

REVISION REGISTER

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Queensland Government Department of Primary Industries

INSPECTION AND TREATMENT OF PLANTS FOR RED IMPORTED FIRE ANT

1. PURPOSE

The purpose of this procedure is to describe -

- (a) the design features for inspection and treatment facilities;
- (b) the standards required for inspection and treatment equipment; and
- (c) the responsibilities and practices of personnel;

that apply to the inspection and treatment of plants for Red Imported Fire Ant under an Interstate Certification Assurance (ICA) arrangement.

2. SCOPE

This procedure covers all certification of inspection and treatment of plants for Red Imported Fire Ant from a business operating under an ICA arrangement in Queensland.

This procedure covers the inspection and treatment of plants with media attached. Media includes soil, potting mixtures and other non-liquid mixtures of organic and inorganic material in which plants can grow.

This procedure is applicable where the requirement(s) specified in section $\underline{6}$. <u>Requirement</u> are a specified condition of entry of an interstate quarantine authority for Red Imported Fire Ant.

Certification of inspection/treatment of plants for Red Imported Fire Ant freedom under this Operational Procedure may not be an accepted entry condition for all plants to all intrastate and interstate markets.

Some intrastate or interstate markets may require additional quarantine certification for pests and diseases other than Red Imported Fire Ant as a condition of entry.

It is the responsibility of the business consigning the plants to ensure compliance with all applicable quarantine requirements.

Information on intrastate and interstate quarantine requirements can be obtained from the ICA Supervisor for your district.

3. REFERENCES

WI-02

Guidelines for Completion of Plant Health Assurance Certificates

Permit No.'sPermit for Minor Off-Label-Use of a Registered AgVetPER3817 / PER3819Chemical ProductNational Registration Authority

Plant Health Control - INTERSTATE CERTIFICATION ASSURANCE

ICA-39



4.	DEFINITIONS	
	accredit	means to accredit persons to issue assurance certificates under section 21 of the <i>Plant Protection Act 1989.</i>
	Agvet Code	means the Agvet Code of Queensland.
	Application for Accreditation	means an Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) Arrangement [FDU 385].
	Assurance Certificate	means a <i>Plant Health Assurance Certificate</i> [FDU 384].
	Authorised Signatory	means an officer of an ICA accredited business who is approved by the business to sign and issue assurance certificates on the business's behalf and whose name and specimen signature is provided as an Authorised Signatory with the business's Application for Accreditation.
	Authorised Inspection Person	means a person who is trained in the detection and recognition of Red Imported Fire Ant and is authorised by the accredited business to conduct Red Imported Fire Ant inspections on their behalf.
	business	means the legal entity responsible for the operation of the facility and ICA arrangement detailed in the business's Application for Accreditation.
	category	means a type of plant in a consignment that is likely to differ in its risk of being infested. Plants in a consignment may be segregated into categories on the basis of species, size of plants or pots and site of production.
	Certification Assurance	means a voluntary arrangement between the Department of Primary Industries and a business that demonstrates effective in-house quality management and provides assurance through documented procedures and records that produce meets specified requirements.
	certified/certification	means covered by a valid <i>Plant Health Assurance Certificate</i> [FDU 384].
	DPI	means Department of Primary Industries.
	facility	means the location where the assembly, inspection, secure storage, certification and dispatch operations covered by the ICA arrangement are carried out.
	ICA	means Interstate Certification Assurance.
	Interstate Certification Assurance	means a system of Certification Assurance developed to meet the requirements of State and Territory governments for the certification of produce for interstate and intrastate quarantine purposes.

Queensland Government Department of Primary Industries

INSPECTION AND TREATMENT OF PLANTS FOR RED IMPORTED FIRE ANT

media	means soil, potting mixtures and other non-liquid mixtures of organic and inorganic material in which plants can grow.		
nonconformance means a nonfulfilment of a specified requirement.			
plant	means a living plant with media attached.		
property	means one or more contiguous parcels of land (lots on plan etc), owned or leased by the applicant business, that are managed as a unit and isolated from any other parcel of land owned or leased by the same business.		
Red Imported Fire Ant	mported Fire means all stages of the ant species Solenopsis invice Buren.		
RIFA	means Red Imported Fire Ant.		
source property	means a property owned or leased by the business where plants are assembled, grown, inspected, stored or packed prior to certification under this Operational Procedure.		

5. **RESPONSIBILITY**

These position titles have been used to reflect the responsibilities of staff under the ICA arrangement. These positions may not be present in all businesses, or different titles may be used for staff who carry out these responsibilities. In some businesses one person may carry out the responsibilities of more than one position.

The Certification Controller is responsible for -

- representing the business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this Operational Procedure;
- ensuring the business and its staff comply with their responsibilities and duties under this Operational Procedure;
- maintaining a property plan for each source property covered by the ICA arrangement (refer <u>7.2</u>);
- maintaining a Register of Authorised Inspection Persons (refer 7.4.1);
- maintaining the required inspection facilities and equipment (refer 7.4.2);
- forwarding samples of suspected RIFA to the DPI ICA Supervisor for the district for identification (refer <u>7.4.4</u>);
- reporting any detection of RIFA on a property where the pest has not previously been detected to the DPI ICA Supervisor for the district within 24 hours of the detection (refer <u>7.4.4</u>);
- ensuring certified plants are maintained in secure conditions from inspection/treatment until dispatch (refer <u>7.5.8</u>).



The Treatment Operator is responsible for -

- maintaining a tank calibration certificate for the treatment tank used for treatment of plants under this Operational Procedure (refer <u>7.5.1</u>);
- preparing RIFA treatment mixtures (refer <u>7.5.4</u>);
- applying RIFA treatments according to specified requirements (refer 7.5.6);
- maintaining treatment mixture preparation and treatment records (refer 7.5.7).

Authorised Inspection Persons are responsible for -

- inspecting all plants for the presence of RIFA prior to certification under this Operational Procedure (refer <u>7.4.3</u>);
- immediately advising the Certification Controller of any detection of RIFA on inspection for certification under this Operational Procedure (refer <u>7.4.4</u>);
- maintaining RIFA freedom inspection records (refer 7.4.6).

The Authorised Dispatcher is responsible for -

- ensuring all packages covered by an Assurance Certificate issued by the business under this Operational Procedure are identified (refer <u>7.7.1</u>);
- maintaining copies of all Assurance Certificates issued by the business under the ICA arrangement (refer <u>7.7.3</u>).

