United States Department of Agriculture

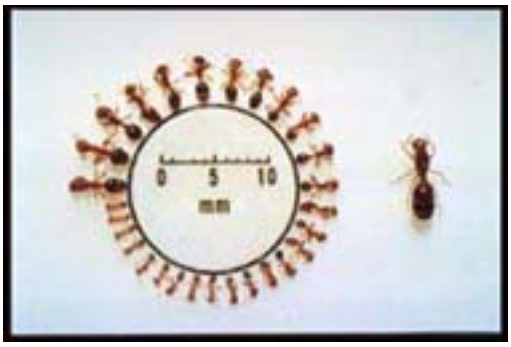
Marketing and Regulatory Programs

Animal and Plant Health Inspection Service

Plant Protection and Quarantine

First Edition

Imported Fire Ant Program Manual



NOTICE

The information herein is supplied with the understanding that no discrimination is intended and that listing of commercial products, necessary to this manual, implies no endorsement by the authors or Plant Protection and Quarantine (PPQ) of APHIS, USDA. Criticism of products or equipment not listed is neither implied nor intended.

Due to constantly changing laws and regulations, PPQ can assume no liability for the suggested use of chemicals contained herein. (Pesticides should be used according to the label directions on the pesticide container.)

Cover Photographs

Clockwise from top left: Imported Fire Ant queen (right) and circle of IFA workers showing various sizes; IFA queen with brood and tending workers; Containerized nursery stock awaiting loading and shipping; Inspection of a truck shipping nursery stock during highway blitz.

Acknowledgements

This manual was produced by the APHIS, PPQ Manuals Unit with assistance from the many APHIS and state personnel associated with the Federal Imported Fire Ant Quarantine. The efforts of those who contributed to and reviewed this manual are gratefully acknowledged.

Imported Fire Ant Program Manual Update Record

Instructions:

1. Record the Transmittal Number and the date you received the update in the appropriate columns.
2. If you are missing updates or manual parts, contact Distribution in Riverdale, Maryland. (Phone 1-301-734-4474; Fax 1-301-734-8455)

Transmittal Number	Date Received	Transmittal Number	Date Received

Imported Fire Ant

Contents

Tables
v

Figures
vii

Introduction
General Information *1-1*

Survey
Procedures *2-1*

Regulatory
Procedures *3-1*

Appendix A
A List of Approved Treatments and Available Labels *A-1*

Appendix B
Summary of Requirements for Moving Imported Fire Ant Regulated Articles *B-1*

Appendix C
A List of State Contacts for the Imported Fire Ant Program *C-1*

Appendix D
Forms *D-1*

Appendix E
Minimum Allowable Rates for IFA Quarantine Treatments *E-1*

Appendix F
A Quarantine Map Illustrating Areas Regulated for Imported Fire Ant *F-1*

Index
Index-1

Tables

TABLE 3-1 : Determining Movement Status of Articles at Transit Inspection Locations *3-4*

TABLE 3-2 : Determining Movement Status of IFA Nonregulated Articles *3-4*

TABLE 3-3 : Determining Movement Status of IFA Regulated Articles *3-4*

TABLE A-1 : Emulsifiable Chlorpyrifos Dosage for Balled or Containerized Plants *A-3*

TABLE A-2 : Granular Bifenthrin Dosage for Containerized Plants *A-4*

TABLE A-3 : Granular Tefluthrin Dosage for Containerized Plants *A-4*

TABLE A-4 : Granular Fipronil Dosage for Containerized Plants *A-4*

TABLE A-5 : Chlorpyrifos Dosage for Grass Sod *A-12*

TABLE A-6 : Fipronil Dosage for Grass Sod *A-13*

TABLE A-7 : Available Labels for Use in the IFA Federal Quarantine *A-14*

TABLE B-1 : Summary of Requirements for Moving IFA Regulated Articles *B-2*

Draft

Figures

FIGURE 2-1: Survey Pattern for Large Block Design *2-2*

FIGURE 2-2: Survey Pattern for Small Block Design *2-3*

FIGURE D-1: PPQ Form 244, Quarantine Tag *D-1*

FIGURE D-2: PPQ Form 518, Report of Violation *D-2*

FIGURE D-3: PPQ Form 519, Compliance Agreement for Baled Hay and Straw *D-3*

FIGURE D-4: PPQ Form 519, Compliance Agreement for Baled Hay and Straw (Attachment) *D-4*

FIGURE D-5: PPQ Form 519, Compliance Agreement for Blueberries *D-5*

FIGURE D-6: PPQ Form 519, Compliance Agreement for Blueberries (Attachment) *D-6*

FIGURE D-7: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock *D-7*

FIGURE D-8: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 1) *D-8*

FIGURE D-9: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 2) *D-9*

FIGURE D-10: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 3) *D-10*

FIGURE D-11: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 4) *D-11*

FIGURE D-12: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock *D-12*

FIGURE D-13: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 1) *D-13*

FIGURE D-14: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 2) *D-14*

FIGURE D-15: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 3) *D-15*

FIGURE D-16: PPQ Form 519, Compliance Agreement for Regulated Articles in General *D-16*

FIGURE D-17: PPQ Form 519, Compliance Agreement for Grass Sod *D-17*

FIGURE D-18: PPQ Form 519, Compliance Agreement for Grass Sod (Attachment) *D-18*

FIGURE D-19: PPQ Form 519, Compliance Agreement for Greenhouse Grown Plants *D-19*

FIGURE D-20: PPQ Form 519, Compliance Agreement for Greenhouse Grown Plants (Attachment) *D-20*

FIGURE D-21: PPQ Form 519, Compliance Agreement for Soil *D-21*

FIGURE D-22: PPQ Form 519, Compliance Agreement for Soil (Attachment 1) *D-22*

FIGURE D-23: PPQ Form 519, Compliance Agreement for Soil (Attachment 2) *D-23*

FIGURE D-24: PPQ Form 519, Compliance Agreement for Used Soil Moving Equipment *D-24*

FIGURE D-25: PPQ Form 519, Compliance Agreement for Used Soil Moving Equipment (Attachment) *D-25*

FIGURE D-26: PPQ Form 523, Emergency Action Notification *D-26*

FIGURE D-27: PPQ Form 530, Limited Permit *D-27*

FIGURE D-28: PPQ Form 540, Certificate *D-28*

FIGURE D-29: APHIS Form 2060, Environmental Monitoring Form *D-29*

FIGURE D-30: APHIS Form 2060, Environmental Monitoring Form Guidelines *D-30*

FIGURE D-31: Imported Fire Ant Quarterly Report *D-31*

1 Introduction

Imported Fire Ant

General Information

Contents

Purpose **page 1-1**
Audience **page 1-1**
Scope **page 1-2**
Authority **page 1-3**
Distribution **page 1-3**
Life History **page 1-4**
Description **page 1-4**

Purpose

This manual will prepare you to accomplish the following tasks:

- Perform accurate surveys for Imported Fire Ant (IFA) along the leading edge of infestation
- Determine the movement (entry) status of regulated and nonregulated articles
- Facilitate the movement of IFA-free nursery stock from regulated to non-regulated areas
- Take regulatory action when IFA is detected

The Animal and Plant Health Inspection Service (APHIS) takes regulatory action against *Solenopsis invicta* Buren (red imported fire ant), *Solenopsis richteri* Forel (black imported fire ant), and their hybrid, collectively known as imported fire ants (IFA), because current IFA infestations cause significant loss in U. S. agriculture and are a human health hazard. IFA attacks have been documented as causing low weight gain, deformity, and death in pigs, calves, sheep, quail, deer, and other wildlife. Young and newborn animals are especially susceptible. These ants will girdle young trees and feed on the buds and fruits of numerous crop plants especially corn, soybeans, okra, and citrus. Large nests located in fields interfere with and damage equipment during cultivation and harvesting, while ant attacks and possible allergic reactions inhibit field worker activities.

Audience

This manual is for use by state and federal regulatory officers.

Scope

The manual is divided into four sections:

- Introduction
- Survey
- Regulatory
- Appendixes

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.

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, intensive bait attractant surveys to determine location of colonies to the acre level, are presented as guidelines for those involved in eradication of small isolated infestations.

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

- Holding shipments while identification of an interception is made
- Determining the movement status of articles at transit inspection locations
- Handling IFA interceptions at transit inspection locations and at destination
- Returning infested articles to origin
- Removing and destroying infested shipments
- Disinfecting infested shipments or non certified regulated articles
- Allowing movement of IFA interceptions to destination for further inspection

Also included in the Regulatory section is information on preparing and 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)
- Soil sampling procedures and monitoring form (PPQ Form 2060)

The Appendixes include the following information:

- A list of approved treatments and available labels
- Requirements for moving IFA regulated articles
- A list of state contacts for the IFA program
- Examples of forms
  - Model compliance agreements for each regulated article
  - Permits and other forms
- Guidelines for conducting IFA inspections at nurseries
- A list of acceptable residue levels for program chemicals
- A quarantine map illustrating regulated areas

Authority

Your authority for taking regulatory actions for IFA is contained in 7CFR 301 Subpart Imported Fire Ant (301.81-1 through 301.81-10). This regulation was enacted under provision of the Plant Protection Act (7 USC 7701, et seq.).

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 bay of Mobile, Alabama. As of 2004, *Solenopsis invicta* infests portions or all of Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Puerto Rico. In the U. S., *S. richteri* is only reported from Northeastern Mississippi, Northwestern Alabama, and Southern Tennessee. The *S. invicta* x *richteri* hybrid has typically been found from the middle of both Mississippi and Alabama northward, in the southeastern corner of Tennessee, and the Northwestern corner of Georgia. Unreported infestations and infestations undergoing eradication may be encountered outside these quarantined areas. For the most recent quarantine map, refer to the following web site:

(http://www.aphis.usda.gov/ppq/maps/fireant.pdf).

Life History

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.

Description

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

Reproductives

Queens are about 9mm 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 remove theirs prior to nest building.

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.

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. Major worker and reproductive larvae take one or more weeks longer to mature than 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.

2

Imported Fire Ant

Survey

Procedures

Contents

Area Detection Survey **page 2-1**
- Purpose **page 2-1**
- Large Block Design **page 2-2**
- Small Block Design **page 2-3**

Delimiting Survey **page 2-6**
- Purpose **page 2-6**
- Supplies **page 2-6**
- Procedure **page 2-7**
- Taxonomy **page 2-7**
- Reporting of Survey Finding **page 2-8**

Area Detection Survey

Purpose

The purpose of the detection survey is to find infestations beyond the regulated or generally infested area. The most common method of detection is by visual survey. This involves looking at highway right of ways for fire ant mounds while driving, as well as looking at numerous types of open areas such as pastures, parks, pipelines, and power line right of ways. Also, look at sites of new construction 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, telephone repair services, livestock industry groups, etc. In areas of more concern, such as nurseries, warehouses, docks, or railroad yards, detection surveys should be more intense visual surveys, possibly supplemented with delimiting surveys (bait/attractant trap).

Determine the intensity of your survey by 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 geographical location. Choose days (or times of the day) with air temperatures above 65°C and below 90°C. However, in some areas it may be difficult to survey during the summer and fall due to tall grass. In these areas it may be necessary to survey early in the spring or even in the late fall after a killing frost that reduces grass height. During these times of the year, choose days with sunshine and temperatures in the 50s (°F) if possible to determine ant activity of visible mounds.

Large Block Design

In infested states where no one has surveyed the previous four years, use the large block design survey. The large block design survey will permit coverage of large areas quickly but with sufficient intensity to detect IFA populations.

Prepare survey maps reflecting 20 x 60 mile sectors along the leading edge of the IFA quarantined area (see Figure 2-1). Each rectangular sector will run perpendicular to the leading edge of the current quarantine area. Plan to survey as many sectors as resources will allow.

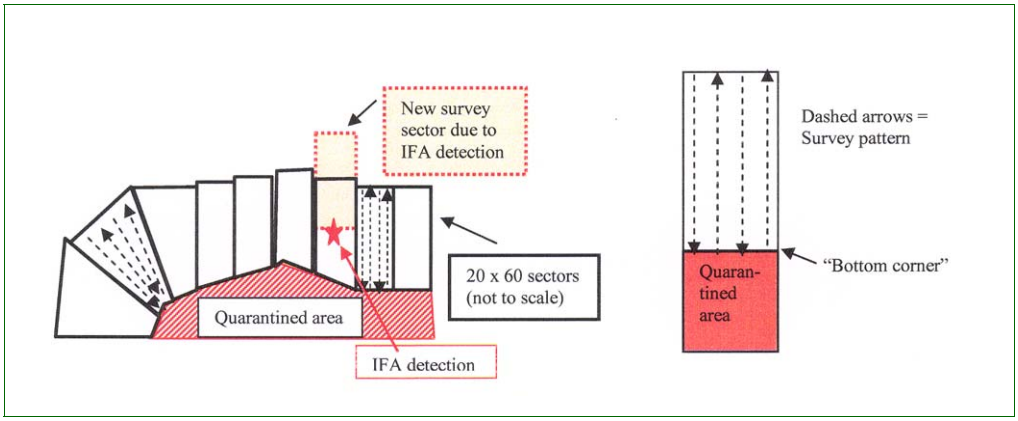


FIGURE 2-1: Survey Pattern for Large Block Design

Survey Pattern

Direct the survey crew to begin surveying at the edge of the sector nearest the quarantined area and travel away from that area. There will be 4 passes through each 20 x 60 mile sector. Select a major road that travels approximately perpendicular (at a 90° angle) to the leading edge of the quarantined area. This road should be approximately 2.5 miles from a "bottom corner" (see diagram above) of your survey sector closest to the edge of the quarantined area. Travel away from the quarantined area surveying for IFA (described in Survey Technique). If you find IFA, extend the sector for an additional 60 miles past the point of IFA detection. If you find no IFA along the first 60 miles, move over approximately 5 miles and choose another road, parallel to your first road, and travel back to the leading edge of the quarantined area, surveying for IFA as you go. When you reach the edge of the quarantine area, move over 5 more miles and choose another road parallel to the previous 2 roads traveled. If possible, survey 60 miles past the IFA detection furthest from the quarantined area. If your survey sectors are not rectangular due to the shape of the quarantine area, still make 4 passes through your sector (see Figure 2-1) to the best of your ability.

Survey Technique

An infestation can be one active reproducing IFA colony – evidence of a reproducing queen includes presence of immature life stages in the colony. While driving, carefully examine 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 10 mile intervals 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 list in Small Block Design for both rural and urban areas).

