579-0054, 00 collection is estimated to average 1.25 hou g the data needed, and completing and revi	088, 0129, 0198, 0257, 0310, 0317, 0198/0257/0310/0317/ ors per response, including the time 0322/0337/0346/0363
UNITED STATES DEPARTMENT OF A ANIMAL AND PLANT HEALTH INSPEC PLANT PROTECTION AND QUA	CTION SERVICE	COMPLIA	NCE AGREEMENT
1. NAME AND MAILING ADDRESS OF PERSON	OR FIRM	2. LOCATION	
Registration Number:		Block Number:	
3. REGULATED ARTICLE(S) Soil: Bulk or Samples			
4. APPLICABLE FEDERAL QUARANTINE(S) OF Imported Fire Ant Quarantine 7CFF			
5. I / WE AGREE TO THE FOLLOWING:			
no liability shall be attached e agencies, or to any of their er B. To handle, process, or move quarantines. C. To safeguard and use all perr D. To maintain and offer for insp E. To carry out all additional con and included with this docum. F. Approved treatments for regu G. Treatment is not required for H. Compliance agreements are II. Certification (stamp/imprint) a must be attached to or accommutation.	mployees in the regulated article mits and certifica ection such recorditions, treatment to be eligible lated articles caregulated article inthorizing movemany all regulated regulated plany all regulated regulated plany all regulated regulated plany all regulated article inthorizing movemany all regulated article inthorizing movemany all regulated articles.	event of injury to property is in accordance with the pates in accordance with insords as may be required fonts, precautions and sanitation or certification. In the found online in the A is not moved outside of the comment.	or the regulated articles. provision of applicable plant structions. per the period of at least 2 years, ary measures which are attached PHIS-PPQ Treatment Manual.
and be included on shipping of to shipping destination. Stamp/Imprint Number:		aybills of stamp to the right)	
to shipping destination.			8. DATE SIGNED
to shipping destination. Stamp/Imprint Number:	(imprint		
to shipping destination. Stamp/Imprint Number: 6. SIGNATURE	(imprint of	of stamp to the right)	8. DATE SIGNED 9. AGREEMENT NO.
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Figure C-8 Compliance Agreement for Soil: Bulk or Samples

Soil: Bulk or Samples - Treatment Options

Soil: Bulk or Samples - Treatment Options

See USDA, APHIS Website USDA, APHIS, PPQ Treatment Manual for more details https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf

BULK SOIL:

Approved treatments:

Heat - dry or steam

All parts of the mass must be brought to required temperature

Application rates and certification periods

Treatment Dry Heat or Steam Temperature (°F)

150°

Certification period * indefinite

SOIL SAMPLES:

Approved treatments: Heat - dry or steam

All parts of the mass must be brought to required temperature

Application rates and certification periods

Treatment Dry Heat or Steam

Certification period * Temperature (°F) indefinite

-10°F to -20°F**

indefinite

Figure C-9 Soil: Bulk or Samples - Treatment Options

^{*} as long as soil is safeguarded from re-infestation

^{*} as long as soil is safeguarded from re-infestation

^{**} maintain temperature for 24 hours

Baled Hay and Straw

PLANT PROTECTION AN	IT OF AGRICULTURE NSPECTION SERVICE D QUARANTINE	COMPLIAN	CE AGREEMENT
1. NAME AND MAILING ADDRESS OF F	PERSON OR FIRM	2. LOCATION	
Registration Number:		Block Number:	
3. REGULATED ARTICLE(S) Baled Hay and Straw			
4. APPLICABLE FEDERAL QUARANTIN Imported Fire Ant Quarantine			
5. I/ WE AGREE TO THE FOLLOWING:			
and included with this d	ocument to be eligible in regulated articles can ad for regulated articles so are non-transferable. In the company all regulate oping documents or way	for certification. be found online in the API not moved outside of the inent d articles	y measures which are attached HIS-PPQ Treatment Manual. rreatment area.
6. SIGNATURE	T 7. TITLE	- Country to the right)	8. DATE SIGNED
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			9. AGREEMENT NO.
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effect until canceled, but may be r 11. PPQ/CBP OFFICIAL (NAME AND TI' 13. SIGNATURE	evised as necessary or rev	oked for noncompliance. 12. ADDRESS	10. DATE OF AGREEMENT