Authorised Signatories are responsible for -

 ensuring, prior to signing and issuing an Assurance Certificate, that produce covered by the certificate has been prepared in accordance with the business's ICA arrangement and that the details on the certificate are true and correct in every particular (refer <u>7.7.2</u>).

6. **REQUIREMENT**

Plants certified for inspection and treatment for Red Imported Fire Ant under this Operational Procedure must meet the following requirements:

1. Inspection

Inspected and found free of Red Imported Fire Ant.

2. Treatment

Plants treated -

- with a mixture containing
 - 0.4 mL of a concentrate containing 500 g/L chlorpyrifos per litre of water; and
 - a **commercial wetting agent** at the rate specified on the product's registered label;

- applied as -
 - a **dip** by fully immersing the container/root-ball in the treatment mixture until all air bubbles are expelled from the media; or
 - a **drench** that saturates the media and comprises a minimum of 1/5 or 20% of the volume of the container/root-ball.

The Department of Primary Industries and interstate quarantine authorities maintain the right to inspect certified produce at any time and to refuse to accept an assurance certificate where produce is found not to comply with specified requirements.

Some plants may be damaged by certain chemical treatments. Businesses applying chemical treatments under this Operational Procedure should check with experienced persons such as departmental officers for any available information. Testing of small quantities is recommended.

The business must use products registered under the Agvet Code in accordance with the instructions included on the product's approved label or an applicable NRA permit, and follow any first aid, safety, protection, storage and disposal directions on the product label or permit. Treatment facilities must comply with the requirements of the local government, environmental and workplace health and safety authorities.

7. PROCEDURE

7.1 Accreditation

7.1.1 Application for Accreditation

A business seeking accreditation for an ICA arrangement under this Operational Procedure shall make application for accreditation (refer <u>Attachment 1</u>) at least 10 working days prior to the intended date of commencement of certification under the ICA arrangement.

7.1.2 Audit Process

Initial Audit

Prior to accrediting a business, an initial audit of the business is carried out to verify the ICA system is implemented and capable of operating in accordance with the requirements of the Operational Procedure, and the system is effective in ensuring compliance with the specified requirements of the ICA arrangement.

On completion of a successful initial audit, applicants will be granted provisional accreditation and posted a Certificate of Accreditation (refer <u>7.1.3 Certificate of Accreditation</u>).

Compliance Audits

Compliance audits are conducted to verify that the ICA system continues to operate in accordance with the requirements of the Operational Procedure.

Compliance audits are, wherever practical, conducted when the ICA system is operating.

A compliance audit is conducted within four weeks of the commencement of certification under the ICA arrangement by the business.

On completion of a successful compliance audit, annual accreditation is granted to cover the current season, up to a maximum of twelve months from the date of provisional accreditation, and a new Certificate of Accreditation issued (refer <u>7.1.3 Certificate of Accreditation</u>).

A compliance audit is conducted between six and nine months after the date of accreditation for an ICA arrangement that operates for more than six months of the year.

Random audits are conducted on a selected number of accredited businesses each year. Random audits may take the form of a full compliance audit, or audits of limited scope to sample treatment mixtures, certified produce, ICA system records or ICA system documentation.

Unscheduled compliance audits may be conducted at any time to investigate reported or suspected nonconformances.

Re-Accreditation

Accredited businesses are required to re-apply for accreditation each year the business seeks to operate under the ICA arrangement. Businesses seeking re-accreditation must lodge a renewal application prior to accreditation lapsing, or if accreditation has lapsed, prior to commencing further certification of produce under the ICA arrangement.

A compliance audit is conducted within twelve weeks of the commencement of certification under the ICA arrangement by the business each year.

A compliance audit is conducted between six and nine months after the date of re-accreditation for an ICA arrangement that operates for more than six months of the year.



7.1.3 Certificate of Accreditation

An accredited business will receive a Certificate of Accreditation for an Interstate Certification Assurance Arrangement detailing the scope of the arrangement including -

- the facility location;
- the Operational Procedure covered;
- the type of produce covered;
- · other restrictions on the accreditation; and
- the period of accreditation. •

The business must maintain a current Certificate of Accreditation and make this available on request by an Inspector.

A business may not commence or continue certification of produce under the ICA arrangement unless it is in possession of a valid and current Certificate of Accreditation for the facility, procedure and produce type covered by the Assurance Certificate.

7.2 **Property Plan**

The Certification Controller shall maintain a property plan for each source property. A 'source property' means a property owned or leased by the applicant business where plants are assembled, grown, inspected, treated, stored or packed prior to certification under this Operational Procedure.

A business may elect to define a 'property' as only a portion of a larger area of land owned or leased by the business. However, the boundaries of the 'property' must be clearly defined on the property plan and must include all areas where plants are assembled, grown, inspected, treated, stored or packed for certification under this Operational Procedure.

The property plan shall comprise of a diagram of the layout of the source property including the following features -

- (a) road access including street names;
- (b) internal roadways within the property;
- the location and identification of buildings on the property (eq office, house, (c) and other permanent roofed structures etc)
- the size and location of the plant inspection area; (d)
- (e) the size and location of the treatment area;
- (f) the secure area for plants awaiting dispatch; and
- (g) the boundaries of all open and covered plant growing areas.

A copy of the business's property plan shall be included with the business's Application for Accreditation (refer 7.1.1 Application for Accreditation).

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A blank Property Plan is included as <u>Attachment 3</u> and should be copied for completion and inclusion with the business's Application for Accreditation.

7.3 Risk Management

The business shall implement risk management strategies to minimise the risk of plants becoming infested with RIFA.

Risk management strategies shall include –

- (a) ensuring purchased materials or other items brought on to a source property, such as soil, media, plants, machinery and other equipment, are free of RIFA (ie purchasing raw materials from RIFA free suppliers or that are certified free from RIFA and carefully inspecting them prior to delivery);
- (b) maintaining a RIFA treatment program for all source properties, either as directed or in cooperation with the DPI; and
- (c) ensuring containerised plants are not stored in direct contact with the soil (ie plants are stored on benches, concrete, gravel or similar surfaces).

The business shall maintain records of any property treatments for RIFA and purchasing to verify conformance with the above requirements.

7.4 Inspection

7.4.1 Authorised Inspection Persons

One or more Authorised Inspection Persons shall be trained in the detection and recognition of RIFA. Authorised Inspection Persons shall have successfully completed a course approved by the DPI in the detection and identification of RIFA.