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 note form, marking on a survey map, or with a GPS unit.

Small Block Design

In infested states that have been surveyed during the four previous years, use the small block design survey. The small block design will speed up the survey while determining the outer limits of the infestation.

Prepare survey maps reflecting 6 x 18 mile sectors along the leading edge of the IFA quarantined area (see Figure 2-2). Each rectangular sector will run perpendicular to the leading edge of the current quarantine area. Plan to survey half of the area each fiscal year. Survey both rural and urban/suburban areas.

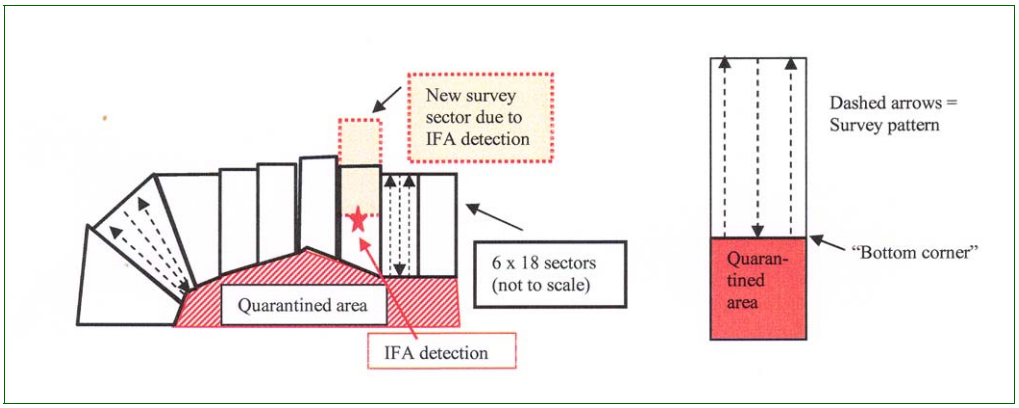


FIGURE 2-2: Survey Pattern for Small Block Design

Rural Areas

Survey Pattern

Direct the survey crew to begin surveying at the edge of the sector nearest the quarantined area and travel away from that area. There will be 3 passes through each 6 x 18 mile sector. Select a major road that travels approximately perpendicular (at a 90° angle) to the leading edge of the quarantined area. This road should be approximately one mile from a "bottom corner" (see Figure 2-2) of your survey sector closest to the edge of the quarantined area. Travel away from the quarantined area surveying for IFA (described in Survey Technique). If you find IFA, extend the sector for an additional 18 miles past the point of IFA detection. If you find no IFA along the first 18 miles, move over approximately 2 miles and choose another road, parallel to your first road, and travel back to the leading edge of the quarantined area, surveying for IFA as you go. When you reach the edge of the quarantine area, move over 2 more miles and choose another road parallel to the previous 2 roads traveled. If possible, always survey 18 miles past the IFA detection furthest from the quarantined area. If your survey sectors are not rectangular due to the shape of the quarantine area, still make 3 passes through your sector (see Figure 2-2) to the best of your ability.

Survey Technique

An infestation can be one active reproducing IFA colony – evidence of a reproducing queen includes presence of immature life stages in the colony. While driving, carefully examine 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 3 mile intervals and walk one quarter-mile along each side of the road to visually survey for mounds. Otherwise, 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 include the following items:

- Nursery stock
- Hay
- Sod
- Soil moving equipment

These locations often receive regulated articles:

- Nurseries and retail stores
- Truck and railroad shipping yards
- Golf courses
- Commercial cattle feeding operations
- Horse farms

At these sites, walk about one half-mile along on both sides of the road or through the location if permission has been granted by the owner.

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 note form, marking on a survey map, or with a GPS unit.

Urban and Suburban Areas

Plan to survey the following areas:

- Streets that transect urban and suburban areas at 2-mile intervals
- Railroad rights of way
- Natural gas and high voltage powerline rights of way
- Open areas along streams
- City 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, sides of ridges, etc.

Surveys will be conducted by state cooperators as outlined in agreements with PPQ regional offices.

Delimiting Survey

Purpose

Delimiting surveys using bait/attractant traps can be used in small area control programs and eradication programs. While the Federal IFA Quarantine Program does not require control or eradication programs, suggestions for delimiting survey are provided here for information. Some states such as California have detailed, delimiting survey protocols developed for nurseries and residential areas.

http://www.cdfa.ca.gov/phpps/pdep/rifa/

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 a tight fitting lid (such as Gelman® dishes) to secure ants without use of an additional enclosure. Mark tops and bottoms of dishes with trap location number.
- Bait – The following baits are examples of IFA attractants:
  - Olive oil
  - Peanut oil
  - Corn oil

    Soak an index card, filter paper, or cotton cosmetic pad (discount store) 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.
  - Corn chips
  - Canned meat
  - Pecan cookie pieces

  Cut or break solid attractants to fit in dish. Use about 1 g. of chosen material.
- Flags - use to mark trap locations or corners of blocks as necessary
- Latex gloves

Procedure

The trapping grid 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 map as 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).

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°C and below 90°C.

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 (labelled properly) until identification can be made.

Taxonomy

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

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.

You can also contact your state agricultural university for questions regarding identification.

Reporting of Survey Finding

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

1. Provide quarterly and annual (fiscal year) IFA reports to the State Plant Health Director (SPHD). See Appendix D for an example of a quarterly report form.
2. Submit survey data for entry into NAPIS by the State Survey Coordinator.
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 through the PPQ SPHD and Regional Program Manager (RPM) to the National Program Manager by September 30.

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 RPM with quarterly and annual (fiscal year) reports covering regulatory, survey, and control activities.

3 Regulatory

Imported Fire Ant

Procedures

Contents

Identifying Regulated Articles **page 3-1**
Certifying Regulated Articles **page 3-2**
Holding Shipments **page 3-4**
Returning Infested Articles to their Origin **page 3-5**
Removing and Destroying Infested Shipments **page 3-6**
Treating Infested Shipments or Noncertified Regulated Articles **page 3-7**
Allowing Movement of Shipments Suspected to be Infested with IFA **page 3-8**
Filling Out Forms **page 3-9**
- Emergency Action Notification (PPQ Form 523) **page 3-9**
- Limited Permit (PPQ Form 530) **page 3-11**
- Report of Violation (PPQ Form 518) **page 3-12**

Issuing Compliance Agreements **page 3-15**
Inspecting for IFA at Nurseries under Compliance **page 3-16**
- Introduction **page 3-16**
- Procedure **page 3-16**
- What to Do if a Shipment Is Returned Because of IFA Interception **page 3-18**
- Shipping Areas and Transportation Vehicles **page 3-18**

Collecting Soil/Media Samples **page 3-19**

Identifying Regulated Articles

The following regulated articles require a certificate for interstate movement out of a regulated area:

- IFA queens and reproducing colonies of IFA
- Soil, separately or with other things, except soil samples shipped to approved laboratories. Potting soil is exempt, if commercially prepared, packaged, and shipped in original containers.
- Plants with roots with soil attached, except houseplants maintained indoors and not for sale
- Grass sod
- Baled hay and straw, unless the bales have been stored in direct contact with the soil
- Used soil moving equipment, unless cleaned of all noncompacted soil
- Any other products, articles, or means of conveyance when it is determined by an inspector that they present a risk of spread of IFA due to its proximity to an infestation of IFA

Certifying Regulated Articles

You can issue a certificate for the interstate movement of a regulated article (7CFR 301.81-5) if the article meets any one of these conditions:

- Has been found, upon examination, to be free of infestation; or
- Has been treated in accordance with procedures in 7 CFR 301.81-10 (see Appendix A) to destroy infestation; or
- Has been grown, produced, manufactured, or handled in such a manner that would prevent infestation or destroy all life stages of the imported fire ant

The certificate should be on 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 showing certification 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 certification is stamped on the shipping documents. The only stamps allowed will be those stamps with a state abbreviation and a sequential number (for example, GA 001, GA 002, etc.) in the federal shield (see Figure D-33). Stamps previously issued with a Southeastern Region number and a Hyattsville, Maryland address are obsolete and the shipment should be considered uncertified. Please contact your PPQ regional representative with any questions regarding rubber stamp validity. Insure 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.

Printed Certificates

These are certificates printed on cartons or mailing labels. Keep accurate records of stamp/certificate number disbursement.

In both of the above cases the establishment must be under compliance agreement, and the State cooperator or PPQ Officer must inspect the establishment periodically to ensure that requirements for treatments, other safeguards, and use of the certificate are being met. PPQ regional offices authorize the use of certificates.

PPQ Form 540

At certain locations you may use the master certificate PPQ Form 540 (see Figure D-28). In these situations when remedial actions are required, monitor each treatment and issue a PPQ Form 540 when all requirements are met. Information on preparation appears in APHIS manual part 390.210/540. 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.

Holding Shipments

When you detect ants and send the interception for identification, the shipment must remain within the inspection area or designated holding area until results are known. Authorized officials 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 IFA interceptions outlined on page 3-8. Use the following decision tables to determine the movement status of articles at transit inspection locations.

TABLE 3-1: Determining Movement Status of Articles at Transit Inspection Locations

If the article is:	Then:
Nonregulated for IFA	GO to **Table 3-2**
Regulated for IFA	GO to **Table 3-3**

TABLE 3-2: 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: 1. Return the article to its origin. Follow instructions on **page 3-5**. 2. Remove and destroy the article. Follow instructions on **page 3-6**. 3. Treat the article. Follow instructions on **page 3-7**.
	Not infested with IFA (presence of worker ants only)	Choose one of these options: 1. Allow movement. 2. Allow movement to destination for inspection. Follow instructions on **page 3-8**.

1 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 ant 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.

TABLE 3-3: Determining Movement Status of IFA Regulated Articles

If the article is:	And is:	Then:
Free of IFA	Accompanied by a certificate	Allow movement
	Not accompanied by a certificate	Choose one of these options: 1. Return the article to its origin. Follow instructions on **page 3-5**. 2. Remove and destroy the article. Follow instructions on **page 3-6**. 3. Treat the article. Follow instructions on **page 3-7**.
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 on **page 3-5**. b. Remove and destroy the article. Follow instructions on **page 3-6**. c. Treat the article. Follow instructions on **page 3-7**.

Returning Infested Articles to their Origin

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

Follow the directions on page 3-9 and see Figure D-26.

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. List these actions on the EAN. Secure the truck with a quarantine tag (PPQ Form 244; see Figure D-1) 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 on page 3-11 and see Figure D-27.

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 C. Mail the appropriate copies of the Limited Permit and the EAN to the state contact.

Step 5—Document the violation.

Follow the directions on page 3-12.

Removing and Destroying Infested Shipments

Methods of disposal include heat, freezing, or chemical treatment. 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.

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

Follow the directions on page 3-9 and see Figure D-26.

Step 2—Safeguard the shipment.

Inform the carrier of actions necessary to minimize the 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. 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 origin.

Step 3—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 on page 3-11 and see Figure D-27.

Step 4—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 C. 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 5—Document the violation.

Follow the directions on page 3-12.

Treating Infested Shipments or Noncertified Regulated Articles

Methods of treatment include heat, freezing, or chemical treatment. Approved treatments are published in this manual, in the PPQ Treatment Manual, and in Program Aid 1736. 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.

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

Follow the directions on page 3-9 and see Figure D-26.

Step 2—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 3—Monitor the treatment.

Refer to Appendix A for approved treatments. Make sure that fumigations and other 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; see Figure D-1) 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 4—Issue a Limited Permit (PPQ Form 530).

If an inspector must meet the shipment at a distant treatment site, issue a Limited Permit (Figure D-27). Follow directions for use, completion, and distribution on page 3-11 and page 3-12.

Step 5—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 C. 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 6—Document the violation on Report of Violation (PPQ Form 518).

Follow directions for use and completion on page 3-12 and see Figure D-2.

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 on page 3-9 and see Figure D-26. 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; see Figure D-1) 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 on page 3-11 and see Figure D-27.

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 C. 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.

Filling Out Forms

Use the following information on filling out PPQ Forms 523, 530, and 518 in the event that you need a federal form in place of a similar state form. The guidelines will assist you in compiling and providing all the correct information to the federal officer supplying the federal form.

Emergency Action Notification (PPQ Form 523)

Authorized officials can issue an EAN, PPQ Form 523 (Figure D-26), 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.

Information on preparation appears in the APHIS manual part 390.210/523. **Fill in all blocks!** If the block does not apply, enter "N/A."

Preparation

- Block 1: Field station responsible for establishment or area.
- Block 2: Self-explanatory.
- Block 3: Scientific and common names.
- Block 4: If applicable, date violation was discovered.
- Block 5: If applicable, name and address of firm sending shipment. Avoid use of intermediate parties such as freight forwarders.
- Block 6: Provide description: quantity; type of container whether cartons or nursery pots; and type of article such as trees, fruits, or seedlings. If plants are involved, identify to genus.
- Block 7: Identify invoice number, brand name on cartons, or any distinguishing marks. The information in blocks 6 and 7 is very valuable to another inspector who might be assigned to monitor a remedial treatment or action.
- Block 8: Mailing address of the party who owns the premises or material. Use intermediate parties such as brokers or carriers if the owner's name is not available.
- Block 9: Location of the articles: address of premises, location on premises such as building, room, or area.
- Block 10: If known.

- Block 11: If applicable, trucking firm and license number, airline and flight number.

  At this point the form provides the violator with several important pieces of information that you should review with him/her:

  - The authority under which you are acting;
  - The process by which the required action will be carried out;
  - The movement of designated articles; and
  - A caution concerning the use of chemicals

- Block 12: State exactly what actions the violator must take to understand how to proceed. Include safeguards pending final quarantine action (if any). Write a brief statement of the violation. You can refer to a stipulation in the compliance agreement if appropriate. This reference documents that you made the violator aware of the nature of the noncompliance so that if he/she repeats the offense later, stronger action can be taken. List options available when more than one is available. Be sure to specify all necessary safeguards such as monitoring of movement and protection from exposure.
- Block 13: Time specified is from the time the notification is issued. Specify a time for complying with each action listed in item 12. The time for complying may be immediately.
- Block 14: Self-explanatory.
- Block 15: Obtain the signature of the owner, agent, or person having immediate jurisdiction over the carrier or articles. The person signing is only acknowledging receipt of the notification. If the person refuses to sign, enter “Refuses to sign” and give a copy to the violator.
- Block 16: Describes the action taken. Be specific that the actions listed in item 12 were carried out. This final disposition is necessary. The PPQ Officer or APHIS collaborator signs and dates the PPQ copy and the copy that is in the hands of the owner/agent.