Figure C-10 Compliance Agreement for Baled Hay and Straw

Baled Hay and Straw - Treatment Options

Baled Hay and Straw - Treatment Options

See USDA, APHIS Website USDA, APHIS, PPQ Treatment Manual for more details https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf

BALED HAY AND STRAW:

Baled hay that meets any of the requirements below is not regulated and has no movement restrictions:

- For baled hay that is stacked, all bales except the bottom layer that is in direct contact with the
- Hay that is cut, baled, loaded, and shipped without storage.
 Baled hay that is stored on an impervious surface such as hard pan (highly compressed soil), asphalt, concrete, etc.
- Baled hay that is stored elevated above the soil on pallets or tires or stored on landscaping cloth placed over the soil.

For Baled hay that is stored in direct contact with the ground, contact your state inspector for assistance.

Figure C-11 Baled Hay and Straw - Treatment Options

Nursery Stock Dealer/Broker of Nursery Stock

0322, 0337, 0346, 0363, and 0369. The time required to control reviewing instructions, searching existing data sources,	MB control numbers for this complete this information co		8, 0129, 0198, 0257, 0310, 0317, per response, including the time	OMB APPROVED 0579-0054/0088/0129/ 0198/0257/0310/0317/ 0322/0337/0346/0363/ 0369
UNITED STATES DEPARTMENT OF A ANIMAL AND PLANT HEALTH INSPEC PLANT PROTECTION AND QUA	TION SERVICE	COMPLIA	NCE AGREEMEN	Т
1. NAME AND MAILING ADDRESS OF PERSON	IOR FIRM	2. LOCATION		
Registration Number:		Block Number:		
3. REGULATED ARTICLE(S) Nursery Stock Dealer / Broker of N	•	Movement Outside the IFA	A Quarantine Area	
4. APPLICABLE FEDERAL QUARANTINE(S) OF Imported Fire Ant Quarantine 7CFF				_
 C. To safeguard and use all permits ar To maintain and offer for inspection For regulated articles not moved ou required. F. Compliance agreements are non-tre employer or company, you must not G. Business's operating as brokers or must obtain plants from IFA certified H. Sales invoices with a clear USDA IF compliance and made available for I. All bills of lading or invoices for ship area must be accompanied by an IF J. All plants held at this establishment infestation and meet any re-treatme out of the IFA quarantine area. 	such records as m t of the quarantine ansferable. If you h tify Division of Plar distribution centers d nurseries under I FA certificate imprii inspection by an a ments leaving the FA imprint assigned must be safeguare int requirements re	nay be required. d area, the treatments descr and a compliance agreement the Industry Inspector. s of plants intended to be shi FA compliance. In must be obtained from pro uthorized inspector for a per IFA quarantine d to the shipper. ded against IFA equired for shipping	and you leave your pre pped outside the IFA quaducing nurseries under l	sent arantine area
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6. SIGNATURE	validate this agreen		9. AGREEMENT NO.	ENT
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Figure C-12 Compliance Agreement for Nursery Stock Dealer/Broker