Accredited businesses shall maintain records to demonstrate that each Authorised Inspection Person has successfully completed an approved RIFA training course.

The names, date of training and specimen signatures of each Authorised Inspection Person shall be included on a *Register of Authorised Inspection Persons* maintained by the business (refer <u>Attachment 4</u>). Only persons currently on the register shall carry out RIFA inspections.

7.4.2 Inspection Facilities and Equipment

The business shall have a designated area for inspection of plants for RIFA.

The business shall maintain inspection equipment such as a hand lens, microscope or other device that provides X10 or greater magnification for examination of suspect plants.

Reference material including photographs/illustrations of RIFA shall be maintained and made available in the inspection area.



7.4.3 Inspection Procedure

Plants shall be inspected as close as practicable, and not more than 48 hours prior to, the time of dispatch from the facility.

Plants shall be assembled at the plant inspection facility prior to inspection. Plants may be categorised into lots based on their risk of being infested with RIFA including species, size of plants or pots and the source or site of production. Each category of plants in a consignment shall be listed on the inspection record (refer <u>7.4.6 Inspection Records</u>).

All categories of plants intended for certification shall be thoroughly inspected by an Authorised Inspection Person. Each plant must be inspected.

Inspections shall include examination of the above ground portions of the plants and their containers/media for ant activity.

A sample of the plants shall be removed from their containers to check for ant activity/nests in the potting media in accordance with the following table –

Number of Plants in Consignment	Number of Plants to be Inspected
1 – 5	All plants.
6 - 30	Every third plant and not less than 5 plants.
31 - 100	Every fifth plant and not less than 10 plants.
101 or more	The square root of the number of plants in the category (rounded up to the nearest whole number).

Plants in the sample shall be selected at random.

For large containerised plants where it is impractical to remove the plant from the container, each container shall have a portion or core of media removed from the container and the remainder of the media disturbed to check for ant activity/nests.

Ants found during RIFA inspections that are suspected to be RIFA shall be collected and carefully examined.

Information on the life cycle and identification of RIFA is given in <u>Attachment 12</u> <u>Identification of Red Imported Fire Ant</u>.

7.4.4 Action Following Detection of Red Imported Fire Ant

The nominated Certification Controller for the business shall be immediately advised of any new detection of RIFA or suspected RIFA identified during plant inspections or at any other time.

Any category of plants found on inspection to be infested or suspected of being infested with RIFA shall be regarded as nonconforming and shall be rejected for certification (refer <u>7.4.5 Rejected Plants</u>).



Samples of suspected RIFA shall be placed in a specimen bottle filled with methylated spirits for identification. Samples shall be labelled with the date of inspection, the Interstate Produce number (IP No.) of the accredited business inspecting the produce, the address of the property or the facility number, and the type of plants from which the sample was taken. Samples shall be forwarded with a completed *Ant Sample Submitted for Identification* [CAF-07] form (refer <u>Attachment 11</u>) to the Fire Ant Control Centre, Oxley for identification.

The Certification Controller shall, as soon as practical and within 24 hours of the detection, report any detection of RIFA on a property where the pest has not been previously detected to the ICA Supervisor for the district in which the ICA arrangement operates.

7.4.5 Rejected Plants

All rejected plants shall be isolated, moved from the inspection area and clearly identified to prevent mixing with conforming plants.

All rejected plants must be treated for RIFA in accordance with 7.5 Treatment.

All rejected plants must be reinspected for RIFA freedom after treatment in accordance with <u>7.4.3 Inspection Procedure</u>.

7.4.6 Inspection Records

The Authorised Inspection Person shall maintain records of the results of all RIFA freedom inspections.

Inspection records shall be in the form of a *Red Imported Fire Ant Freedom Inspection Record* (refer <u>Attachment 9</u>) or records which capture the same information.

Inspection records must include -

- the Interstate Produce (IP) Number of the business that operates the approved facility in which the inspection was undertaken;
- the number of the Assurance Certificate to which the inspection relates;
- the date of inspection;
- the type, number and size of plants in each category inspected;
- the inspection result including the presence or absence of RIFA;
- the number of any rejected plants;
- the name and signature of the Authorised Inspection Person.

An example of a completed *Red Imported Fire Ant Freedom Inspection Record* is shown as <u>Attachment 10</u>.

7.5 Treatment

Treatment shall be carried out following RIFA freedom inspection.



The treatment mixture shall be applied as -

- a **dip** by fully immersing the container/root-ball in the treatment mixture until all air bubbles are expelled from the media; or
- a **drench** that saturates the media and comprises a minimum of 1/5 or 20% of the volume of the container/root-ball.

7.5.1 Treatment Equipment Calibration

Permanent volume indicator marks shall be made on the side of the treatment mixture tank, on a sight tube or sight panel on the outside of the tank, or by some other method which clearly and accurately indicates the **maximum mixture level** and any **incremental volumes** used. Volume indicator marks shall include the volume in litres required to fill the tank to that level.

Each of the volume indicator marks shall be calibrated with the tank at the normal filling position using a calibrated flow meter. The person conducting the calibration test shall issue a certificate of calibration of the treatment mixture tank which must be available to the auditor at the initial audit and all compliance audits.

An example *Chemical Mixture Tank Calibration Certificate* [CAF-03] is shown as <u>Attachment 5</u>.

A Tank Calibration Certificate is not required for small tanks where the capacity of the treatment mixture tank is less than 25 litres.

7.5.2 Calculating the Quantity of Concentrate to Add to the Treatment Mixture

Calculate **0.4 mL** of a concentrate containing **500 g/L chlorpyrifos** per litre of water.

The treatment mixture shall include a commercial wetting agent at the maximum rate specified on the product's registered label for the purpose.

The following calculation may be used to determine the quantity of concentrate required to add to the treatment mixture volume of water (L) X volume of conc./litre $(mL) = \frac{total \ volume \ of \ concentrate \ (mL)}{total \ conc./litre \ of \ water} = 300 \ L$ conc./litre of water = 0.4 mL 300 L X 0.4 mL = 120 mL concentrate This calculation may also be used to calculate the volume of wetting agent to add to the treatment mixture.



Calculate the volumes of concentrate and commercial wetting agent for the **maximum mixture level** and each of the **incremental volumes** marked on the treatment mixture tank and record these on the *Treatment Mixture Preparation Chart* (refer <u>7.5.3 Treatment Mixture Preparation Chart</u>).