Distribution

- Part 1 (the original): Give to the owner/agent.
- Part 2: Filed at the issuing office.
- Part 3: Give to the broker if applicable.
- Part 4: Send to the State Plant Regulatory Official (SPRO) for review and further distribution to APHIS.

Take the least drastic action as provided in the Plant Protection Act of 2000. The purpose of the action is to eliminate pest risk, not to punish violators.

Limited Permit (PPQ Form 530)

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 (Figure D-27). Destination checks at the time of receipt are optional.

Information on preparation appears in APHIS manual part 390.210/530. Completion of the limited permit is very similar to the certificate. 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.

Report of Violation (PPQ Form 518)

Document the violation on a Report of Violation form (PPQ Form 518, Figure D-2). 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.

Information on preparation appears in APHIS manual part 390.710. **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. The address to send PPQ Form 518 and supporting documentation is listed below:

USDA-APHIS-IES
Unit 85
4700 River Road
Riverdale, MD 20737

Issuing Compliance Agreements

Entering Into 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:

- They must review with an inspector each stipulation of the compliance agreement
- They must have facilities and equipment to carry out disinfestation procedures or application of chemical materials in accordance with this manual (Appendix A)
- They must meet applicable state training and certification standards as authorized by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Cancelling 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

Inspectors should review compliance agreements on a yearly basis, and update, modify, or remove as needed. A new compliance agreement must be signed every year; compliance agreements are valid for only one year from the date of signing. Printed certificates or stamps (see "Certifying Regulated Articles" on page 3-2) may be issued to persons under compliance agreements. Insure 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, see Appendix D. These examples were compiled from examples submitted by several states. We are grateful for their submittals.

Inspecting for IFA at Nurseries under Compliance

Introduction

This section includes the following information:

- Directions on inspecting for IFA at two types of nurseries
- Action to take if a shipment is returned because of an IFA interception

The following information was prepared and graciously submitted by the Florida Department of Agriculture and Consumer Services, Dept. of Plant Industry. Specific IFA regulatory information including the approved chemical list is available online at the following website:

http://www.ceris.purdue.edu/napis/pests/ifa/freg/cfrifa.html

The procedures described below are valid as of January 6, 2003, and are specific to the State of Florida. Modifications will need to be made for use in other states.

Procedure

At your office separate paperwork for IFA compliant nurseries into two stacks; one for IFA-Free, and the other for IFA-Dip & Drench. IFA-Free nurseries need to be inspected twice yearly, at least one being during the main shipping season.

IFA-Free Nursery Inspections

Take the folowing steps to inspect an IFA-Free nursery:

Step 1—Identify yourself.

When you arrive at the nursery, identify yourself with the owner or manager before conducting the IFA inspection. **Do not inspect a nursery until you contact someone from the nursery!**

Step 2—Inspect the perimeter and shipping area.

Start your inspection of the perimeter, looking for debris and weedy areas where IFA can hide and have nests. Also check the shipping area and its surroundings (mapping the nursery will make it easier for you).

Step 3—Inspect potted material.

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, and they will attack.

CAUTION

Be careful where you stand/touch!

Taking an ant sample for ID is helpful. If you see different stages of ant development, collect some of each. Put them in a vial of alcohol.

Step 4—Contact the owner.

If you find IFA, contact the owner or manager and point out the problem(s) and tell them that you will return after they have cleaned up the problem. Notify the nurseryman that the nursery's shipping privileges can be suspended because of IFA on the property. The inspection is not complete until you find no more ants.

Step 5—Make a stamp imprint.

Make an imprint of their current IFA stamp and be sure to pick up any old IFA stamps.

Step 6—Collect soil samples.

After your inspection, take soil samples from the soil bin, and separate soil bin samples from saleable plant samples.

Step 7—Get copies of soil receipts.

Procure copies of the last 3 soil receipts, which show the incorporation of Talstar or other approved chemical in the soil.

Step 8—Fill out the SIR.

Fill out the Special Inspection Report (SIR) and have the nurseryman sign it. Give the nurseryman a copy of the SIR for his records.

Step 9—Label soil samples.

When you return to the office, make out specimen slips for the soil samples, and place a prenumbered IFA sticker on each bag and a copy of the prenumbered IFA sticker on the specimen slip (prenumbered IFA stickers are available through your regional office). Regional Administrators should contact Dan Hudson for additional stickers. **Photocopy the specimen slip when finished for your records.**

IFA-Dip & Drench Nursery Inspections

When you arrive at the nursery, identify yourself with the owner or manager before conducting the IFA inspection. **Do not inspect a nursery until you contact someone from the nursery!**

IFA certification for dip and drench nurseries is based on the proper treatment of nursery stock prior to shipping out of the IFA quarantine area. Take the following steps to insure that proper treatments are being conducted:

Step 1—Check for a catchment facility.

Verify the presence of a catchment facility (temporary or permanent) adequate to prevent contamination of ground and surface water in loading areas where liquid drenches and immersions are applied.

Step 2—Check spray records.

Check the nursery's spray records to see what approved chemicals, date and rate of application were used on each shipment. The nursery is required by law to maintain a spray record for your inspection. Every effort should be made to witness some of the treatments to insure that they are being conducted in accordance with the approved rates. Please refer to the current IFA manual for appropriate chemical treatments. Report any violations to your supervisor.

Step 3—Fill out the SIR.

After the inspection is completed, fill out a SIR and have the nurseryman sign and give him/her a copy for his records.

What to Do if a Shipment Is Returned Because of IFA Interception

If a shipment is returned because of IFA, 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 noticed, take separate samples of ants and soil to send to the lab. Make photocopies of soil receipts if the nursery is on an IFA free compliance. If the nursery drenches the product before shipping, get a copy of their treatment records. Document all work and if necessary, contact a USDA investigator to be present.

Nurseries who are on an IFA free compliance, and have had an IFA interception, will need to be inspected and re-sampled. This includes all saleable plants and the soil bin. Also needed are copies of the nurseries' soil receipts showing the addition of Talstar or other approved chemical. The nursery will not be reinstated until all tests for Talstar or other approved chemical have come back with the appropriate amount of approved chemical incorporated, and Request for Reinstatement letter has been written and approval has been received.

Nurseries who drench the product before shipping will have to submit a letter stating how the IFA infested the shipment and what steps are being taken to correct this from happening again. The suspended nursery will not be able to ship until a Request of Reinstatement has been written, and approval has been received.

Shipping Areas and Transportation Vehicles

Please remember to inspect the shipping areas to insure that no IFA are present in these areas. Also remind nurserymen of the importance of inspecting the transportation vehicle (tractor-trailer) for IFA prior to loading any nursery stock.

Collecting Soil/Media Samples

Compliance

Collect a minimum of 2 cups of potting media from five different locations (containers) around the collection site. In this case more is better, and 4–5 cups would be optimum. If 2 cups is not possible, collect as much as possible. A collection site may be a media pile, a block of nursery stock originally treated on the same date, etc. If media from containerized nursery stock is to be collected, samples may be obtained by soil corer, by spade, or by removing the plant from the container and breaking off some media from the "root ball". Place the five subsamples from the collection site together in a heavy duty plastic or foil bag. Double-bagging may be necessary to ensure against breakage during shipment. Freeze samples if they are not to be shipped or submitted to a lab promptly. Shape or flatten the samples to avoid boxing weird-shaped rocks. A Bulk Density Determination Form[1] should accompany all samples sent to USDA, APHIS, PPQ, CPHST, ANPCL (Analytical and Natural Products Chemistry Lab aka NMRAL) for analysis. Submit samples to the USDA lab or to state or private labs for chemical analysis.

USDA, APHIS, PPQ, CPHST, ANPCL
3505 25th Ave., Bldg. 4
Gulfport, MS 39501

For examples of forms, refer to Appendix D.

Violations

Collect and submit media samples for possible violation as above. Contact your PPQ State Plant Health Director for other necessary documentation pertaining to a potential violation (investigation forms, etc.).

1 See Program Aid No. 1736 at this website: http://www.aphis.usda.gov/oa/pubs/ifapub.pdf.

A

Imported Fire Ant

Appendix A

A List of Approved Treatments and Available Labels

Contents

Introduction **page A-1**
Authorized Chemicals **page A-2**
Approved Treatments **page A-2**
- Equipment—Used Soil Moving **page A-2**
- Hay and Straw **page A-3**
- Plants—Balled or in Containers **page A-3**
- Containerized Plants from IFA-Free Nurseries **page A-8**
- Field-Grown Woody Ornamentals (In-Field Treatment Prior to Harvest) **page A-11**
- Blueberries and Other Fruit and Nut Nursery Stocks **page A-11**
- Plants—Greenhouse Grown **page A-12**
- Grass—Sod **page A-12**
- Soil—Bulk **page A-13**
- Soil Samples **page A-13**

Available Labels **page A-14**
Mitigative Measures **page A-15**

Introduction

Only certified pesticide applicators are authorized to treat regulated articles with approved insecticides. Applicators must follow instructions found in the following sources of information:

- This manual
- The PPQ Treatment Manual
- The pesticide label
- Exemptions (Section 18 or 24(c) of FIFRA) for the treatment or other procedures used to authorize the movement of regulated articles
- 7 CFR 301.81, 7 CFR 301.81-1 through 7 CFR 301.81-10

Use the above sources of information as a basis to explain treatment procedures to persons interested in moving articles affected by the quarantine. Be prepared to provide complete information to anyone interested in moving regulated articles.

Authorized Chemicals

The following chemicals and examples of trade names are authorized insecticides for the treatment of regulated articles under the IFA quarantine:

- Bifenthrin (Talstar®)
- Chlorpyrifos (Dursban®)
- Diazinon
- Fenoxycarb (AWARD®)
- Fipronil (ChipCo® Choice™, ChipCo® Top Choice™)
- Hydramethylnon (AMDRO® Pro/Siege® Pro)
- Methoprene (Extinguish®)
- Pyriproxyfen (Distance®)
- Tefluthrin (FIREBAN®)

Approved Treatments

Equipment—Used Soil Moving

Methods

Used soil moving equipment is eligible for movement when an inspector determines that **one** of the following procedures has been done:

- It has been brushed free of noncompacted soil
- It has been washed free of noncompacted soil
- Noncompacted soil has been removed with air pressure equipment using compressors designed specifically for this purpose. Such compressors must provide free air delivery of no less than 30 ft^3 per minute at 200 pounds per in^2.

Certification Period

The certification will be valid as long as the equipment remains free of noncompacted soil.

Limitations

Regardless of the type of cleaning equipment used, all debris and noncompacted soil must be removed unless it is steam-heated by a “steam jenny” to disinfest the articles. Used soil-moving equipment, such as bulldozers, dirt pans, motor graders, and draglines, are difficult to clean sufficiently to eliminate pest risk.

Precaution

Steam may remove loose paint and usually is not recommended for use on equipment with conveyor belts and rubber parts.

Hay and Straw

Baled hay and straw stored in direct contact with the ground is ineligible for movement.

Plants—Balled or in Containers

General Requirements

Conditions and type of soil: Any friable soil may be treated with emulsifiable chlorpyrifos, bifenthrin, or tefluthrin.

Emulsifiable Chlorpyrifos

Material: Emulsifiable chlorpyrifos – Immersion and drench treatments (post-harvest): any Environmental Protection Agency (EPA) registered formulation with correct language on the label is acceptable.

Dosage:

TABLE A-1: Emulsifiable Chlorpyrifos Dosage for Balled or Containerized Plants

Chlorpyrifos formulation	Amount of formulation to make 100 gallons of treating solution
1 EC	16 fl. oz. (472 ml)
2 EC	8 fl. oz. (236 ml)
4 EC	4 fl. oz. (118 ml)

Exposure Period: Plants can be certified immediately upon completion of treatment.

Certification period: 30 days.

Precautions: Dwarf yaupon may show phytotoxicity to chlorpyrifos.

Bifenthrin: Drench and Topical Applications

Material: Bifenthrin—drench of containerized nursery stock or topical application to 3- or 4-quart containerized nursery stock followed by irrigation with water.

Dosage: Dosage rate is 25 ppm. The amount of formulation needed to achieve 25 ppm varies with the bulk density of the soil or potting media. Follow label directions to calculate the amount of formulation needed to achieve 25 ppm.

Exposure period: Containerized nursery stock can be certified immediately upon completion of the treatment.

Certification period: 180 days.

Bifenthrin: Granular Formulation

Material: Granular bifenthrin—incorporation into soil or potting media for containerized nursery stock.

Dosage: The amount of granular bifenthrin needed to achieve a specified dosage varies with the bulk density of the soil or potting media. Follow label directions to calculate the amount needed to achieve a specified dosage.

TABLE A-2: Granular Bifenthrin Dosage for Containerized Plants

Granular bifenthrin dosage (parts per million)	Certification period (months after treatment)
10 ppm	0–6 months
12 ppm	0–12 months
15 ppm	0–24 months
25 ppm	Continuous

Exposure period: Containerized nursery stock can be certified immediately upon completion of the treatment.

Tefluthrin: Granular Formulation

Material: Granular tefluthrin—incorporation into soil or potting media for containerized nursery stock.

Dosage: The amount of granular tefluthrin needed to achieve a specified dosage varies with the bulk density of the soil or potting media. Follow label directions to calculate the amount needed to achieve a specified dosage.

TABLE A-3: Granular Tefluthrin Dosage for Containerized Plants

Granular tefluthrin dosage (parts per million)	Certification period (months after treatment)
10 ppm	0–18 months
25 ppm	Continuous

Exposure period: Containerized nursery stock can be certified for interstate movement from quarantined areas immediately upon completion of the treatment.

Fipronil: Granular Formulation

Material: Granular fipronil—incorporation into soil or potting media for containerized nursery stock.

Dosage: The amount of granular fipronil needed to achieve a specified dosage varies with the bulk density of the soil or potting media. Follow label directions to calculate the amount needed to achieve a specified dosage.

TABLE A-4: Granular Fipronil Dosage for Containerized Plants

Granular fipronil dosage (parts per million)	Certification period (months after treatment)
10 ppm	0–6 months
12 ppm	0–12 months
15 ppm	0–24 months
25 ppm	Continuous

Exposure period: Containerized nursery stock can be certified for interstate movement from quarantined areas two weeks after completion of the treatment.