Nursery Stock and Other Regulated Articles

Nursery Stock Compliance Agreement from LA

ANIMAL AND PLANT HEA PLANT PROTECTION	TMENT OF AGRICULTURE ALTH INSPECTION SERVICE IN AND QUARANTINE E AGREEMENT	
Name and Mailing Address of Person or Firm	2. Location	
3. Regulated	4. IFA Certification Stamp Number	ber
Nursery Stock and Other Regulated Articles		
Applicable Federal Quarantine(s) or Regulations		
Imported Fire Ant Quarantine #81 (7 CFR 301.81)		
6. I/We agree to the following:		
A. To offer for sale or movement outside the IFA quarantined area or restricted articles which have been treated with approved materials*		
*See Federal or State Cooperators for a listing of approved materialisting of state counties that are regulated are also available, however there is any question about an areas regulated status.		
B. To contact Federal or State Cooperators to monitor regulatory trea	atments*.	
*A portion of all regulatory treatments performed by the nurserymor revoked.	an must be monitored annually or II	A certification will be suspende
C. To use Federal Certification Stamps on those restricted articles of those articles which are eligible for certification after treatment, whe a safe manner in order to prevent possible misuse by unauthorized Certification Stamps and to return same to Federal or State Coopera canceled.	en required, with approved materials individuals. To immediately report	. To keep Certification Stamps is damage, loss, theft, or misuse of
D. To maintain a record of all regulatory treatments and shipment records available to Federal or State Cooperators upon request.	ats of regulated articles from IFA re	egulated areas, and to make suc
7. Signature	8. Title	9. Date of Agreement
-		
The affixing of the signatures below will validate this agreeme revoked as necessary or revoked for non-compliance.	ent which shall remain in effect u	ıntil canceled, but may be
	ent which shall remain in effect u	until canceled, but may be
revoked as necessary or revoked for non-compliance.		ulture and Forestry
10. State Agency Official (Name, Title, and Signature) , Adm. Coordinator, Nursery and	11. State Agency Address Louisiana Dept. of Agric 5825 Florida Blvd., Suite	ulture and Forestry

Figure C-13 Example of an IFA Nursery Stock Compliance Agreement from LA

Nursery Stock (Drench Treatment) Compliance Agreement from TN

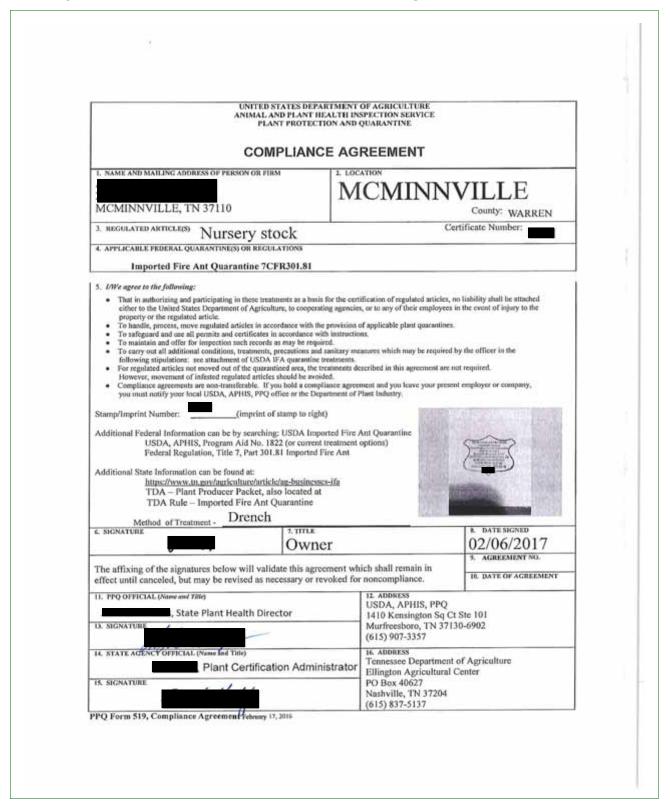


Figure C-14 Example of an IFA Nursery Stock (Drench Treatment) Compliance Agreement from TN