7.5.3 Treatment Mixture Preparation Chart

The business shall maintain a *Treatment Mixture Preparation Chart* (refer <u>Attachment 6</u>) or similar record in close proximity to the treatment mixture preparation area for each dip tank or drenching unit used by the business for treatment under this Operational Procedure.

The chart shall provide the following details -

- (a) identification of the treatment equipment to which the chart applies;
- (b) the trade name of the concentrate to which the chart applies;
- (c) the name and concentration of the active ingredient in the concentrate;
- (d) the quantity of concentrate required per litre of mixture in mL per litre (refer <u>7.5.2 Calculating the Quantity of Concentrate to Add to the Treatment</u> <u>Mixture</u>);
- (e) the trade name of the wetting agent used and the quantity required per litre of treatment mixture;
- (f) the total volume in litres of the treatment mixture tank when filled to the maximum mixture level mark (refer <u>7.5.1 Treatment Equipment Calibration</u>);
- (g) the volume in millilitres (mL) of concentrate and wetting agent required in the mixture when filled to the maximum mixture level mark;
- (h) the volume in millilitres (mL) of a concentrate and wetting agent required in the mixture for any known incremental volumes used;
- (i) the printed name and signature of the person responsible for the chart's preparation and the date of preparation.

An example of a completed *Treatment Mixture Preparation Chart* is included as <u>Attachment 7</u>.

7.5.4 Treatment Mixture Preparation

The Treatment Operator shall prepare the treatment mixture at least daily or more frequently as required.

7.5.5 Making Up the Treatment Mixture

Using a clean graduated measuring vessel, measure the amount of concentrate required for the required volume of **mixture** (refer <u>7.5.2 Calculating the Quantity</u> <u>of Concentrate to Add to the Treatment Mixture</u>).</u>

Suitable measuring vessels include graduated plastic or glass measuring cylinders or syringes.



Add the required amount of concentrate to the spray tank in accordance with the manufacturer's directions on the label.

Add the required amount of commercial wetting agent in accordance with the manufacturer's directions on the label.

Fill the mixture tank with clean water to the **incremental volume** mark or **maximum mixture level** mark.

Other ingredients may only be added to the treatment mixture if they are known to be compatible with chlorpyrifos.

Ensure that the chemical is completely diluted in all of the water by mixing the tank for a minimum of two minutes before commencing the spray operation. Some equipment may require extended periods of mixing to fully dilute the chemical in the water.

7.5.6 Treatment Application

Dip

The Treatment Operator shall ensure all plant containers/root balls are fully immersed in the solution so that the media is completely covered by the treatment mixture. Root-balled plants must have space between them when grouped in trays, baskets or other dipping containers.

Plants must remain in the treatment mixture until all air bubbles are expelled from the media. After removal from the dip, plants may be set aside to drain. Run-off of the treatment mixture from the treatment area should not be permitted.

As treatment progresses, freshly prepared treatment mixture may be added to maintain the mixture at the required depth.

Drench

The container/root ball must be thoroughly drenched with the treatment mixture. The volume of mixture must be at least 1/5 (20%) of the container/root ball.

Run-off of the treatment mixture from the treatment area should not be permitted.

Some medias can be difficult to wet. In addition to the wetter, some medias may require disturbance (eg a sharpened stick or other implement penetrated through the media) to ensure the media is thoroughly saturated with the treatment mixture.



7.5.7 Treatment Mixture Preparation and Treatment Records

The Treatment Operator must record details of all treatment mixture preparation and treatment of plants using a *Treatment Mixture Preparation and Treatment Record* (refer <u>Attachment 8</u>) or records which capture the same information.

The business's treatment records must identify -

- the date of treatment mixture preparation;
- the time of treatment mixture preparation;
- the trade name of the concentrate used;
- volume of concentrate used (millilitres) in the treatment mixture;
- volume of wetting agent used (millilitres) in the treatment mixture;
- the total volume (litres) of the made up treatment mixture;
- the date of treatment;
- the type of plants treated;
- the number of plants treated;
- the identification of the Treatment Operator.

7.5.8 Disposal of Treatment Mixture

The business must have facilities to dispose of any waste treatment mixture in a manner consistent with the requirements of Queensland's Environmental Protection Agency and Local Government Authorities (Shire or City Councils etc).

7.6 Post Inspection/Treatment Security

The business shall maintain a designated secure area for storage of treated plants prior to dispatch. The area shall be at least 10 metres from any known RIFA nest sites.

Plants must not be stored in direct contact with the ground (soil) between treatment and dispatch. The secure storage area should consist of a concrete, bitumen or hard-packed gravel pad, or be covered with plastic or other impervious material. Alternatively, plants may be stored on benches off the ground.

Plants must be dispatched within 48 hours of treatment (refer 7.7 Dispatch).



7.7 Dispatch

7.7.1 Package Identification

The Authorised Dispatcher shall ensure that, after packing, each package is marked in indelible and legible characters of at least 5mm, with -

- the Interstate Produce number of the business that operates the approved facility in which the plants were inspected/treated;
- the words "MEETS ICA-39"; and
- the date (or date code) on which the plants were inspected;

prior to the issuance of an Assurance Certificate by the business under this Operational Procedure.

If plants are consigned loose in pots and not in packages, the above information shall be marked on the consignment note or the invoice accompanying the plants and signed and dated by an Authorised Signatory of the business.

For Western Australia only, loose plants must have the above information applied to a tag or label securely attached to each plant. Whole truck or container loads of loose plants do not require individual tags or labels provided the truck or container door is sealed at the time of dispatch from the facility and the seal is intact on arrival in Western Australia. The seal number must be included in the 'Brand Name or Identifying Marks' section of the Assurance Certificate covering the consignment (refer <u>Attachment 2</u>).

Plants that have not been inspected/treated in accordance with the requirements of this Operational Procedure shall not be marked as stated above.

7.7.2 Assurance Certificates

The Authorised Dispatcher shall ensure an Assurance Certificate is completed and signed by an Authorised Signatory of the business prior to consignment of plants to a market requiring certification of inspection and treatment for RIFA.

Assurance certificates shall be in the form of a *Plant Health Assurance Certificate* [FDU 384].