Treatment Methods

Use one of the following methods to treat the plants:

Method A—Immersion

Equipment: You will need the following pieces of equipment to immerse the plants:

- A watertight container for mixing the treating solutions
- An open-top, watertight container sufficiently large to accommodate the treating solution and plants

Procedure: Follow this procedure to treat the plants:

Step 1—Choose an appropriate site.
Locate the immersion tank in a well-ventilated place. Do not remove burlap wrap or plastic containers with drain holes before immersion.

Step 2—Immerse the plants.
Immerse the soil balls and containers, singly or in groups, so that the soil is completely covered by the solution. Make sure that the plant balls have space between them when grouped in trays, baskets, or other dipping containers. Allow the plants to remain in the solution until bubbling ceases.

Thorough saturation of the plant balls or containers with the insecticide solution is essential!

Step 3—Remove the plants from the dip.
After removal from the dip, set the plants on a drainboard until adequately drained.

Step 4—Add treating mixture.
As treating progresses, add freshly prepared treating mixture to maintain the liquid at immersion depth.

Step 5—Dispose of solution.
Dispose of tank contents 8 hours after mixing. Clean the tank before recharging. Disposal must comply with state and local regulations.

Do not permit runoff of the solution from the treatment area! Dispose of excess and unused solution in accordance with state and local regulations.

Method B—Drench

Equipment: You will need the following pieces of equipment to drench the plants:

- A large-capacity bulk mixing tank, either pressurized or gravity-flow for mixing and holding the insecticide solution
- Properly equipped hoses and watering nozzles that can be attached to the mixing tank and used to thoroughly saturate the plant balls with insecticide solution

Procedure: Follow these procedures to treat the plants:

Plants Balled with Burlap

Step 1—Select a site for the treatment

Move the plants to a well-ventilated place normally used to maintain plants prior to shipment.

Step 2—Add wetting agent

Adding any agricultural wetting agent (Ortho-77®, Tronic®, Tecowet®, etc., to the chlorpyrifos solution at the labeled rate (usually ½ pint per 100 gallons of water) will enhance the treatment.

Step 3—Apply the solution

Apply the chlorpyrifos solution as a substitute for plain water to the plants during the routine watering activities. Do not remove burlap wrap from plants prior to treatment. Treat plants singly or in groups with the chlorpyrifos solution to the point or runoff on a twice daily schedule for 3 consecutive days.

Containerized Plants

Step 1—Prepare the solution

The volume of the treating solution must be at least 20 percent of the volume of the container.

Step 2—Apply the solution

Apply the bifenthrin or chlorpyrifos solution to the point of saturation one time only.

Thorough saturation of the plant balls or containers with the insecticide solution is essential. Do not permit runoff of the solution from the treatment area! Dispose of excess and unused solution in accordance with state and local regulations.

Method C—Topical Application

Procedure: Apply bifenthrin according to the label instructions for topical application. Use this method only with nursery stock in 3- and 4-quart containers. Penetration of the pesticide in larger containers does not provide sufficient residual activity.

Irrigate all treated containers with 1.5 inches of water following application.

Important

Do not permit runoff of the solution from the treatment area! Dispose of excess and unused solution in accordance with state and local regulations.

Method D—Granular Incorporation (Bifenthrin)

Procedure: Apply bifenthrin according to the label instructions for granular incorporation. Mix thoroughly to distribute the product evenly throughout the soil or potting media. After potting, water containers to the point of saturation.

Important

Saturation of the soil or potting media with the granular bifenthrin is essential. Dispose of water, which may contain bifenthrin, that drains from the treatment area in accordance with state and local laws.

Method E—Granular Incorporation (Tefluthrin)

Procedure: Apply tefluthrin according to the label instructions for granular incorporation. Mix thoroughly to distribute the product evenly throughout the soil or potting media. After potting, water containers to the point of saturation.

Important

Saturation of the soil or potting media with the granular tefluthrin is essential. Dispose of water, which may contain tefluthrin, that drains from the treatment area in accordance with state and local laws.

Method F—Granular Incorporation (Fipronil)

Procedure: Apply fipronil according to the label instructions for granular incorporation. Mix thoroughly to distribute the product evenly throughout the soil or potting media. After potting, water containers to the point of saturation.

Important

Saturation of the soil or potting media with the granular fipronil is essential. Dispose of water, which may contain tefluthrin, that drains from the treatment area in accordance with state and local laws.

Containerized Plants from IFA-Free Nurseries

This detection, control, exclusion, and enforcement program is designed to keep nurseries free of the imported fire ant and provides a basis to certify containerized nursery stock for interstate movement. Participating regulated establishments must be operating under a compliance agreement. Such compliance agreements shall state the specific requirements that a shipper agrees to follow to move plants in accordance with the requirements of the program. Certificates and a nursery identification number may be issued to the nursery for use on shipments of regulated articles.

Detection

A successful treatment program depends upon early detection of imported fire ant colonies. Nursery owners are required to survey visually their entire premises twice monthly for the presence of imported fire ants. Nurseries participating in this program will be inspected by Federal or State inspectors at least twice per year. More frequent inspections may be necessary depending upon imported fire ant infestation levels immediately surrounding the nursery, the thoroughness of nursery management in maintaining IFA-free premises, and the number of previous detections of IFA in or near containerized plants. Inspections by Federal and State inspectors should be more frequent just before and during the peak shipping season. Any nurseries determined during nursery inspections to have imported fire ant colonies must be immediately treated to the extent necessary to eliminate the colonies.

Control

Nursery plants that are shipped under this program must originate in a nursery free of IFA. Nursery owners must implement a treatment program with registered bait and contact insecticides. The premises, including growing and holding areas, must be maintained free of IFA. As part of this treatment program, 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 once every six months. The first application is more effective when applied early in the spring. An early spring bait application provides control before alate queens are produced or have time to establish new colonies. Follow label directions for use.

When properly used, baits are between 80 percent and 90 percent effective. Follow-up treatments with a contact insecticide must be applied to eliminate all remaining colonies. Mound drench treatments with a registered formulation of chlorpyrifos or diazinon are approved. Follow label directions for use.

Exclusion

Bifenthrin

For plants grown on the premises: Treatment of potting media with granular or flowable formulation of bifenthrin prior to planting is required. This treatment reduces the risk of infestation of containers by alate queens flying in from adjacent or nearby infested premises. The dosage rate for granular bifenthrin is variable and is determined by the certification period selected; for flowable bifenthrin it is 25 ppm. Apply this treatment according to the label instructions. Mixing must be adequate to blend the required dosage of pesticide throughout the entire potting soil mixture. For plants received from outside sources to prevent the spread into a nursery free of IFA by newly introduced, infested nursery plants, all plants must be: (a) Obtained from nurseries free of imported fire ant that are certified under a compliance agreement; or (b) Treated with bifenthrin drench upon delivery in accordance with this IFA regulatory treatment manual (III.C.3.b), and within 180 days be either: (1) Repotted in treated potting soil media, (2) Retreated with bifenthrin drench, immersion, or topical application (III.C.3.b) at 180-day intervals, or (3) Shipped.

Tefluthrin

For plants grown on the premises: Treatment of soil or potting media with granular tefluthrin prior to planting is permitted as an alternative to treatment with granular or flowable formulation of bifenthrin. This treatment reduces the risk of infestation of containers by alate queens flying in from adjacent or nearby infested premises. The dosage rate is variable, determined by the selected certification period, for the granular tefluthrin. Apply this treatment according to the label directions. Mixing must be adequate to blend the required dosage of granular tefluthrin throughout the entire soil or potting media.

Fipronil

For plants grown on the premises: Treatment of soil or potting media with granular fipronil prior to planting is permitted as an alternative to treatment with granular tefluthrin or granular or flowable formulation of bifenthrin. This treatment reduces the risk of infestation of containers by alate queens flying in from adjacent or nearby infested premises. The dosage rate is variable, determined by the selected certification period, for the granular fipronil. Apply this treatment according to the label directions. Mixing must be adequate to blend the required dosage of granular fipronil throughout the entire soil or potting media.

Enforcement

The nursery owner shall maintain records of the nursery's surveys and treatments for IFA. These records shall be made available to State and Federal inspectors upon request.

If IFAs are detected in nursery stock during an inspection by a Federal or State inspector, issuance of certificates for movement shall be suspended until necessary treatments are applied and the plants and nursery premises are determined to be free of IFA. A Federal or State inspector may declare a nursery to be free of IFA upon reinspection of the premises. This inspection must be conducted no sooner than 30 days after treatment to ensure its effectiveness. During this period, certification may be based upon the drench or immersion treatment described previously in this appendix, titled "**Plants—Balled or in Containers**."

Upon notification by the department of agriculture in any State of destination that a confirmed IFA infestation was found on a shipment from a nursery considered free of IFA, the department of agriculture in the State of origin shall cease its certification of shipments from that nursery. An investigation by Federal or State inspectors will commence immediately to determine the probable source of the problem and to ensure that the problem is resolved. If the problem is an infestation, issuance of certification for movement on the basis of IFA-free premises will be suspended until treatment and elimination of the infestation is completed. Reinstatement into the program will be granted upon determination that the nursery premises are free of IFA, and that all other provisions of this manual are being followed.

In cases where the issuance of certificates is suspended through oral notification, the suspension and the reasons for the suspension will be confirmed in writing within 20 days of the oral notification of the suspension. Any person whose issuance of certificates has been suspended may appeal the decision, in writing, within 10 days after receiving the written suspension notice. The appeal must state all of the facts and reasons that the person wants the Administrator to consider in deciding the appeal. A hearing may be held to resolve any conflict as to any material fact. Rules of practice for the hearing will be adopted by the Administrator. As soon as practicable, the Administrator will grant or deny the appeal, in writing, stating the reasons for the decision.

Violations of the quarantine shall be investigated by Federal or State inspectors and appropriate penalties will be assessed to discourage further violations.

This IFA-free nursery program is not mandatory for movement of regulated articles. Plants, balled or in containers, may otherwise be certified for movement using the chlorpyrifos, bifenthrin, or tefluthrin treatments described previously in this appendix, titled "Plants—Balled or in Containers." However, certification for movement under the IFA-free nursery program will be granted only if all of the provisions of this program are followed.

Certification Period: Continuous as long as all provisions of the IFA-free nursery program are followed.

Field-Grown Woody Ornamentals (In-Field Treatment Prior to Harvest)

Material: Chlorpyrifos used in combination with approved bait.

Dosage: An approved bait at 1.0–1.5 lb (0.45–0.68 kg) bait/acre. Chlorpyrifos at 6.0 lb (2.7 kg) a.i./acre.

Method: Apply approved bait only when ants are actively foraging (follow EPA-approved label directions for use). Broadcast application with any type of equipment that can be calibrated to deliver 1.0–1.5 lb (0.45–0.68 kg) of bait per acre. Three to five days after the approved bait application, apply chlorpyrifos broadcast at 6.0 lb (2.7 kg) a.i. per acre. Treatment area must extend at least 10 feet beyond the base of all plants that are to be certified.

Exposure Period: 30 days. Plants can be certified 30 days after treatment.

Certification Period: 12 weeks; an additional 12 weeks of certification can be obtained with a second application of granular chlorpyrifos. Special Information: This in-field treatment is based on a sequential application of approved bait followed by chlorpyrifos. The combination treatment is necessary since broadcast application of chlorpyrifos (or other short-term residual insecticides) usually does not eliminate large, mature IFA colonies, and no bait, including program approved baits, is capable of providing a residual barrier against reinfestation by new queens. Therefore, the approved bait application will drastically reduce the IFA population while chlorpyrifos, applied approximately 5 days later, will destroy any remaining weakened colonies and also leave a residual barrier against reinfestation by new queens for at least 12 weeks.

Blueberries and Other Fruit and Nut Nursery Stocks

Certain States have special local need labeling in accordance with section 24(c) of FIFRA for D-z-n® Diazinon AG-500 and D-z-n® Diazinon 50W, which APHIS will recognize as a regulatory treatment for containerized nonbearing blueberries and fruit and nut plants. Follow label directions for use.

Plants—Greenhouse Grown

Greenhouse grown plants are certifiable without treatment if the inspector determines that the greenhouse is constructed of fiberglass, glass, or plastic in such a way that IFA is physically excluded and cannot become established within the enclosure. No other treatment of the plants will be necessary if they are not exposed to infestation.

Grass—Sod

Material: Chlorpyrifos.

TABLE A-5: Chlorpyrifos Dosage for Grass Sod

Material	Amount and dosage of material	Certification period
Chlorpyrifos	8.0 lb (3.6 kg) a.i./acre	6 weeks (after exposure period has been completed)

Exposure Period: 48 hours.

Method:

Step 1—Apply the insecticide.

Apply a single broadcast application of chlorpyrifos with ground equipment.

Step 2—Water the treated areas.

Immediately after treatment, water the treated areas with at least ½ inch of water.

Chlorpyrifos wettable powder Dursban® 50-W: Follow label directions for regulatory treatment for IFA.

Material: Fipronil.

TABLE A-6: Fipronil Dosage for Grass Sod

Material	Amount and dosage of material	Certification period
Fipronil	0.0125 lb a.i./acre[1]	20 weeks (after exposure period has been completed)

1 Apply in two applications one week apart for a total of 0.025 lb a.i./acre.

Exposure Period: 30 days from the second application.

Soil—Bulk

Method: Bulk soil is eligible for movement when heated either by dry or steam heat after all parts of the mass have been brought to the required temperature.

Temperature: 150°F (65.5°C).

Certification Period: As long as protected from recontamination.

Soil Samples

Soil samples are eligible for movement when heated or frozen as follows:

Heat

Method: Soil samples are heated either by dry heat or steam heat. All parts of the mass must be brought to the required temperature.

Temperature: 150°F (65.5°C).

Certification Period: As long as protected from recontamination.

Cold

Method: Soil samples are frozen in any commercial cold storage, frozen food locker, or home freezer capable of rapidly reducing to and maintaining required temperature. Soil samples will be placed in containers, such as plastic bags—one sample per bag. The containers will be arranged in the freezer in a manner to allow the soil samples to freeze in the fastest possible time. If desired, the frozen samples may be shipped in one carton.

Temperature: -10° to -20°F (-23° to -29°C) for at least 24 hours.

Certification Period: As long as protected from recontamination.

Available Labels

Refer to Table A-7 below.