Nursery Stock/Bare Root Compliance Agreement from NC

According to the Paperwork Reduction Act of 1995, no persons are require unless it displays a valid OMB control number. The valid OMB control num The time required to complete this information collection is estimated to averone for reviewing instructions, searching existing data sources, gathering and reviewing the collection of information.	ber for this information collection is erage 1.25 hours per response, incl	0579-0054. luding the time	OMB APPROVED 0579-0054/0088/0129 0198/0257/0310/0317 0322/0337/0346/0363 0369
UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE PLANT PROTECTION AND QUARANTINE	COMPLIAN	CE AGREE	EMENT
1. NAME AND MAILING ADDRESS OF PERSON OR FIRM:	2. LOCATION:		
MONROE, NC 28112	Monroe, NC 28112 County: Union		
REGULATED ARTICLE(S): Nursery Stock APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS: Imported Fire Ant: Federal(7CFR 301.81); Imported Fire Ant: NC(02 NCAC 48A.0700)		
5. I/WE AGREE TO THE FOLLOWING: All plants are to be rendered free of soil (bare-rooted) prior to ship	ment.		
6. SIGNATURE 7. TITLE		8. DATE SIGN	IED
The affixing of the signature below will validate this agreement which shall but may be revised as necessary or revoked for noncompliance.	remain in effect until cancelled,	9. AGREEME 10. DATE OF	AGREEMENT
11. PPQ/CBP OFFICIAL (NAME AND TITLE)	12. ADDRESS		8/1/17
13. SIGNATURE	USDA-APHIS-PPQ 920 Main Campus Drive Raleigh, NC 27606	e Ste. 150	
14. State Agency Official (Name and Title)	15. ADDRESS		
Plant Pest Specialist 16. SIGNATURE	NCDA&CS Plant Industry Division 1060 Mail Service Center Raleigh, NC 27699		
SEP 2012			

Figure C-15 Example of an IFA Nursery Stock/Bare Root Compliance Agreement from NC

Container Nursery Stock Compliance Agreement from NM

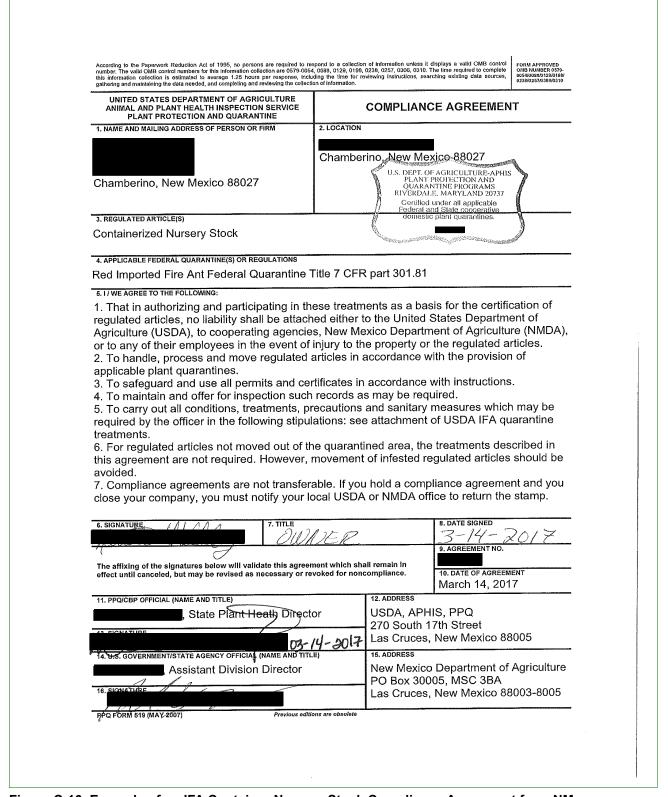


Figure C-16 Example of an IFA Container Nursery Stock Compliance Agreement from NM