Assurance certificates shall include -

- (a) in the 'Accredited Business that Prepared the Produce' section -
 - the name and address of the accredited business that **inspected/treated** the plants;
- (b) in the 'IP No. of Acc. Business' section -
 - the IP No. of the accredited business that inspected/treated the plants;

- (c) in the 'Type of Produce' section -
 - the **number and description** of plants of **each plant category** in the consignment;

NOTE: Where there is insufficient room to list each plant category the words 'See Attachment' are to be used and an Attachment Sheet securely attached to each copy of the assurance certificate.

The Attachment Sheet must include the words 'ATTACHMENT SHEET', the name and address of the consignor, the assurance certificate number, the signature of the Authorised Signatory that signed the certificate and the date.

Alternatively, a copy of the Red Imported Fire Ant Freedom Inspection Record covering the consignment may be used. An example Attachment Sheet is included with <u>Attachment 2</u>.

- (d) in the 'Treatment' section -
 - in the Date column, the date or dates of **treatment** of the plants;
 - in the Treatment column, the words 'Dip' or 'Drench' as applicable;
 - in the Chemical (Active Ingredient) column, the concentration and name of the active ingredient of the chemical, ie '500 g/L chlorpyrifos';
 - in the Concentration column, the rate of dilution of the chemical in the treatment mixture, ie 'at 0.4 mL/L';
- (e) in the 'Additional Certification' section the statement -

'Inspected and found free of red imported fire ant.'

A completed example is shown as <u>Attachment 2</u>.

Individual assurance certificates shall be issued to cover each consignment (ie. a discrete quantity of product transported to a single consignee at one time) to avoid splitting of consignments.

Assurance Certificates shall be completed, issued and distributed in accordance with the Work Instruction *Guidelines for Completion of Plant Health Assurance Certificates* [WI-02].

7.7.3 Assurance Certificate Distribution

The original (yellow copy) must accompany the consignment.

The **duplicate** (white copy) must be retained by the business.

Queensland Government Department of Primary Industries

INSPECTION AND TREATMENT OF PLANTS FOR RED IMPORTED FIRE ANT

7.8 ICA System Records

The business shall maintain the following records -

- (a) a Property Plan for each source property (refer <u>7.2</u>);
- (b) Red Imported Fire Ant Freedom Inspection Record (refer 7.4.6);
- (c) Chemical Mixture Tank Calibration Certificate (refer 7.5.1);
- (d) *Treatment Mixture Preparation Chart* (refer <u>7.5.3</u>);
- (e) Treatment Mixture Preparation and Treatment Record (refer 7.5.7)
- (f) the duplicate copy of each *Plant Health Assurance Certificate* [FDU 384] issued by the business (refer <u>7.7.3</u>).

ICA system records shall be retained for a period of not less than 12 months from completion or until the next compliance audit of the business, whichever is the later.

An accredited business must hold a minimum of 12 months ICA system records at the time of any compliance audit. If the compliance audit is conducted more than 12 months from the last compliance audit, the business must maintain all records completed since the previous compliance audit.

ICA system records shall be made available on request by an Inspector.

7.9 ICA System Documentation

The business shall maintain the following documentation -

- (a) a copy of the business's current Application for Accreditation (refer <u>Attachment 1</u>);
- (b) a current copy of this Operational Procedure;
- (c) a current Certificate of Accreditation for an Interstate Certification Assurance Arrangement.

ICA system documentation shall be made available on request by an Inspector.

8. ATTACHMENTS

Attachment 1	Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) Arrangement	FDU 385 (FRONT PAGE ONLY)
Attachment 2	Plant Health Assurance Certificate	FDU 384 (COMPLETED EXAMPLE)

ICA-39

Queensland Government Department of Primary Industries

INSPECTION AND TREATMENT OF PLANTS FOR RED IMPORTED FIRE ANT

Attachment 3	Property Plan	(BLANK)
Attachment 4	Register of Authorised Inspection Persons	(BLANK)
Attachment 5	Chemical Mixture Tank Calibration Certificate	CAF-03 (BLANK)
Attachment 6	Treatment Mixture Preparation Chart	(BLANK)
Attachment 7	Treatment Mixture Preparation Chart	(COMPLETED EXAMPLE)
Attachment 8	Treatment Mixture Preparation and Treatment Record	(BLANK)
Attachment 9	Red Imported Fire Ant Freedom Inspection Record	(BLANK)
Attachment 10	Red Imported Fire Ant Freedom Inspection Record	(COMPLETED EXAMPLE)
Attachment 11	Ant Sample Submitted for Identification	CAF-07 (BLANK)
Attachment 12	Identification of Red Imported Fire Ant	

]						Business for an A) Arrangement
India	cate the New	type of appli	cation being r al	nade Indment	provide spec	ific details	s where required.	Only o	d the type of application and one ICA arrangement, that is e covered in one application.
<i>1</i> .	Busin	ess Deta	ils						
(a)	Туре о	of Ownersh	nip of Busin	ess		(plea	se specify)		
	Inc	dividual	Incor	oorated Cor	mpany 🔄 C	Other		/	<u>\</u>
	Pa	rtnership	· · · ·	erative Asso					
(b)	Name	of Applica	nt/s <i>(Print yo</i> normal o	ur full name i rder. For inc	including any giver orporated compani	n names. Ties and coo	For partnerships, p peratives, print the	rint the fi Yull regis	ull name of each partner in their stered name of the organisation.)
							$\sim \sim $		
	🛄 ACN 🛄 ARBI	N			ed Body Number	Certificate Commission of Registr	of incorporation or sin on. Cooperative associ ation of a registratio	nilar docu ations mu n search	pration by attaching a copy of their ment from the Australian Securities ist provide a copy of their Certificate from the Department of Justice.
(c)	Trading	g Name/s o	of the busin	ess (include	e any business or l	brand nam	es used by the bus	iness on	packages of certified produce)
							////		
(d)	Postal	address o	f the busine	ess		\rangle	$\overline{)}$	$\overline{)}$	
					$ \land \land \land \land$		Telephone	$\langle \rangle \rangle$	
				\sim			Facsimile	$\overline{()}$	Ŵ.
				Pos	tcode		Mobile	\bigcirc	
(e)			een register tate moveme			Yes	If yes, give the Interstate Produ	ne busin uce (IP)	ess's Number
2.	Opera	ational P	rocedure	and Faci	lity Details	$\langle \vee \rangle$	\land		
(a)	-					(refer to li	st of Operational P	rocedur	es)
	Referen		$\backslash N \rangle$	li the Op in two pa	erational Procedu arts, indicate the ou are seeking	re is docur part or pa	mented arts for	Part A	Part B Parts A & B
	Title of	Operation	al Procedu		full title of the Ope	>			
\langle									
(b)	Street	address o	f the facility		\square				
		$\overline{}$		$\left(\right) \left(\right)$			Telephone	()
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3.	Autho			(for Assur	ance Certifica				
Cer	tification	Far	nilyName		Giv	en Name/s	5		Specimen Signature
Co	ontroller								
Cer	ack-Up tification ontroller								
Ad	dditional								
	thorised matories								
οlί	natorios								