TABLE A-7: Available Labels for Use in the IFA Federal Quarantine[1]

Chemical Name	Product Label	Distributor
Bifenthrin	Talstar® Nursery Granular Insecticide	FMC Corp.
	Bifenthrin Pro 0.2% Nursery Granular Insecticide	Micro Flo Company LLC/ BASF Specialty Products
	Talstar® Nursery Flowable Insecticide/Miticide	FMC Corp.
	Bifenthrin Pro Multi-Insecticide Golf Courses/Nursery	Micro Flo Company LLC/ BASF Specialty Products
Chlorpyrifos	Dursban® 50W	Dow AgroSciences
	Chlorpyrifos Pro 2 Insecticide	Micro Flo Company LLC
	Chlorpyrifos Pro 4 Insecticide	Micro Flo Company LLC
	Dursban® TNP	United Horticultural Supply
	Dursban® 4E Insecticide	Prentiss Inc.
	Dursban® 2.32 G Granular Insecticide	Prentiss Inc.
	Dursban® 2.5 Granular Insecticide	Southern Agricultural Insecticides, Inc.
Diazinon[2]	(See Footnote [2])	(See Footnote [2])
Fenoxycarb	Award® Fire Ant Bait	Sygenta
Fipronil	Chipco® Choice™	Bayer
	Chipco® Top Choice™ Insecticide	Bayer
Hydramethylnon	Amdro® Pro	TopPro Specialties
	Siege® Pro[3]	Waterbury Companies
Methoprene	Extinguish®	Wellmark International
Pyriproxyfen	Distance® Fire Ant Bait	Valent
Tefluthrin	Fireban® Granular Ornamental Insecticide[4]	Uniroyal Chemical

1 Updated January 2004.

2 Contact your local state regulatory official to determine whether your state has a FIFRA section 24(c) exemption to use this product.

3 Others may be available; check label for correct language.

4 No longer available; existing supplies can be used.

Mitigative Measures

The following measures are required to minimize impact on the environment and human health. Any person requesting certification to authorize the movement of regulated articles must adhere to these measures where applicable.

1. Follow all applicable Federal, State, and local environmental laws and regulations.
2. Use and wear safety equipment and clothing, as specified by the label instructions, during treatments and inspections.
3. Communicate safety practices. Regulated establishment managers must require employees to follow on-the-job safety practices.
4. Apply, handle, store, and use all pesticides in accordance with label instructions.
5. Dispose of empty pesticide containers in accordance with Federal and State regulations.
6. Retain and dispose of pesticide remaining in containers after completion of an application in accordance with label instructions and Federal and State regulations.
7. Provide oral or written warning to workers and the general public, indicating pesticide application areas during application and appropriate reentry periods.
8. Owners or managers of regulated properties must take precautions to limit access by the public, livestock, and wildlife to treated areas.
9. Minimize accidental spill or water runoff of liquid or granular pesticides leading to potential contamination of ground and surface waters by following appropriate operating procedures. Provide catchment facilities (temporary or permanent) adequate to prevent contamination of ground and surface water in loading areas where liquid drenches and immersions are applied.
10. APHIS must implement an environmental monitoring plan, including monitoring procedures. Monitoring will determine if additional mitigative measures are necessary.

B

Imported Fire Ant

Appendix B

Summary of Requirements for Moving Imported Fire Ant Regulated Articles

Movement of IFA Regulated Articles

This decision table assumes the following:

- You are in an IFA quarantine area
- You have access to Program Aid No. 1736, Imported Fire Ant 2003: Quarantine Treatments for Nursery Stock and Other Regulated Articles
- You have access to the IFA quarantine

The legal authority for statements made in this decision table is Title 7 Code of Federal Regulations, Subpart – Imported Fire Ant Part 301.81. In the decision table, this is referred to as 7 CFR 301.81. Please refer to these regulations for more detailed information, as this table is, by necessity, abbreviated.

The decision table is for use by anyone moving, shipping, or causing shipment of plants or sod with roots and soil attached (bare-rooted plants are not regulated) into or through an IFA nonquarantined area. Refer to 7CFR 301.81-2(d) and Program Aid 1736, page 2. See the list of quarantined areas under 7CFR 301.81-3(e).

Important

If you produce more than one type of regulated plant product with soil and roots attached, use each applicable part of the decision table for treatment requirements specific to that product.

TABLE B-1: Summary of Requirements for Moving IFA Regulated Articles

If you are a:	Then:
Greenhouse producer	Have your greenhouse examined by an inspector according to Program Aid 1736, page 4 (see your local state inspector or list of USDA PPQ officials on page 19 of Program Aid 1736) to determine if plants you grow are regulated.
Landscaper, garden center, or other business involved in moving plants you did not produce	You are regulated by the quarantine because by ordering plants you are causing movement of a regulated article (7CFR 301.81-1), but the nursery has the responsiblilty to treat. By asking for and receiving IFA quarantine certification, you insure that the plants are moved legally.
Sod producer	Treatment is required.[1] See treatment procedures in Program Aid 1736, pages 14-15 (Grass Sod).
Nursery producer growing balled and burlapped (B&B) nursery stock	Treatment is required.[1] Choose one of the following treatment procedures in Program Aid 1736: 1. Pages 4-5, Method A 2. Pages 5-7, Method B (chlorpyrifos only) 3. Pages 9-10, Method E
Nursery producer growing plants in 3-4 quart containers	Treatment is required.[1] Choose one of the following treatment procedures in Program Aid 1736: 1. Pages 5-7, Method B (bifenthrin) 2. Pages 7-8, Method C 3. Pages 8-9, Method D 4. Pages 11-14, Method F For the above treatments you must have bulk density of the potting media (see pages 17-18 for how to obtain bulk density). You can use the following treatments without having bulk density: 1. Pages 4-5, Method A 2. Pages 5-7, Method B (chlorpyrifos or diazinon)
Nursery producer growing plants in containers other than 3-4 quarts	Treatment is required.[1] Choose one of the following treatment procedures in Program Aid 1736: 1. Pages 5-7, Method B (bifenthrin) 2. Pages 8-9, Method D 3. Pages 11-14, Method F For the above treatments you must have bulk density of the potting media (see pages 17-18 for how to obtain bulk density). You can use the following treatments without having bulk density: 1. Pages 4-5, Method A 2. Pages 5-7, Method B (chlorpyrifos or diazinon)

1 Each treated shipment must be certified! See additional information on the following page.

Important

For further guidance regarding treatments, refer to the information on the following page.

- **To move regulated plants using the treatments listed in the decision table, you must get each shipment certified (see 7CFR 301.81-4, 5, and 6).** Contact your state inspector or one of the USDA PPQ officials listed on page 19 of Program Aid 1736.
- When using these treatments **you must determine the insecticidal treatment** that you will use, the **dosage**, the **exposure period** for that treatment, and the **certification period** for that treatment. **You must use a pesticide that is registered and labeled for IFA regulatory or quarantine use.** For example: See pages 4 & 5 of Program Aid 1736 for Method A, Immersion. Notice on page 5 that the pesticide is emulsifiable chlorpyrifos. The dosage from page 5 is 4 fl (fluid) oz (ounces) of a 4 EC formulation needed to prepare 100 gallons of treating solution (smaller amounts of the solution can be mixed as long as the concentration stays the same, for example, 50 gallons of solution would require only 2 oz of Dursban 4 EC). The exposure period is immediately after treatment; the certification period is 30 days.
- **In Program Aid 1736[1], methods B and C do not specifically list exposure periods, but the exposure should be considered to be immediately after the pesticide application is fully completed. Other treatments in Program Aid 1736 have different certification periods depending on pesticide concentration. You must follow the directions in the Program Aid to properly treat your plants. Please note that, according to Program Aid 1736, page 5, some of the treatments may be phytotoxic to some kinds of plants. Also, you must be aware of the treatment mitigative measures listed on page 16 of Program Aid 1736.**

1 Imported Fire Ant 2003: Quarantine Treatments for Nursery Stock and Other Regulated Articles

C

Imported Fire Ant

Appendix C

A List of State Contacts for the Imported Fire Ant Program

State Plant Regulatory Officials

Alabama

Alabama Dept. of Agriculture and Industries
Plant Industry Section
P.O. Box 3336
Montgomery, AL 36109-0336
(334) 240-7239

Arizona

Arizona Dept. of Agriculture
Plant Services Division
1688 W. Adams
Phoenix, AZ 85007
(602) 542-0994

Arkansas

Div. of Plant Industry
State Plant Board
P.O. Box 1069
Little Rock, AR 72203
(501) 225-1598

California

California Dept. of Food and Agriculture
Pest Exclusion
1220 N Street, Room A37D2
Sacramento, CA 95814
(916) 654-0312

Florida

Florida Dept. of Agriculture and Consumer Services
Division of Plant Industry
1911 SW 34th Street
Gainesville, FL 32608
(352) 372-3505, ext. 162

Georgia

Georgia Dept. of Agriculture
Plant Protection Division
19 Martin Luther King Jr. Dr., Rm 243
Atlanta, GA 30334
(404) 651-9486

Kentucky

Department of Entomology
S-225 Ag. Science Center North
University of Kentucky
Lexington, KY 40546-0091
(859) 257-5838

Louisiana

Louisiana Dept. of Agriculture
P.O. Box 3596
Baton Rouge, LA 70821-3596
(225) 925-3770

Maryland

Plant Protection Section
Maryland Department of Agriculture
50 Harry S. Truman Pkwy.
Annapolis, MD 2140
(410) 841-5920

Mississippi

Mississippi Dept. of Agriculture and Commerce
Division of Plant Industry
P.O. Box 5207
Stone Boulevard
Mississippi State, MS 39762
(662) 325-3390

Nevada

Division of Plant Industry
Nevada Division of Agriculture
350 Capitol Hill Ave.
Reno, NV 89502-2992
(775) 688-1182 Ext. 241

New Mexico

New Mexico Dept. of Agriculture
Bureau of Entomology and Nursery Industries
Box 30005, Dept. 3-MSC3BA
Las Cruces, NM 88003
(505) 646-3207

North Carolina

North Carolina Dept. of Agriculture
Plant Industry Section
P.O. Box 27647
Raleigh, NC 27611
(919) 733-6930

Oklahoma

Oklahoma Dept. of Agriculture
Plant Industry and Consumer Services
2800 N. Lincoln Blvd.
Oklahoma City, OK 73105-4298
(405) 521-3864

Puerto Rico

Puerto Rico Dept. of Agriculture
Plant Quarantine Services
P.O. Box 10163
Santurce, PR 00908-0163
(787) 724-4627

South Carolina

Dept. of Plant Industry
511 Westinghouse Road
Pendleton, SC 29670
(864) 646-2130

Tennessee

Tennessee Dept. of Agriculture
Regulatory Services, Plant Certification
Ellington Agricultural Center,
440 Hogan Road, Porter Bldg.
Nashville, TN 37220
(615) 837-5338

Texas

Texas Dept. of Agriculture
P.O. Box 12847
Austin, TX 78711
(512) 463-7476

Utah

Division of Plant Industry
Utah Dept. of Agriculture & Food
350 North Redwood Road
Box 146500.
Salt Lake City, UT 84114-6500
(801) 538-7180

Virginia

Office of Plant Pest Services
Virginia Department of Agriculture & Consumer Services
PO Box 1163
Richmond, VA 23218
(804) 786-3515

West Virginia

Plant Industries Division
West Virginia Dept. of Agriculture
1900 Kanawha Blvd. East
Charleston, WV 25305-0191
(304) 558-2212

USDA-APHIS State Plant Health Directors

Alabama
USDA, APHIS, PPQ
1836 Glynwood Drive
Prattville, AL 36066
(334) 358-8568

Arizona
USDA, APHIS, PPQ
3658 E. Chipman Rd.
Phoenix, AZ 85040
(602) 431-8930

Arkansas
USDA, APHIS, PPQ
1200 Cherry Brook Dr.
Suite 100
Little Rock, AR 72211
(501) 324-5258

California
USDA, APHIS, PPQ
9550 Micron Ave., Suite G
Sacramento, CA 95827
(916) 857-6241

Florida
USDA, APHIS, PPQ
7022 NW. 10th Place
Gainesville, FL 32605
(352) 331-3990

Georgia
USDA, APHIS, PPQ
1498 Klondike Rd., Ste 200
Conyers, GA 30094
(770) 922-9894

Kentucky
USDA, APHIS, PPQ
12921 West Highway 42
Prospect, KY 40059
(502) 228-8224

Louisiana

USDA, APHIS, PPQ
4354 S. Sherwood Forest Drive
Suite 150
Baton Rouge, LA 70816
(225) 298-5410

Maryland

USDA, APHIS, PPQ
Wayne A. Cawley, Jr. Bldg., Room 350
50 Harry S Truman Parkway
Annapolis, MD 21401-7080
(410) 224-3452, 3495

Mississippi

USDA, APHIS, PPQ
P.O. Box 9655
Mississippi State, MS 39762
(662) 325-3140

Nevada

USDA, APHIS, PPQ
1550 S. Wells Avenue Room 204
Reno, NV 89502
(702) 784-5701, 5702

New Mexico

USDA, APHIS, PPQ
6200 Jefferson St. NE., Ste. 130
Albuquerque, NM 87109-3734
(505) 761-3189

North Carolina

USDA, APHIS, PPQ
930 Main Campus Drive, Ste. 200
Raleigh, NC 27606
(919) 855-7606

Puerto Rico

USDA, APHIS, PPQ
654 Munoz Rivera Avenue
Suite 700, IBM Building
San Juan, PR 00918
(787) 771-3611

South Carolina

USDA, APHIS, PPQ
9600 Two Notch Rd., Ste. 10
Columbia, SC 29229
(803) 788-0506

Tennessee

USDA, APHIS, PPQ
Harvey P. Gasaway Building
322 Knapp Boulevard, Suite 101
Nashville, TN 37217
(615) 781-5477

Texas

USDA, APHIS, PPQ
903 San Jacinto Blvd., Ste. 270
Austin, TX 78701-2450
(512) 916-5241

Utah

USDA, APHIS, PPQ
1860 W. Alexander, Suite B
West Valley, UT 84119
(801) 975-3310, 3311

Virginia

USDA, APHIS, PPQ
2702 Charles City Road
Richmond, VA 23231-4536
(804) 771-2042

West Virginia

USDA, APHIS, PPQ
Route 1, Box 142
Ripley, WV 25271-9724
(304) 372-8590

Appendix D

Forms

Imported Fire Ant

Contents

PPQ Forms **page D-1**
- PPQ Form 244, Quarantine Tag **page D-1**
- PPQ Form 518, Report of Violation **page D-2**
- PPQ Form 519, Compliance Agreement **page D-3**
- PPQ Form 523, Emergency Action Notification **page D-26**
- PPQ Form 530, Limited Permit **page D-27**
- PPQ Form 540, Certificate **page D-28**

APHIS Forms **page D-29**
- APHIS Form 2060, Environmental Monitoring Form **page D-29**

Regional Office Forms **page D-31**
- Imported Fire Ant Quarterly Report **page D-31**

Other Forms **page D-32**
- Bulk Density Determination Form **page D-32**
- Rubber Stamp **page D-33**

PPQ Forms

PPQ Form 244, Quarantine Tag

The following is an example of a quarantine tag.