Bamboo Dip Compliance Agreement from TN

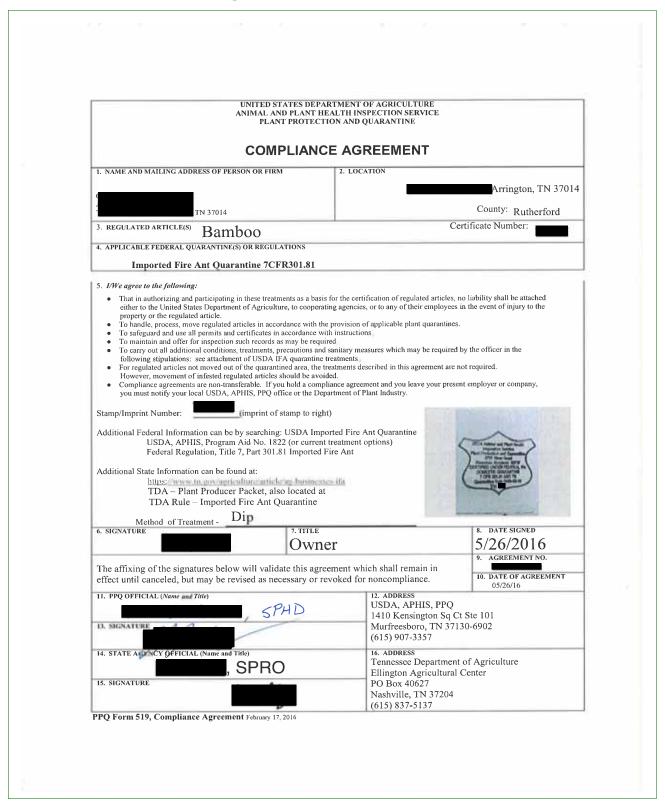


Figure C-17 Example of an IFA Bamboo Dip Compliance Agreement from TN

Container Nursery Stock Compliance Agreement from TX

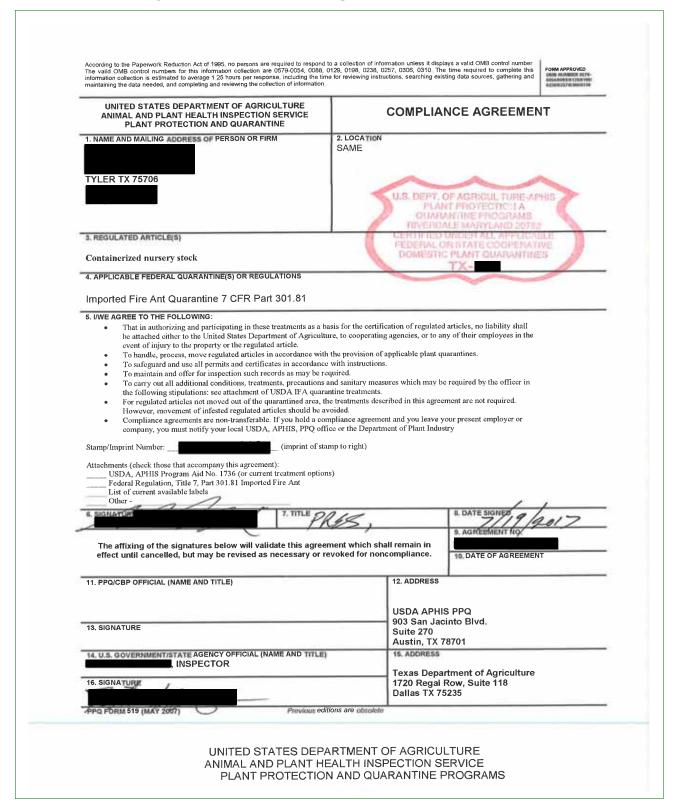


Figure C-18 Example of an IFA Container Nursery Stock Compliance Agreement from TX

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE PLANT PROTECTION AND QUARANTINE PROGRAMS Compliance Agreement

Containerized Ornamental Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

INCORPORATION OF GRANULAR INSECTICIDES:

Approved insecticides

Bifenthrin

Fipronil (no current label available)

Tefluthrin (no current label available)

Mix thoroughly to distribute the insecticide evenly throughout the soil or potting media

After potting, containers must be watered to the point of saturation

Application rates and certification periods:

<u>Insecticide</u>	Dose rate (ppm)	Certification period (months)
Bifenthrin	10 12 15 25	0-6 0-12 0-24 Continuous†
Fipronil*	10 12 15 25	0-6 0-12 0-24 Continuous†
Tefluthrin	10 25	0-18 Continuous†

^{*} fipronil has a 2 week exposure period after treatment prior to certification; others can be certified immediately upon completion of treatment

Any person who knowingly violates the Plant Protection Act (PPA) (7U.S.C. §§ 7701 et. Seq.) may be criminally prosecuted and found guilty of a misdemeanor which can result in penalties, and one year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for any violation that results in the person deriving pecuniary gain or causing pecuniary loss to another, whichever is greater.