Queensland Original (yellow) - Consignment Copy Department of Duplicate (white) - Business Copy ABN 78 342 684 030		t Health ce Certificate
ORIGINAL <i>Consignment Details</i> (Please print) Consignor	Certificate Number	9999999
Name Tropics Plant Nursery P/L	Name Plant Wholesa	lers P/L
Address Nursery Road	Address 14-16 Long Stre	et
Wacol QLD 4076	Footscray VI	
Reconsigned To (Splitting consignments or reconsigning whole consignments)	Method of Transport (Provide details when	
Name	Road Truck/Trailer Registration	<u> </u>
Address	Rail Consignment	$\langle \cdot \rangle$
<u>,</u>	Air Airline/Flight no.	
Contification Details of	Sea Vessel Name Voyage no.	
Certification Details (Please print) Accredited Business that Prepared the Produce	Grower or Packer	
Name Tropics Plant Nursery P/L	Name Tropics Rlant N	Hursery P/L
Address Nursery Road	Address Nursery Road	
Wacol QLD 4076	Wacal QLD 4	076 > ~
IP No. of Acc. Business Brand Name or Identifying Marks (as m		ode (as marked on packages)
Q 9999 Tropics Nurser	x Plants \ \ X	21073Ŏ
Number of Packages Type of Packages (eg. trays,cartons) Type of Prov	duce Authorisation for	Split Consignment
3 Cartons Mixed Pl	ants /	
See Altac	hment <	
Date Treatment Chemical Active Ingred		on and Temperature
/ / Dipping Dimetricate	400ppnp Greenin.	10 sec. then wet for 60 sec.
/ / Dipping Pentition	412.5ppm I One min. 400ppm 10 seconds then w	
1 1 Phod Spraying Fenthion	412.5ppm 10 seconds then w	
/ Non-recirculated Spray Fenthion	412.5ppm 10 seconds then w	
/ / D Faingation Methyl Bromide	g/m ³ Two hours @	°C
30/07/01 Drench 500 g/L chlorpyris	fos at 0.4 mL/L	
/ / Bananas in a hard green condition with unbroken sk		
Additional Certification		
Inspected and found free of red i	mported fire ant.	
Declaration I, an Authorised Signatory of the accredited business that prepare	d the plants or plant produce described a	above, hereby declare that

the plants or plant produce have been prepared in the business's approved facilities in accordance with the accreditation(s) granted to the business under the Plant Protection Act 1989 and that the details shown above are true and correct in every particular. Date

Authorised Signatory's Name (Please print)

Form FDU 384 01/01

Signature

Arthur John Signatory

© State of Queensland 2001

ignatory

Forms Management Unit **ATTACHMENT 2**

30/07/01

ATTACHMENT SHEET

Plant Health Assurance Certificate No. 9999999

Consignor –

Tropics Plant Nursery Pty Ltd Nursery Road Wacol QLD 4076

Carton No.	No. and Size of Plants	Type of Plants
1	10 X 100 mm 20 X 100 mm	Small Leaf Lillypilly (<i>Syzygium luehmannii</i>) Lemon Scented Myrtle (Backhousia citriodora)
2	10 X 75 mm 10 X 75 mm 10 X 75 mm	Dwarf Agapanthus (White) (Agapanthus sp.) Native Violet (<i>Viola hederacea</i>) Bangalow Palm (<i>Archontophoenix cunninghamiana</i>)
3	20 X tubes 20 X tubes 40 X tubes	Walking Stick Palm (Linospadix monostachya) Foxtail Palm (Wodyetia bifurcata) Bangalow Palm (Archontophoenix cunninghamiana)
Authorised Signatory -		
Arthur John Printed Na	Signatory	A Junatory 30/07/01 Signature 30/07/01

PROPERTY PLAN



ATTACHMENT 3

ARRANGEMENT DETAILS

DECLARATION

Applicant's Name (as shown on the application form)

SCOPE OF ARRANGEMENT

Street Address of Property

Postcode

Real Property Description(s) (available from Rates Notice)

PROPERTY PLAN DETAILS

The property plan (overleaf) is to include the following-

- 1. road access including street names;
- 2. internal roadways within the property;
- 3. the location and identification of buildings on the property (eg office, house, equipment and potting sheds, and permanent shadehouse structures etc)
- 4. the size and location of the plant inspection area;
- 5. the size and location of the treatment area;
- 6. the size and location of the secure area for plants awaiting dispatch;
- 7. the size and location of all open and covered plant growing areas.

am authorised to sign on behalf of the business and I understand that-

- (a) accreditation will only be granted for properties covered by a Property Plan submitted with the Application for Accreditation of a Business for an Interstate Certification Assurance Arrangement [FDU 385];
- (b) application must be made to amend any of the current details in the Application for Accreditation of a Business for an Interstate Certification Assurance Arrangement [FDU 385] or this Property Plan; and
- (c) following accreditation, certification can only be issued in accordance with scope of accreditation detailed in the *Certificate* of Accreditation for an Interstate Certification Assurance (ICA) Arrangement covering the arrangement.



REGISTER OF AUTHORISED INSPECTION PERSONS

Business Name			IP Numbe	er Q
Date/s of	Authorised Ins	pection Person	Authorisation by Ce Printed Name	rtification Controller
Training	Printed Name	Signature	Printed Name	Signature
<u> </u>		<u> </u>		e.g

Note: Place a line through any entry for any person who is no longer authorised to carry out RIFA freedom inspections under the business's Interstate Certification Assurance arrangement.