FIGURE D-1: PPQ Form 244, Quarantine Tag

PPQ Form 518, Report of Violation

The following is an example of a report of violation.

The information requested is voluntary, and is needed to record your knowledge of possible irregularities under the USDA Plant Protection and Quarantine Program.

U.S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEATH INSPECTION SERVICE
PLAN PROTECTION AND QUARANTINE

REPORT OF VIOLATION

SERIAL NO.

1. DATE VIOLATION DISCOVERED
2. VIOLATED · REG/COMPL. AGREEMENT
3. WHERE INTERCEPTED *(City or port, and State; also county if domestic)*
4. ORIGIN OF ARTICLE *(Include county if domestic)*
5. ARTICLE MOVED IN VIOLATION OF REGULATIONS
6. IDENTITY OF ARTICLE *(Serial No., Waybill No., description, etc.)*
7. NAME AND BUSINESS ADDRESS OF VIOLATOR *(Shipper, caterer, cleaner, garbage handler, servicing agent, broker, ship's agent, etc. Identify which)*
8. VIOLATOR HAD Compliance agreement? ☐ Yes ☐ No Permit? ☐ Yes ☐ No
9. IF NO, VIOLATOR WAS AWARE OF REGULATION? ☐ Yes ☐ No ☐ Unknown
   If "Yes," how informed and when?
10. 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
    PLANE Acft. No Flight No.
    SHIP Flag Name
    ROAD VEHICLE License No.
13. NAME AND BUSINESS ADDRESS OF CONSIGNEE
14. DISPOSITION OF PEST RISK *(i.e., articles named in Item 5 were fumigated, destroyed, etc)*
15. REMARKS *(Attach additional sheet, if needed)*
16. VIOLATOR OR CARRIER'S STATEMENT OF VIOLATION *(Attach additional sheet, if needed. Identify who gave statement)*
17. **OFFICER'S STATEMENT: Must attach a detailed, signed, and dated statement. State how the action violated the regulations or compliance agreement cited in Item 2. Describe fully the facts of the violation from discovery through disposition of pest risk including when, who, what, and where.**
18. SIGNATURE OF INITIATING OFFICER
19. PRINTED NAME OF OFFICER AND WORK UNIT
20. DATE REPORT COMPLETED
21. OFFICER IN CHARGE COMMENTS *(Attach additional sheet, if needed)*
    List Previous Violations
    Recommendations
22. SIGNATURE OF OFFICER IN CHARGE
23. PRINTED NAME OF OFFICER IN CHARGE AND WORK UNIT
24. DATE SIGNED

PPQ FORM 518
AUG 2002

Previous editions are obsolete

FIGURE D-2: PPQ Form 518, Report of Violation

PPQ Form 519, Compliance Agreement

The following are examples of compliance agreements used in the IFA program.

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Baled hay and straw

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

9. AGREEMENT NO.

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-3: PPQ Form 519, Compliance Agreement for Baled Hay and Straw

Baled Hay and Straw – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

BALED HAY AND STRAW:

Baled hay and straw stored in direct contact with the ground is ineligible for movement.

Immediately after baling, store baled hay and straw on concrete, pallets, plastic of sufficient thickness to prevent tearing, or on other suitable material approved by state or federal inspector to prevent IFA infestation.

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

FIGURE D-4: PPQ Form 519, Compliance Agreement for Baled Hay and Straw (Attachment)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Blueberries and other fruit and nut nursery stock

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-5: PPQ Form 519, Compliance Agreement for Blueberries

Blueberries and Other Fruit and Nut Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

BLUEBERRIES/FRUIT AND NUT NURSERY STOCK:

Certain states have special local need labeling in accordance with section 24(c) of FIFRA for D-z-n® Diazinon AG-500 and D-z-n® Diazinon 50W, which APHIS will recognize as a regulatory treatment for containerized nonbearing blueberries and fruit and nut plants.

Contact your local state or federal inspector to determine appropriate labels and rates for your state.

Follow label instructions

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

FIGURE D-6: PPQ Form 519, Compliance Agreement for Blueberries (Attachment)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Containerized nursery stock

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-7: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock

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

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

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

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

FIGURE D-8: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 1)

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

Insecticide	Dose rate (ppm/other)	Certification period (days)
Bifenthrin	25	180
Chlorpyrifos	4 fl oz 4EC (or equilavent 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

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 equilavent of other formulation/100 gal H_2O)	30

FIGURE D-9: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 2)

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 holdings 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 drench 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 other IFA-free nursery certified 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.

FIGURE D-10: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 3)

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

FIGURE D-11: PPQ Form 519, Compliance Agreement for Containerized Nursery Stock (Attachment 4)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Field-grown or balled-and-burlapped nursery stock

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

9. AGREEMENT NO.

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-12: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock

Field-Grown/Balled-and-Burlapped Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

FIELD-GROWN NURSERY STOCK - IN-FIELD TREATMENT:

Approved insecticides
- Fire ant baits:
  - Fenoxycarb
  - Hydramethylnon
  - Pyriproxifen
- Chlorpyrifos

Apply bait by broadcast method when ants are actively foraging.
Apply granular chlorpyrifos by broadcast method 3-5 days after bait application.
Treatment area must extend 10 ft. from the base of all plants to be certified.

Application rates and certification periods

Insecticide	Application rate	Certification period (weeks)*
Baits	1–1½ lb bait/acre	
Chlorpyrifos	6 lb ai/acre	12

*after 30 day exposure period

A second application of granular chlorpyrifos will extend the certification period an additional 12 weeks without a second bait application or additional exposure period

FIGURE D-13: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 1)

Field-Grown/Balled-and-Burlapped Nursery Stock – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

BALLED-AND-BURLAPPED NURSERY STOCK - DRENCH APPLICATION OF INSECTICIDES:

Approved insecticides
Chlorpyrifos

Apply chlorpyrifos solution as a substitute for plain water
Do not remove burlap
Treat plants to the point of runoff twice a day for 3 consecutive days

Application rates and certification periods

Insecticide	Dose rate (ppm/other)	Certification period (days)
Chlorpyrifos	4 fl oz 4EC (or equilavent of other formulation/100 gal H_2O)	30

BALLED-AND-BURLAPPED NURSERY STOCK - IMMERSION IN INSECTICIDE:

Approved insecticides
Chlorpyrifos

Do not remove burlap
Plants 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 equilavent of other formulation/100 gal H_2O)	30

FIGURE D-14: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 2)

Field-Grown/Balled-and-Burlapped 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

FIGURE D-15: PPQ Form 519, Compliance Agreement for Field-Grown or Balled-and-Burlapped Nursery Stock (Attachment 3)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)
IFA queens and reproducing colonies; soil separately or with other articles except potting soil that is shipped in original containers in which the soil was placed after commercial preparation; baled hay and baled straw stored in direct contact with the ground; plants and sod with roots and soil attached; used soil-moving equipment unless removed of all noncompacted soil

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):
_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-16: PPQ Form 519, Compliance Agreement for Regulated Articles in General

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Grass sod

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-17: PPQ Form 519, Compliance Agreement for Grass Sod

Commercial Grass Sod – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

GRASS SOD:

Approved insecticides
Chlorpyrifos
Fipronil

Apply insecticide by broadcast method
Water area immediately after treatment

Application rates and certification periods

Insecticide	Application rate (lb ai/acre)	Cerification period (weeks after exposure)*/**
Chlorpyrifos*	8	6*
Fipronil**	0.0125/application**	20**

* 48 hour exposure period
** apply 2 applications ca. 1 week apart (total 0.025 lb ai/acre); 30 day exposure period

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

FIGURE D-18: PPQ Form 519, Compliance Agreement for Grass Sod (Attachment)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Greenhouse grown plants

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-19: PPQ Form 519, Compliance Agreement for Greenhouse Grown Plants

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

GREENHOUSE GROWN STOCK:

Greenhouse grown plants are certifiable without treatment if the inspector determines that the greenhouse is constructed of fiberglass, glass, or plastic in such a way that IFA is physically excluded and cannot become established within the enclosure. No other treatment of the plants will be necessary if they are not exposed to infestation.

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

FIGURE D-20: PPQ Form 519, Compliance Agreement for Greenhouse Grown Plants (Attachment)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Soil – bulk or samples

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-21: PPQ Form 519, Compliance Agreement for Soil

Soil: Bulk or Samples – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

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	Temperature (°F)	Certification Period*
Dry or heat steam	150	indefinite

* as long as protected from recontamination

SOIL SAMPLES:

Approved treatments
Heat – dry or steam
Cold

All parts of the mass must be brought to required temperature
Cold temperature must be maintained for 24 hours

Application rates and certification periods

Treatment	Temperature (°F)	Certification Period*
Dry or heat steam	150	indefinite
Cold	-10 to -20**	indefinite

* as long as protected from recontamination
** maintain for 24 hours

FIGURE D-22: PPQ Form 519, Compliance Agreement for Soil (Attachment 1)

Soil: Bulk or Samples – 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

FIGURE D-23: PPQ Form 519, Compliance Agreement for Soil (Attachment 2)

FORM APPROVED
OMB NUMBER 0579-0054

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

COMPLIANCE AGREEMENT

Public reporting burden for this collection of information is estimated to average 1.25 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the form. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to USDA, OIRM, Clearance Officer, Room 404-W, Washington, DC 20250. When replying refer to the OMB number and Form Number in your letter.

1. NAME AND MAILING ADDRESS OF PERSON OR FIRM

2. LOCATION

3. REGULATED ARTICLE(S)

Equipment – used soil moving equipment

4. APPLICABLE FEDERAL QUARANTINE(S) OR REGULATIONS

Imported Fire Ant Quarantine 7CFR301.81

5. I/We agree to the following:

- That in authorizing and participating in these treatments as a basis for the certification of regulated articles, no liability shall be attached either to the United States Department of Agriculture, to cooperating agencies, or to any of their employees in the event of injury to the property or the regulated article.
- To handle, process, move regulated articles in accordance with the provision of applicable plant quarantines.
- To safeguard and use all permits and certificates in accordance with instructions.
- To maintain and offer for inspection such records as may be required.
- To carry out all additional conditions, treatments, precautions and sanitary measures which may be required by the officer in the following stipulations: see attachment of USDA IFA quarantine treatments.
- For regulated articles not moved out of the quarantined area, the treatments described in this agreement are not required. However, movement of infested regulated articles should be avoided.
- Compliance agreements are non-transferable. If you hold a compliance agreement and you leave your present employer or company, you must notify your local USDA, APHIS, PPQ office or the Department of Plant Industry

Stamp/Imprint Number: _____ (imprint of stamp to right)

Attachments (check those that accompany this agreement):

_____ USDA, APHIS Program Aid No. 1736 (or current treatment options)
_____ Federal Regulation, Title 7, Part 301.81 Imported Fire Ant
_____ List of current available labels
_____ Other - _____

6. SIGNATURE

7. TITLE

8. DATE SIGNED

The affixing of the signatures below will validate this agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

9. AGREEMENT NO.

10. DATE OF AGREEMENT

11. PPQ OFFICIAL *(Name and Title)*

12. ADDRESS

13. SIGNATURE

14. STATE AGENCY OFFICIAL *(Name and Title)*

15. ADDRESS

16. SIGNATURE

PPQ FORM 519
AUG 77

FIGURE D-24: PPQ Form 519, Compliance Agreement for Used Soil Moving Equipment

Used Soil-Moving Equipment – Treatment Options
See USDA, APHIS Program Aid No. 1736 or Regulations (7CFR 301.81) for more details

USED SOIL MOVING EQUIPMENT:

Used soil moving equipment is eligible for movement when an inspector determines that one of the following procedures has been done:

Equipment brushed free of non-compacted soil
Equipment washed free of non-compacted soil
Non-compacted soil removed with air pressure equipment using compressors designed specifically for this purpose. Compressors must provide free air delivery of no less than 30 cubic feet per minute at 200 lbs per square inch.
Equipment certified as long as it remains free of non-compacted soil

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

FIGURE D-25: PPQ Form 519, Compliance Agreement for Used Soil Moving Equipment (Attachment)

PPQ Form 523, Emergency Action Notification

The following is an example of an emergency action notification.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information is 0579-0102. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

FORM APPROVED - OMB NO. 0579-0102

U.S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE

EMERGENCY ACTION NOTIFICATION

SERIAL NO.

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)
9. OWNER/CONSIGNEE OF ARTICLES

Name:

Address:

PHONE NO. FAX NO.

SS NO. TAX ID NO.

10. PORT OF LADING
11. DATE OF ARRIVAL
12. ID OF PEST(S), NOXIOUS WEEDS, OR ARTICLE(S)
12a. PEST ID NO.
12b. DATE INTERCEPTED
13. COUNTRY OF ORIGIN
14. GROWER NO.
15. FOREIGN CERTIFICATE NO.
15a. PLACE ISSUED
15b. DATE

Under Sections 411, 412, and 414 of the Plant Protection Act (7 USC 7711, 7712, and 7714) and Sections 10404 through 10407 of the Animal Health Protection Act (7 USC 8303 through 8306), you are hereby notified, as owner or agent of the owner of said carrier, premises, and/or articles, to apply remedial measures for the pest(s), noxious weeds, and or article(s) specified in Item 12, in a manner satisfactory to and under the supervision of an Agriculture Officer. Remedial measures shall be in accordance with the action specified in Item 16 and shall be completed within the time specified in Item 17.

AFTER RECEIPT OF THIS NOTIFICATION, ARTICLES AND/OR CARRIERS HEREIN DESIGNATED MUST NOT BE MOVED EXCEPT AS DIRECTED BY 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 time specified below, USDA is authorized to recover from the owner or agent cost of any care, handling, application of remedial measures, disposal, or other action incurred in connection with the remedial action, destruction, or removal.