Attachment to PPQ FORM 519

Figure C-19 Example of an IFA Container Nursery Stock Compliance Agreement from TX (page 2)

[†] if all other provisions of the IFA free nursery program are met

Containerized Ornamental Nursery Stock - Treatment Options

See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

DRENCH APPLICATION OF INSECTICIDES:

Approved insecticides Bifenthrin Chlorpyrifos

The volume of the treating solution must be at least 1/5 (20%) the volume of the container

Application rates and certification periods:

InsecticideDose rate (ppm/other)Certification period (days)Bifenthrin25180Chlorpyrifos4 fl oz 4EC (or equivalent of other formulation /100 gal H_2O)30

TOPICAL APPLICATION OF INSECTICIDES:

Approved insecticides for 3- and 4-quart containers only

Bifenthrin

Irrigate all treated containers thoroughly after treatment

Application rates and certification periods:

 Insecticide
 Dose rate (ppm/)
 Certification period (days)

 Bifenthrin
 25
 180

Any person who knowingly violates the Plant Protection Act (PPA) (7U.S.C. §§ 7701 et. Seq.) may be criminally prosecuted and found guilty of a misdemeanor which can result in penalties, and one year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for any violation that results in the person deriving pecuniary gain or causing pecuniary loss to another, whichever is greater.

Attachment to PPQ FORM 519

Figure C-20 Example of an IFA Container Nursery Stock Compliance Agreement from TX (page 3)

Containerized Ornamental Nursery Stock - Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

IMMERSION OF CONTAINERIZED NURSERY STOCK IN INSECTICIDE:

Approved insecticides

Chlorpyrifos

Containers must remain in solution until bubbling ceases

Application rates and certification periods:

Insecticide

Dose rate (ppm/other)

Certification period (days)

Chlorpyrifos

4 fl oz 4EC (or equivalent of other formulation /100 gal $H_2\text{O}$)

30

Any person who knowingly violates the Plant Protection Act (PPA) (7U.S.C. §§ 7701 et. Seq.) may be criminally prosecuted and found guilty of a misdemeanor which can result in penalties, and one year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for any violation that results in the person deriving pecuniary gain or causing pecuniary loss to another, whichever is greater.

Attachment to PPQ FORM 519

Figure C-21 Example of an IFA Container Nursery Stock Compliance Agreement from TX (page 4)

Containerized Ornamental Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

IFA-FREE NURSERY PROGRAM:

Detection

Nursery owner must visually survey for IFA twice a month Federal or state inspectors will inspect twice a year

Control

Implement a treatment program with registered baits and chemicals
Premises, including growing and holding areas, must be free of IFA
All exposed soil surfaces (including sod and mulched areas) on property where
plants are grown, potted, stored, handled, loaded, unloaded, or sold must be
treated with a broadcast application of an approved bait at least every 6 months
Followup treatments with a contact insecticide must be applied to eliminate
remaining colonies. Mound treatments with chlorpyrifos or diazinon are approved

Exclusion

Plants grown on premises

Treatment of potting media with approved granular insecticide prior to planting required

Plants received from outside sources

Must be obtained from either other IFA-free nursery under compliance agreement

Or

Drench treated with bifenthrin upon delivery and within 180 days and either: Repotted in media treated with approved granular insecticide Retreated with bifenthrin drench or immersion at 180 day intervals Shipped

Enforcement

Maintain survey and treatment records
Records made available to state and Federal inspectors upon request
Details in Program Aid No. 1653 or 7CFR 301.81 (Regulations)

This IFA-free nursery program is not mandatory for movement of regulated articles.
 Plants may otherwise be certified for movement using the insecticide treatments described in the incorporation, drench, topical, or immersion treatment options.