CHEMICAL MIXTURE TANK CALIBRATION CERTIFICATE

EQUIPMENT CALIBRATED

Name and Address of Owner of Equipment:	
Type of equipment (eg boom spray, mister):	
Brand:	_
Model:	_
Serial No.:	
Other Identification:	
	TESTING DETAILS
Name and Address of the Business Conducting the Test:	
Date of Testing:	
Bate of Testing.	
Type of Flow Meter Used: Date of Latest Calibration of Flow Meter:	

Maximum Mixture Level Volume (litres)

Incremental Volumes (litres) (as marked on the spray tank):

CERTIFICATION

The spray mixture tank on the equipment described above has been calibrated in the normal filling position using a calibrated flow meter. Volume indicator marks have been clearly marked on the tank with the volume in litres required to fill the tank to that level.

Printed Name

Signature

/ / Date

CAF-03 (29/09/97)

nature

TREATMENT MIXTURE PREPARATION CHART

Treatment Unit	
Concentrate (Trade Name)	
Active Ingredient	Conc g/L
Concentrate Mixing Rate	mL/litre of mixture
Wetting Agent (Trade Name)	
Wetting Agent Mixing Rate	mL/litre of mixture
Full Tank	
Full Treatment Tank Volume =	Litres
Volume of Concentrate =	millilitres
Volume of Wetting Agent =	millilitres
Part Fill	
mL Concentrate and	
mL Wetting Agent /	Litres Mixture
mL Concentrate and	
mL Concentrate /	Litres Mixture
mL Concentrate and	
mL Concentrate /	Litres Mixture
Prepared by: Printed Name	/ /
	ATTACHMENT 6

TREATMENT MIXTURE PREPARATION CHART

Treatment Unit 300 L Dip Tank								
Concentrate (Trade Name) <u>Chlorpyrifos 500 EC</u>								
Active Ingredient <u>Chlorpyrifos</u> Conc. <u>500</u> g/L								
Concentrate Mixing Rate mL/litre of mixture								
Wetting Agent (Trade Name) Agral								
Wetting Agent Mixing Rate mL/litre of mixture								
Full Tank								
Full Treatment Tank Volume = <u>300</u> Litres								
Volume of Concentrate = <u>120</u> millilitres								
Volume of Wetting Agent = <u><u>30</u> millilitres</u>								
Part Fill								
8 mL Concentrate and								
mL Wetting Agent / Litres Mixture								
mL Concentrate and								
mL Wetting Agent / Litres Mixture								
80 mL Concentrate and								
20 mL Wetting Agent /200 Litres Mixture								
Prepared by: <u>S Operator</u> Printed Name <u>S Operator</u> 12/05/01 Signature <u>Date</u> ATTACHMENT 7								

TREATMENT MIXTURE PREPARATION AND TREATMENT RECORD

TREATMENT MIXTURE PREPARATION						DIP/DRENCH TREATMENT							
Date	Time	Volume of Concentrate (Millilitres)	Volume of Wetting Agent (Millilitres)	Volume of Mixture (Litres)	Trade Name of the Concentrate	Date of Application	Treatment Used (Dip/Drench)	Type of Plants Treated	Number Treated	Treatment Operator's Name	Signature		

RED IMPORTED FIRE ANT FREEDOM INSPECTION RECORD

Page ____ of ____

Business I	Name						IP Number Q	PHA Certificate No.		
Date		Plant	Category		Free of	RIFA?		Authorised Inspection Person		
Dale	Ту	pe of Plants	No. of Plants	Size of Plants	Yes	No	Comments	Printed Name	Signature	
The consignme	ent describe	d above has been ins	pected in accordan	ce with the require	ments of t	he ICA O	perational Procedure Inspection and Treatment	of Plants for Red Imported	d Fire Ant [ICA-39].	
0		Printed Name					Signature	Date		
Authorised	Signato	ry							/	

RED IMPORTED FIRE ANT FREEDOM INSPECTION RECORD

Page l of l

Business I	Name	Tropics Plant N	Nursery P/L IP Number Q 9 9 9 9 PHA Certificate No.					9999999						
Date			Category		Free of			Comn	nen	ts			Authorised Ins	
	Type of Plants		No. of Plants	Size of Plants	Yes	No		001111					Printed Name	Signature
28/07/01	SLeafl	_íllypílly	10	6" pots	\checkmark									
"	Lemons	scented Myrtle	20	6" pots	\checkmark									
"	Agapan	thus (Whíte)	10	3" pots	\checkmark								John Inspector	J Inspector
"	Natíve v	/iolet	10	з" pots		\checkmark	2 plants int	fested	wít	h RIF	A.			
"	Bangalo	ow Palms	10	з" pots	\checkmark		Lot rejected	and tr	reat	ed wi	th	J		
							Chlorpyrifo:	s as pe	er IC	CA-39).			
29/07/01	Walking	Stick Palm	20	tubes	\checkmark								Ann Inspector	A Inspector
"	Foxtail F	alm	20	tubes	\checkmark							Ann Inspector	A Inspector	
56	Bangalo	w Palm	40	tubes	\checkmark								Ann Inspector	A Inspector
														4.1
30/07/01	Native	/iolet	10	3" pots	\checkmark		Reinspectio	on fro	m	28/07	(01.		Ann Inspector	A Inspector
							No RIFA fo	und.						
										_				
		_												
The consignme	ent described	d above has been ins Printed Name	pected in accordan	ce with the require	ments of t		perational Proce Signature	dure <i>In</i> s	spect	tion and	d Trea	tment	of Plants for Red Importe	ed Fire Ant [ICA-39].
Authorised	Signato	Δ.	rthur John	Signatory				493	Sig	mate	Try			′ 07 / 0 1



ANT SAMPLE SUBMITTED FOR IDENTIFICATION

This form should accompany each sample of ants submitted to the Fire Ant Control Centre for identification. Please forward the sample with the completed form to -

Diagnostic Unit, Scientific Services, Fire A	nt Control Centre, 81A Seventeen Mile	Rocks Roa	d, Oxley QL	D 4075
Name of business submitting sample:			_ IP Nu	mber:
			Q	
Postal address for response:				
Telephone number: Fa	acsimile number:	Mobile nu	umber:	
())			
Name of person who collected sample:		Time and	date collec	cted:
		:	AM PM	/ /
Street address of property where ants collect	ed:			
Turne of increasions				
Type of inspection:				
Property Consignment	Equipment Routine	Monitoring	Other	(specify)
Brief description of where ants were found:				
Printed Name	Signature		Date	
			/	1
			1	1
OFFICE USE ONLY				
			AM	1 1
Sample number:	Time and date received:	:	PM	/ /
Ant species identified:				
Red Imported Fire Ant (Solenopsis invicta) Tropical Fire Ant (Solenopsis geminata)	Other (specify) -			
Identified by:			Data	
-	Ciana atuma		Date	
Printed Name	Signature		1	1
-	Signature		/	/
-	Signature		/	/
Printed Name	Time and date sent:		/ AM PM	/
Printed Name Business advised by:			/ AM PM Date	/
Printed Name Business advised by: Post Facsimile	Time and date sent:		PM	/

Red Imported Fire Ant (Solenopsis invicta Buren)

Background

RIFA are native to South America and were introduced to the United States in the 1930's where it has since become established in eleven of the south-eastern most states. RIFA were first detected in Australia in Brisbane in February 2001.