17. AFTER RECEIPT OF THIS NOTIFICATION COMPLETE SPECIFIED ACTION WITHIN (Specify No. Hours or No. Days):
18. SIGNATURE OF OFFICER:

ACKNOWLEDGMENT OF RECEIPT OF EMERGENCY ACTION NOTIFICATION

I hereby acknowledge receipt of the foregoing notification.

SIGNATURE AND TITLE:

DATE AND TIME:

19. REVOCATION OF NOTIFICATION

ACTION TAKEN:

SIGNATURE OF OFFICER:

DATE:

PPQ FORM 523 (JULY 2002) Previous editions are obsolete.

FIGURE D-26: PPQ Form 523, Emergency Action Notification

PPQ Form 530, Limited Permit

The following is an example of a limited permit.

No. C 325575

Information requested is needed to determine if a permit can be issued (7 CFR 301).
FORM APPROVED: OMB NOS. 0579-0068 & 0579-0123
See reverse side for additional information.

U.S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE

LIMITED PERMIT

This permit authorizes the movement of the NONCERTIFIED articles described below to a specified destination for limited handling, utilization, or processing, or for treatment. The movement of such articles is regulated by Federal or State cooperative domestic plant quarantines.

1. DATE ISSUED	2. VOID AFTER

3. NAME OF CONSIGNOR

4. SHIPPING POINT

5. NAME AND ADDRESS OF CONSIGNEE

6. VEHICLE LICENSE NO. & STATE	7. R.R. CAR INITIALS

8. DESCRIPTION

A. Quantity	B. Article	C. Remarks

9. SIGNATURE OF ISSUING OFFICER

ENDORSEMENT

The above described shipment was received by the designated consignee, and was handled in the manner approved under the provisions of all applicable Federal or State cooperative domestic plant quarantines.

10. DATE RECEIVED

11. SIGNATURE OF DESTINATION OFFICER

PENALTY FOR MISUSE OR ALTERATION (7 USC 163)

PPQ FORM 530 (FEB 2002)
Previous edition dated APR 88 may be used.

PART 1 - CONSIGNEE'S COPY

☆ U.S. GOVERNMENT PRINTING OFFICE: 2002-722-410

FIGURE D-27: PPQ Form 530, Limited Permit

PPQ Form 540, Certificate

The following is an example of a certificate.

FORM APPROVED
OMB NO. 0579-0088

Information requested is needed to determine if a permit can be issued (7 CFR 301). See reverse side for additional information.

E 089704

U.S. DEPARTMENT OF AGRICULTURE
Animal and Plant Health Inspection Service
Plant Protection and Quarantine

CERTIFICATE

This certificate must be surrendered to the consignee at destination of shipment.

The articles described below are certified under all applicable Federal or State cooperative domestic plant quarantines.

1. DATE ISSUED	2. VOID AFTER

3. NAME OF CONSIGNOR

4. SHIPPING POINT

5. NAME & ADDRESS OF CONSIGNEE

6. VEHICLE LICENSE NO. & STATE	7. R.R. CAR INITIALS & NO.

8. DESCRIPTION

A. Quantity	B. Article	C. Remarks

9. SIGNATURE OF ISSUING INSPECTOR

PENALTY FOR MISUSE OR ALTERATION (7 USC 163)

PPQ FORM 540 (APR 89) *Previous edition obsolete.* PART 1—CONSIGNEE

FIGURE D-28: PPQ Form 540, Certificate

APHIS Forms

APHIS Form 2060, Environmental Monitoring Form

The following is an example of an environmental monitoring form.

OMB NO.: 0579-0117

PRESS HARD.
YOU ARE MAKING 4 COPIES
See Guidelines on back of this form.
Use a separate form for each sample collected.

Environmental Monitoring Form

19306H

1. Program	2. State	3. County	4. Site Identification	5. Date Collected MO-DA-YR	6. Time Collected

7. Sample Description	8. Location DISTANCE (Ft.)	DIRECTION	9. Pesticide	10. Formulation	11. Application Method	Rate	12. Sample Type
							☐ Priority ☐ Routine

13. Dates Treatment Applied

1 Month	1 Day	2 Month	2 Day	3 Month	3 Day	4 Month	4 Day	5 Month	5 Day	6 Month	6 Day	7 Month	7 Day	8 Month	8 Day

14. Total Trtmnts	15. Time of Last Treatment	16. Soil Type *(from county soil survey)*	17. Land Slope *(Degrees)*	18. Last Rainfall MONTH	DAY	AMT.	19. Wind SPEED	DIRECTION	20. Rel. Hum.

21. Water Body Type *(Pool, Pond, Reservoir, Well, Stream, etc.)*	Size *(Acres or Width)*	22. Water Depth *(Feet)*	Velocity *(Ft./Min.)*	Temp. *(°F)*	pH *(include decimal pt.)* Before	After	Dissolved Oxygen *(mg/L)*	23. Average Air Temp. *(°F)*

24. **Remarks** *(e.g. Sketch of site, unusual occurrences, additional information unique to sample, etc.)*

25. Lat.
Long.

26. Name of Collector *(type or print)*	27. Initials	28. Telephone Number of Collector

FOR LABORATORY USE ONLY

29. Date Sample Received	30. Date Analyzed	31. Results	
32. Laboratory Accession Number	33. Condition of Sample on Receipt		Public reporting burden for this collection of information is estimated to average 0.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, D.C. 20250; and to the Office of Information and Regulatory Affairs Office of Management and Budget, Washington, D.C. 20503.

APHIS FORM 2060 (OCT 99) replaces APHIS FORM 2060 (MAR 94) which is obsolete.

FIGURE D-29: APHIS Form 2060, Environmental Monitoring Form

Guidelines

Every sample must be accompanied by a completed APHIS Form 2060. The present guidelines are generic and will be superseded by specific instructions included in an Environmental Monitoring Plan for a particular program or operation. If you have any questions about how to fill out the form, or any other questions about monitoring, please call the Environ. Monitoring Team at 301-734-7175.

1. **Program**: Enter the most accurate description, or a commonly used acronym, of program.
2. **State**: The two letter postal abbreviation of the state in which the sample was collected.
3. **County**: The county in which the sample was collected.
4. **Site ID**: Assign a number which uniquely identifies the site (can be alphanumeric).
5. **Date Collected**: The date that the sample was collected.
6. **Time Collected**: The time the sample was collected, using a 24 hour clock.
7. **Sample Description**: Enter what the sample is (e.g., soil, sediment, water, grass, dye card, grasshoppers).
8. **Location**: The distance (in feet) and direction (e.g., 242 degrees as measured with a compass) from the nearest point of the treatment block to the site where the sample was collected.
9. **Pesticide**: The name of the pesticide for which the laboratory should analyze. If analyses for more than one pesticide are necessary, list the other pesticides in the Remarks block.
10. **Formulation**: The formulation of the pesticide used (e.g., emulsifiable concentrate, wettable powder).
11. **Application**:
    - **Method**: The method used to apply the pesticide (e.g., fixed wing aircraft, highboy, backpack sprayer, drench).
    - **Rate**: The rate at which the pesticide is applied (e.g., pounds a.i. per acre).
12. **Sample Type**: Check off the appropriate box. Sample types are usually defined as follows:
    - **Priority**: Samples collected to respond to any reported or observed adverse impact (e.g., bird kill, fish kill, public health concern, property damage).
    - **Routine**: All samples not considered priority samples.
13. **Dates Treatment Applied**: The dates treatments applied. If more than 8, then list additional in Remarks block.
14. **Total Treatments**: Enter the total number of treatments.
15. **Time of Last Treatment**: The time of day that the last treatment was completed (use 24 hour clock).
16. **Soil Type**: Enter the type of soil (e.g., sandy loam).
17. **Land Slope**: Enter the slope, measured from the treatment block to the sample collection site (positive degrees above horizontal for an incline or negative degrees below horizontal for a decline).
18. **Last Rainfall**: The date and amount of the last rainfall before the sample collection.
19. **Wind**: The speed (mph) and direction (e.g., 320 degrees as measured with a compass) from which the wind was coming at the time of the last treatment.
20. **Rel. Humidity**: The relative humidity of the air, measured as a percentage (e.g. 75%) at the time of the last treatment.
21. **Water Body**:
    - **Type**: Examples; pool, lake, river.
    - **Size**: Surface area (acres) or width (feet).
22. **Water**:
    - **Depth**: Average depth (feet).
    - **Velocity**: At the sample collection site (feet per minute).
    - **Temp.**: Water temperature (°F).
    - **pH Values**:
      - **Before**: The pH of the water sample.
      - **After**: If a pH adjustment is required to stabilize the sample, enter the pH of the sample after the adjustment.
    - **Dissolved Oxygen**: Enter the oxygen content of the water sample.
23. **Average Air Temp.**: Enter the air temperature at the time of the last treatment.
24. **Remarks**: Additional information concerning the location of the sampling site (sketch of the site or attach a map), weather conditions (additional wind speeds and directions, gusts, cloud cover), circumstances relevant to the results of the sample analysis, and who to report results to if different from collector.
25. **Latitude and Longitude**: Coordinates of sampling site as determined by GPS unit.
26. **Name of Collector**: Print submitter's name.
27. **Initials**: Submitter's initials in script.
28. **Telephone Number of Collector**: Include area code.

Distribution

Laboratory (original) - submit to the USDA-APHIS National Monitoring and Residue Analysis Laboratory (NMRAL), 3505 25th Avenue, Building 4, Gulfport, Mississippi 39501, c/o Environmental Monitoring Coordinator.
Headquarters (yellow copy) - mail to: USDA-APHIS-PPQ, 4700 River Road, Unit 150, Riverdale, MD 20737, along with any attached maps or other documentation.
Collector (pink copy) - the collector will keep this copy on file for reference.
Sample (blue copy) - package with the individual sample so that if several samples are being shipped in the same container, each form will be associated with it's corresponding sample.

FIGURE D-30: APHIS Form 2060, Environmental Monitoring Form Guidelines

Regional Office Forms

Imported Fire Ant Quarterly Report

The following is an example of an Imported Fire Ant Quarterly Report.

IMPORTED FIRE ANT QUARTERLY REPORT

STATE _____

DATES _____

ACTIVITY	Month 1	Month 2	Month 3	TOTAL
REGULATORY	--	--	--	--
Number of Establishment Visits				
New Compliance Agreements Issued				
Number of Media/Soil Samples Taken				
Number of Highway Blitzes				
Number of Blitz Trucks Inspected				
Incidents Reported to IES				
Staff Years spent on IFA regulatory				
SURVEY	--	--	--	--
Number of Counties Surveyed				
Number of Sites Surveyed				
Number of Establishments Surveyed				
Number of Bait Stations Installed				
Number of New Isolated Sites Detected				
New Infested Sites Within 3-5 miles of Quarantine Area				
Number of New Counties Infested				
Number of New Partial Counties Infested				
NARRATIVE	--	--	--	--
(Regulatory and/or Survey comments)	--	--	--	--

FIGURE D-31: Imported Fire Ant Quarterly Report

Other Forms

Bulk Density Determination Form

The following is an example of a Bulk Density Determination Form.

Bulk Density Determination Form

NURSERY: _____

MAILING ADDRESS: _____

_____

PHYSICAL ADDRESS: _____

_____

PHONE: (_____) _____

DATE SAMPLE COLLECTED: _____

RESULTS RETURNED TO ATTN. OF: _____

BASIC MEDIA COMPONENTS: _____

REMARKS: _____

FIGURE D-32: Bulk Density Determination Form

Rubber Stamp

The following is an example of a rubber stamp imprint.

FIGURE D-33: Rubber Stamp

E

Imported Fire Ant

Appendix E

Minimum Allowable Rates for IFA Quarantine Treatments

Introduction

There are currently (April 2004) five chemicals that are used in the Federal IFA Quarantine for treatment of containerized nursery stock. This type of stock is the most commonly tested for compliance with the quarantine. Of these products, the most commonly used are chlorpyrifos and bifenthrin, and for these we have good data to support a minimum standard for chemical analysis. For the others we have not determined minimum concentrations required to eliminate IFA.

Chemical	Approximate Minimum Rate
Bifenthrin	5 ppm
Chlorpyrifos	10 ppm
Diazinon	(not available)
Fipronil	(not available)
Tefluthrin	(not available)

While these minimums are suggested for compliance with the quarantine, detection of levels lower than those suggested should be evaluated with consideration for variables that will affect the analysis. Type of potting media (or soil), age of treatment, analysis method, and other variables may affect the residue level detected.

Additions or changes to this list of minimum requirements will be made as they become available.