Any person who knowingly violates the Plant Protection Act (PPA) (7U.S.C. §§ 7701 et. Seq.) may be criminally prosecuted and found guilty of a misdemeanor which can result in penalties, and one year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for any violation that results in the person deriving pecuniary gain or causing pecuniary loss to another, whichever is greater.

Attachment to PPQ FORM 519

Figure C-22 Example of an IFA Container Nursery Stock Compliance Agreement from TX (page 5)

Containerized Ornamental Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

ATTACHMENT AND DISPOSITION OF CERTIFICATES/PERMITS:

Consignor must ensure that the certificate (stamp/imprint) authorizing interstate movement of a regulated item is, at all times during interstate movement, attached to:

- the outside of the container encasing the regulated article
- the article itself, if it is not in a container
- the consignee's copy of the accompanying waybill: provided that the descriptions
 of the regulated article on the certificate or limited permit, and on the way bill, are
 sufficient to identify the regulated article

Carrier must furnish the certificate or limited permit authorizing interstate movement of a regulated article to the consignee at the shipment's destination

Any person who knowingly violates the Plant Protection Act (PPA) (7U.S.C. §§ 7701 et. Seq.) may be criminally prosecuted and found guilty of a misdemeanor which can result in penalties, and one year prison term, or both. Additionally, any person violating the PPA may be assessed civil penalties of up to \$250,000 per violation or twice the gross gain or gross loss for any violation that results in the person deriving pecuniary gain or causing pecuniary loss to another, whichever is greater.

Attachment to PPQ FORM 519

Figure C-23 Example of an IFA Container Nursery Stock Compliance Agreement from TX (page 6)



Appendix D

Recipe for USDA IFA Bait Attractant Cookies

Background

The methods used were a combination of those used by cooks in preparing cookies or granola bars and those used in mixing insect diets. The ingredients listed in the recipe (Table D-1) were tested in the laboratory on IFA prior to selection. They were selected for being essential to insect nutrition and attraction as well as being preservatives and glues to hold the ingredients together. These are food products found in most grocery stores.

They are basic products that have not been adulterated with additives or by removing ingredients such as gluten. The pregelatinized corn starch acts as a sponge when mixed with vegetable oil and maintains it general size and shape. When mixed in water it dissolves and becomes a thickening agent. The recipe in Table D-1 was developed through trial and error to get the right consistency of the end product. The mixture of ingredients are mixed and heated to a malleable form for spreading over sheets of individual molds. Each mold is in the shape of half a sphere with a diameter of 17 mm.

Instructions

The ingredients for the developed bait are listed in Table D-1.

Table D-1 Ingredients for USDA IFA Survey Bait Attractant Cookies

Ingredients	Amounts
Stone ground natural yellow cornmeal	84 grams
Pregelled corn (pregelatinized starch)	63 grams
Corn oil	54 grams
Clover honey	21 grams
Egg (chicken)	1 large egg
Corn syrup	63 grams
Granulated white sugar	21 grams

Mixing instructions are as follows:

- 1. Weigh out and mix together the cornmeal and pregelled corn in a bowl or beaker.
- 2. Mix or beat together the corn oil, honey, and egg in a separate beaker.

- 3. Add the oil, honey, and egg mix to the cornmeal-pregelled corn and mix thoroughly.
- 4. Mix together the corn syrup and sugar in a 1-quart sauce pan. Heat these ingredients to melting, being careful not to burn the mixture.
- 5. Mix the remainder of the ingredients into the hot sugar. Heat this while mixing and pressing the mixture together for assured consistency.
- 6. When hot to the touch, stop heating and spoon the mixture into the molds. Press into individual molds with a putty knife or spatula.
- 7. Once each sheet of molds is filled, go to the next sheet. When completed, set molds aside to air dry at room temperature for 24 hours.
- 8. Remove the baits from the molds and place on wax paper to dry for 24 hours more.
- 9. When hardened, count and place the baits in plastic bags. Seal the bags and store in a refrigerator or freezer.

The finished product is shown in Figure D-1.



Figure D-1 Laboratory Produced Bait Attractant Cookie



Imported Fire Ant Program

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