The ants are predominantly a public nuisance and social amenity pest because of their painful stings and their negative effect on other insects, small invertebrates, ground-nesting animals and birds, and even the young of larger species. RIFA infest recreation areas such as yards, parks, school playgrounds and reserves where they can be especially dangerous to young children and pets.

RIFA use their stingers to immobilise or kill their prey and to defend their nests from disturbance. Ants grab their victims by their mandibles (mouthparts) and sting repeatedly. Each sting injects a dose of venom that causes a painful burning sensation similar to a wasp or bee sting. The stings raise itching blisters that can become infected. Stings can also cause severe allergic reactions in some people including localised swelling, breathing difficulties, nausea, vomiting, dizziness, perspiration and even death in rare cases.

RIFA can also be a significant economic pest of agriculture because of its prevalence in nursery plants, orchards and pastures. RIFA harvest crop seeds, feed on and destroy seedlings, buds and fruits, and are even known to ring-bark young trees during times of drought. RIFA also tend aphids and mealy bugs, which in turn damage crops. RIFA mounds can damage agricultural equipment and their aggressive nature and painful stings can interfere with the harvesting of crops.

RIFA will also nest in machinery and equipment and have been known to remove the insulation from electrical wiring and block the action of mechanical devices by crowding between working parts.

Detection and Identification

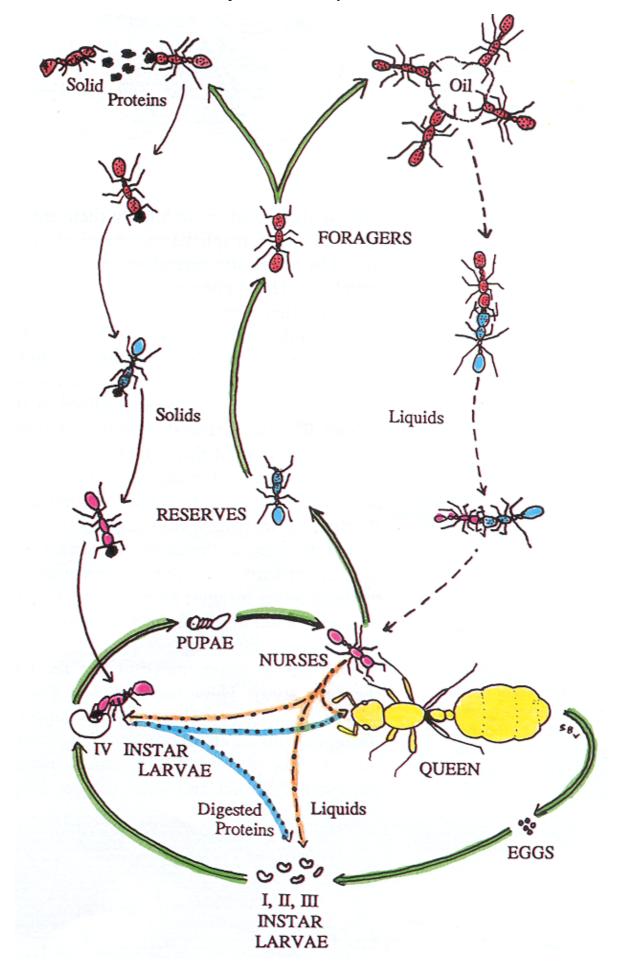
RIFA look very much like ordinary house or garden ants and are approximately 3-5mm long and reddish-brown to black in colour. RIFA are best distinguished by their aggressive swarming behaviour and their distinctive domed-shape nests.

RIFA nests appear as conical mounds 30-60cm high. Nests can range from 0.3m to 1m deep with lateral foraging tunnels extending up to 40m from the mound. RIFA colonies can be either monogyne (containing a single queen) or polygyne (containing multiple queens) with average colonies containing from 100,000 to 500,000 worker ants.

Mounds are normally found in undisturbed open areas such as lawns, pastures, roadside verges, unused cropping land and reserves. Nests are rarely found in frequently cultivated land. Nests may also be found in logs, around trees, under roads, footpaths and paved areas, under timber or other construction material, in disused machinery and equipment stored in contact with the ground, and even in air conditioners, electrical switch boxes and traffic lights.

When nests are disturbed worker ants will swarm from the nest to attack any animal nearby, including humans.

New colonies can be formed naturally through the flight of queens, which can spread the pest at a rate of 8 to 20 km per year. RIFA can also vacate, migrate and reform nests very quickly, especially if the original nest has been disturbed. Reproducing colonies can also be moved during floods or through human activity such as in movements of soil, mulches and potted plants, and as hitchhikers on trucks, trains, cars, agricultural machinery and earth moving equipment.

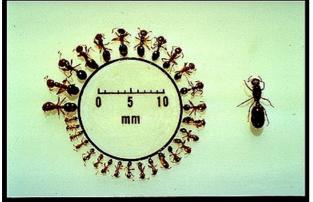


Life Cycle of Red Imported Fire Ant

IDENTIFICATION OF RED IMPORTED FIRE ANT



RIFA worker ant (Drees)



Array of RIFA worker ant sizes (Porter)



RIFA worker ant biting and stinging (Texas Dept. of Ag. file photo)



RIFA worker ants (Drees)



RIFA worker ants tending queen (Texas Dept. of Ag. file photo)



RIFA colony infesting pot plant (Drees)



RIFA mound next to tree (Drees)



RIFA tending mealybug (Ree) Photographs courtesy of Texas Imported Fire Ant Research and Management Project, Dept of Entomology, Texas A&M University



RIFA feeding on plant nectary (Vinson)