F

Imported Fire Ant

Appendix F

A Quarantine Map Illustrating Areas Regulated for Imported Fire Ant

Website

Refer to the following site for the most current quarantine map:

http://www.aphis.usda.gov/ppq/maps/fireant.pdf

Index

Numerics

7 CFR 301 Subpart Imported Fire Ant, 1-3

7 CFR 301.81, 3-12, 3-15, A-1, B-1

7 CFR 301.81-10, 3-2

A

age of treatment, E-1

agricultural seal, 3-5, 3-6, 3-8

agricultural wetting agent, A-6

air pressure equipment, A-2

Alabama, 1-3

alate queens, A-8, A-9

alates, 1-4

alcohol, 2-7, 3-17

allergic reactions, 1-1

Amdro® Pro, A-14

AMDRO® Pro/Siege® Pro, A-2

analysis method, E-1

Analytical and Natural Products Chemistry Lab, 3-19

Animal and Plant Health Inspection Service (APHIS), 1-1

ANPCL, 3-19

ant population, 2-7

apartment complexes, 2-1, 2-5

APHIS (Animal and Plant Health Inspection Service), 1-1

APHIS collaborator, 3-10

APHIS Form 2060, D-29

approved bait, A-8

approved chemicals, 3-18

approved insecticides, A-1

approved laboratories, 3-1

approved treatments, 3-7, A-2

Arkansas, 1-3

audience, 1-1, 1-2

authority, 1-3

authorized chemicals, A-2

authorized insecticides, A-2

AWARD®, A-2, A-14

B

bait traps, 2-7

bait, A-8

bait/attractant trap surveys, 2-1

bait/attractant traps, 2-6

baled hay and straw, A-3, D-3

baled hay, 3-1

balled and burlapped (B&B) nursery stock, B-2, D-12

bifenthrin
drench, A-3
emulsifiable, A-3
for treating plants balled or in containers, A-11
for treating plants in 3-4 quart containers, B-2
granular incorporation, A-7
granular or flowable, A-9
included in list of authorized insecticides, A-2
included in table of available labels, A-14
minimum allowable rates, E-1
solution for treating containerized plants, A-6
topical application, A-3, A-6

bills of lading, 3-14

blueberries, A-11, D-5

border interceptions, 3-11

broadcast application, A-8

brood production, 1-4

brood, 1-4, 1-5

bulk density, B-2

bulk mixing tank, A-6

bulk soil, A-13

bulldozers, A-2

burlap wrap, A-6

C

California, 1-3

calves, 1-1

canned meat, 2-6

catchment facilities, 3-17, A-15

cattle feeding operations, 2-4

certificate, 1-2, D-28

certification period, B-3

certified pesticide applicators, A-1

certifying regulated articles, 3-2

chemical analysis, E-1

chemical treatment, 3-6, 3-7

ChipCo® Choice™, A-2, A-14

ChipCo® Top Choice™, A-2, A-14

chlorpyrifos
drench treatment, A-8
emulsifiable, A-3, B-3
for treating balled and burlapped nursery stock, B-2
for treating plants balled or in containers, A-11
for treating sod, A-12
included in list of authorized chemicals, A-2
included in table of available labels, A-14
minimum allowable rates, E-1
solution for treating containerized plants, A-6
solution for treating plants balled with burlap, A-6

citrus, 1-1

city parks, 2-5

cold storage, A-13

collection site, 3-19

colonies, 2-7

colony, 1-4

compliance agreement
cancellation of, 3-15
examples of, D-3 to D-25
for establishments using certificates, 3-2
for IFA-free nurseries, A-8
for nurseries using bifenthrin for exclusion, A-9
issuing, 3-15
referred to in report of violation, 3-12
stipulation in, 3-10

contact insecticide, A-8

containerized nursery stock, 3-19, A-3 to A-5, A-8, D-7, E-1

containerized plants, A-6, A-8

conveyor belts, A-2

corn chips, 2-6

corn oil, 2-6

corn, 1-1

corrective actions, 3-9

cotton cosmetic pad, 2-6

county extension agents, 2-1

CPHST, 3-19

D

deer, 1-1

delimiting survey, 2-6

description of IFA castes and life stages, 1-4

destination checks, 3-11

destination inspector, 3-11

destination site, 3-8

destroying infested shipments, 3-6

detection survey, 2-1

diazinon
  drench treatment, A-8
  for treating blueberries and other fruit and nut nursery stock, A-11
  for treating plants in 3-4 quart containers, B-2
  included in list of authorized chemicals, A-2
  included in table of available labels, A-14
  minimum allowable rates, E-1

dip & drench nursery inspections, 3-17

dirt pans, A-2

Distance®, A-2, A-14

distant disposal site, 3-6

distribution, 1-3

docks, 2-1

dosage, B-3

draglines, A-2

drainboard, A-5

dry heat, A-13

Dursban®, A-2, A-14

dwarf yaupon, A-3

E

EAN, 3-5, 3-6, 3-7, 3-8, 3-9, 3-12

egg production, 1-4

eggs, 1-4, 1-5, 3-4

emergency action notification, 1-2, 3-4, 3-5 to 3-9, D-26

empty pesticide containers, A-15

emulsifiable chlorpyrifos, A-3

enforcement, A-10

entomologists, 2-1

environmental laws, A-15

environmental monitoring form, D-29

environmental monitoring plan, A-15

equipment, soil moving, 2-4

eradication programs, 2-6

exposed soil surfaces, A-8

exposure period, B-3

Extinguish®, A-2, A-14

F

Federal and State regulations, A-15

Federal Insecticide, Fungicide, and Rodenticide Act, 3-15

Federal inspectors, A-8

Federal or State inspector, A-10

Federal Plant Pest Act, 3-10

federal regulatory officers, 1-1

fenoxycarb
  included in list of authorized chemicals, A-2
  included in table of available labels, A-14

fiberglass, A-12

field-grown nursery stock, D-12

FIFRA, 3-15, A-1, A-11

filter paper, 2-6

final disposition, 3-10

fipronil
granular incorporation, A-7
granular treatment for soil or potting media, A-9
included in list of authorized chemicals, A-2
included in table of available labels, A-14
minimum allowable rates, E-1

FIREBAN®, A-2, A-14

flags, 2-6, 2-7

Florida Department of Agriculture and Consumer Services, 3-16

Florida, 1-3, 2-7

frozen food locker, A-13

fruit and nut plants, A-11

G

garden center, B-2

gaster, 1-4

Gelman® dishes, 2-6

generally infested area, 2-1

Georgia, 1-3

gloves, latex, 2-6

golf courses, 2-4

GPS unit, 2-3, 2-5

granular bifenthrin, A-3, A-4

granular fipronil, A-4

granular tefluthrin, A-4

grass sod, 3-1, 3-4, D-17

greenhouse grown plants, A-12, D-19

greenhouse producer, B-2

grid pattern, 2-7

ground water, 3-17

growing and holding areas, A-8

H

hay and straw, A-3

hay, 2-4, 3-1

high voltage powerline rights of way, 2-5

highway maintenance district offices, 2-1

horse farms, 2-4

houseplants, 3-1

human health hazard, 1-1

hydramethylnon
included in list of authorized chemicals, A-2
included in table of available labels, A-14

Hymenoptera, 2-7

I

IFA
as a human health hazard, 1-1
attacks, 1-1
attractants, 2-6
brood, 1-4, 1-5
colonies, 2-7, A-8
colony, 1-4
compliant nurseries, 3-16
dip & drench nursery inspections, 3-17
distribution, 1-3
eggs, 1-4, 1-5, 3-4
infestations, 1-1
interception, 3-18
keys, 2-7
larvae, 1-4, 1-5, 3-4
life history, 1-4
life stages, 3-2
major workers, 1-4
minor workers, 1-4
mounds, 1-4, 2-1, 2-7
nests, 1-1, 1-4
populations, 2-2
pupae, 1-5, 3-4
quarantine map, F-1
quarterly report, D-31
queens, 1-4, 3-1
reproducing colonies, 3-1, 3-4
reproductives, 1-4
spread of, 3-6, 3-7, 3-8
stamp, 3-17
sticker, 3-17
taxonomy, 2-7
workers, 1-4, 3-4

IFA-free nurseries, A-8

IFA-free nursery inspections, 3-16

IFA-free nursery stock, 1-1

immersion tank, A-5

index card, 2-6

infestations, 2-1

insecticidal treatment, B-3

inspections, A-8

intercepting inspector, 3-3, 3-11

intercepting officer, 3-11

interstate movement, 3-1, 3-2

investigation forms, 3-19

invoices, 3-14

issuing inspector, 3-3, 3-11

K

keys, 2-7

L

label instructions, A-15

landscape/yard services, 2-1

landscaped office buildings, 2-5

landscaper, B-2

large block design survey, 2-2

larvae, 1-4, 1-5, 3-4

latex gloves, 2-6

leading edge of infestation, 1-1

leading edge, 2-2

life history, 1-4

Limited Permit, 3-5, 3-6, 3-7, 3-8

limited permit, 1-2, 3-5 to 3-7, 3-11, D-27

liquid drenches, 3-17

livestock industry groups, 2-1

loading areas, 3-17

Louisiana, 1-3

M

major workers, 1-4

majors, 1-4

malls/shopping centers, 2-5

manifests, 3-14

mated queen, 1-4

mating flights, 1-4

media samples, 3-19

methoprene
  included in list of authorized chemicals, A-2
  included in table of available labels, A-14

minims, 1-4

minimum requirements, E-1

minor workers, 1-4

Mississippi, 1-3

mitigative measures, A-15, B-3

mixing tank, A-6

Mobile, Alabama, 1-3

monitoring of movement, 3-10

motor graders, A-2

mound drench treatments, A-8

mounds, 1-4, 2-1, 2-3, 2-4, 2-5, 2-7

movement of regulated articles, 3-11

mulched areas, A-8

Myrmicinae, 2-7

N

natural gas rights of way, 2-5

nests, 1-1, 1-4

new colonies, A-8

New Mexico, 1-3

new roads, 2-1

newly mated queen, 1-4

NMRAL, 3-19

noncompacted soil, A-2

noncompliance, 3-10

North Carolina, 1-3

nurseries, 2-1, 2-4, 2-6

nursery identification number, A-8

nursery owners, A-8

nursery producer, B-2

nursery stock, 2-4, 3-18, A-6, E-1

nurseryman, 3-17, 3-18

O

office buildings, 2-5

oil
  corn, 2-6
  olive, 2-6
  peanut, 2-6

Oklahoma, 1-3

okra, 1-1

olive oil, 2-6

open areas along streams, 2-5

open lands, 2-3

orchards, 2-3

Ortho-77®, A-6

outer limits of the infestation, 2-3

P

packing lists, 3-14

Paraguay River floodplain, 1-3

parks, 2-1

pastures, 2-1, 2-3

peak shipping season, A-8

peanut oil, 2-6

pecan cookie pieces, 2-6

permits, 3-14

pest control operators, 2-1

pest risk, 3-14

pesticide applicators, A-1

pesticide label, A-1

phytotoxicity, A-3

pigs, 1-1

pipelines, 2-1

Plant Protection Act (7 USC 7701), 1-3

plant regulatory officials, 3-3

plants with roots, 3-1, 3-4

plastic dishes, 2-6

polystyrene plastic dishes, 2-6

ponds, 2-3

potting media, 3-19, A-9, E-1

potting soil, 3-1

power line right of ways, 2-1

PPQ Form 2060, 1-2

PPQ Form 244, 3-5 to 3-8, D-1

PPQ Form 518, 1-2, 3-7, 3-12, 3-14, D-2

PPQ Form 519, D-3

PPQ Form 523, 1-2, 3-4, 3-9, 3-14, D-26

PPQ Form 530, 1-2, 3-5 to 3-8, 3-11, D-27

PPQ Form 540, 1-2, 3-3, D-28

PPQ Officer, 3-10

PPQ regional offices, 2-5, 3-2

PPQ State Plant Health Director, 3-14, 3-19

PPQ Treatment Manual, 3-7

prenumbered IFA sticker, 3-17

printed certificates, 3-2, 3-15

Program Aid 1736, B-2, B-3

Program Aid No. 1736, B-1

prohibited material, 3-7

protection from exposure, 3-10

public recreation areas, 2-5

Puerto Rico, 1-3

pupae, 1-5, 3-4

purpose, 1-2

pyriproxyfen
  included in list of authorized chemicals, A-2
  included in table of available labels, A-14

Q

quail, 1-1

quarantine map, 1-3, F-1

quarantine treatments, E-1

queens, 1-4, 3-1

R

railroad rights of way, 2-5

railroad shipping yards, 2-4

railroad yards, 2-1

records, A-10

Regional Office forms, D-31

registered bait, A-8

regulated area, 2-1, 3-1

regulated articles
  examples of, 2-4
  issuing an EAN for, 3-9
  limited permits for, 3-11
  list of, 3-1
  locations likely to receive, 2-3, 2-4, 2-5
  shipments of, A-8

regulated establishments, A-8

regulated properties, A-15

regurgitated liquids, 1-4

remedial measures, 3-9

report of violation, 1-2, 3-7, 3-12, D-2

reporting of survey finding, 2-8

reproducing colonies, 2-3, 2-4, 3-1, 3-4

reproducing queen, 2-3, 2-4

reproductive ants, 1-4

reproductives, 1-4

request for reinstatement, 3-18

residential areas, 2-6

residual activity, A-6

residue level, E-1

retail stores, 2-4

root ball, 3-19

rubber stamp certificates, 3-2

rubber stamp, 3-11

rural areas, 2-3, 2-4

S

safeguards, 3-9, 3-10

safety equipment, A-15

scope, 1-2

sector, 2-4

sectors, 2-2

sheep, 1-1

shipping areas, 3-18

shipping documents, 3-2, 3-3, 3-12

shipping yards, 2-4

Siege®Pro, A-14

SIR, 3-17, 3-18

sites of new construction, 2-1

small area control programs, 2-6

small block design survey, 2-3

sod producer, B-2

sod, 2-4, A-8

soil bin, 3-17, 3-18

soil corer, 3-19

soil moving equipment, 2-4, 3-1, A-2, D-24

soil receipts, 3-17, 3-18

soil samples, 3-17, A-13

soil sampling procedures and monitoring form, 1-2

soil, 3-1, D-21

soil/media samples, 3-19

Solenopsis geminata, 2-7

Solenopsis invicta x richteri hybrid, 1-3

Solenopsis invicta, 1-1, 1-3, 1-4

Solenopsis richteri, 1-1, 1-3, 1-4

Solenopsis species, 2-7

solid attractants, 2-6

South America, 1-3

South Carolina, 1-3

soybeans, 1-1

spade, 3-19

Special Inspection Report, 3-17

specimen slips, 3-17

spray records, 3-18

stamp/certificate number disbursement, 3-15

stamps, 3-15

state contacts, C-1

state cooperators, 2-5

state inspector, A-8, B-3

State Plant Health Director, 3-14, 3-19

state plant regulatory official, 3-7, 3-8

state regulatory officers, 1-1

state regulatory officials, C-1

steam heat, A-13

steam jenny, A-2

stingers, 1-4

straw, 3-1

stream banks, 2-3

suburban areas, 2-5

supplies for the delimiting survey, 2-6

surface water, 3-17

survey
  area, 2-7
  maps, 2-2, 2-3

T

Talstar®, A-2, A-14

taxonomy, 2-7

Tecowet®, A-6

tefluthrin
  emulsifiable, A-3
  for treating plants balled or in containers, A-11
  granular incorporation, A-7
  granular treatment for soil or potting media, A-9
  included in list of authorized chemicals, A-2
  included in table of available labels, A-14
  minimum allowable rates, E-1

telephone repair services, 2-1

Tennessee, 1-3

Texas, 1-3, 2-7

topical application, A-6

transit inspection locations, 3-4

transit locations, 3-12

transportation vehicles, 3-18

transporting agency, 3-6

trapping grid, 2-7

Treatment Manual, 3-7, A-1

treatment program, A-8

treatment records, 3-18

treatment site, 3-7

treatments, 3-9

Tronic®, A-6

truck shipping yards, 2-4

U

urban areas, 2-3, 2-5

USDA investigator, 3-18

USDA PPQ officials, B-3

USDA-APHIS State Plant Health Directors, C-5

used soil moving equipment, A-2, D-24

V

violations, 3-19

visual survey, 2-1

W

warehouses, 2-1

wetting agent, A-6

workers, 1-4

Y

yaupon, dwarf, A-3