

**Surveillance Program for Panama disease tropical race
4 – Monitoring and Compliance under the *Biosecurity
Act 2014***

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1 Biosecurity program

1.1 Program name

The surveillance program (biosecurity program) for Panama disease tropical race 4 (also known as fusarium wilt of banana, caused by *Fusarium oxysporum* f. sp. *ubense* tropical race 4) will be known as the Surveillance Program for Panama disease tropical race 4 – Monitoring and Compliance (the Program).

2 Requirement for a surveillance program

2.1 Purpose and rationale

The *Biosecurity Act 2014* (the Act) provides for the establishment of surveillance programs. Surveillance programs are directed at any of the following: —

- (a) monitoring compliance with the Act in relation to a particular matter to which the Act applies;
- (b) confirming the presence, or finding out the extent of the presence, in the State or the parts of the State to which the program applies, of the biosecurity matter to which the program relates;
- (c) confirming the absence, in the State or the parts of the State to which the program applies, of the biosecurity matter to which the program relates;
- (d) monitoring the effects of measures taken in response to a biosecurity risk;
- (e) monitoring compliance with requirements about prohibited matter or restricted matter;
- (f) monitoring levels of biosecurity matter or levels of biosecurity matter in a carrier.

The objectives of the Program are to contain and prevent the spread of Panama disease tropical race 4 by:

- monitoring the movement of matter and carriers from infested properties¹ and suspect properties², for compliance with Panama disease tropical race 4 requirements in the *Biosecurity Act 2014* and its subordinate legislation such as the *Biosecurity Regulation 2016*;
- monitoring the effects of measures taken on infested properties and suspect properties in response to biosecurity risk to determine their effectiveness and to ensure that biosecurity risk is minimised; and
- monitoring compliance with requirements of a regulatory notice, biosecurity order and/or injunction or other legislative tools, and directions issued by authorised officers.

Panama disease tropical race 4 is a disease of banana plants (*Musa* spp.) caused by the fungus *Fusarium oxysporum* f. sp. *ubense* tropical race 4. On 3 March 2015, the disease was detected on

¹ An infested property is a property where Panama disease tropical race 4 has been detected using a suite of Panama TR4 Program approved diagnostic tests, and that is recorded as such in official records held by the Department.

² A suspect property is a property identified to be at risk of having Panama disease tropical race 4 due to significant tracing links with an infested property. Examples of significant tracing links with an infested property include shared ownership, plant material and/or shared appliances. If a suspect property shares tracing links with infested property, it may pose a significant biosecurity risk of disease spread. Alternatively, a suspect property is a property at which plants have positive internal symptoms consistent with Panama disease tropical race 4 and confirmatory diagnostic testing is pending. Suspect properties are identified and recorded as such in official records held by the Department.

Cavendish banana plants on a commercial banana farm located in the Tully Valley, North Queensland. This disease poses a significant threat to the commercial banana industry.

Bananas (*Musa* spp.) are Australia's most valuable horticultural crop with an annual production value of approximately \$600 million. All fresh bananas available in Australia are grown domestically. There are no fresh banana imports because of the disease threat they pose to local production.

The major banana production area is situated in the wet tropics of Queensland, in the coastal area between Cardwell and Lakeland, and accounts for 95 per cent of national production. Commercial production also occurs in the subtropical region between Bundaberg in southern Queensland and Coffs Harbour in northern New South Wales, and in Carnarvon in Western Australia. Bananas are also produced in the tropics of Western Australia and the Northern Territory, although the Northern Territory industry was largely wiped out by Panama disease tropical race 4 in the late 1990s and more recently eradication activities associated with the National Banana Freckle Eradication Program.

The importance of the banana industry to regional Queensland and the Queensland economy overall is significant. The industry contributes greatly to local jobs, commerce and backpacker working-tourism. The volume of produce transported each day from the Queensland production areas supports a considerable economic sector in its own right, which in turn supports the Queensland community. The potential impact of Panama disease tropical race 4 on the economies of banana growing regions, and of Queensland in general is sufficiently adverse that ongoing investment by stakeholders is warranted to address the needs of the commercial banana industry in the face of this disease threat.

There is no known effective treatment for the disease. The fungus is considered to be the greatest threat to banana production worldwide owing to its capacity to survive for decades in the soil and its ability to spread in infected plant material, soil and water. The fungus is also known to persist in the roots of some grass and weed species. The fungus which causes the disease initially infects the plant through the roots, then moves through the corm into the vascular system within the pseudostem. The fungus eventually blocks the plant's vascular system cutting off the supply of water and nutrients which causes the plant to die. The fungus is not transferred to the fruit. The time frame between infection and when the plant first shows symptoms can range from two months to three years, depending on the number of spores in the soil, the number of successful infections, the age of the plant and environmental stresses. Unfortunately, this means that the fungus may have been spread to other properties by the time an infection is detected.

Following the initial detection in the Tully Valley, the Department of Agriculture and Fisheries mounted an emergency response program under the *Plant Protection Act 1989* and the *Plant Protection Regulation 2002*. Surveillance was undertaken under an *Authorisation of a Pest Surveillance Program for tropical race 4*. The response transitioned to the Panama TR4 Program in September 2015.

The *Biosecurity Act 2014* and its subordinate legislation establish a number of obligations and restrictions on properties that are infested with the disease or that are suspected to be infested.

The Surveillance Program for Panama disease tropical race 4 – Monitoring and Compliance is an essential component of the Panama TR4 Program, to ensure that requirements imposed to prevent the spread of the disease are complied with. This complements the Surveillance Program for Panama disease tropical race 4 – Detection of disease in Queensland, which is focussed on finding and confirming the presence of Panama disease tropical race 4, and monitoring the levels of the disease on known or suspected to be infested properties.

2.2 Measures that are required to achieve the purpose

The key activities undertaken by the Program include but are not limited to:

- Monitoring compliance with the General Biosecurity Obligation which requires a person to take all reasonable and practical measures to prevent or minimise the spread of Panama disease tropical race 4.
- Monitoring the compliance with the *Biosecurity Regulation 2016*, which includes:

- the establishment and maintenance of systems which minimise spread of the disease both on and off and within an infested property or suspect property;
 - the destruction of plants determined to be infected with Panama disease tropical race 4 as determined by positive results to a suite of Panama TR4 Program approved diagnostic tests, and surrounding plants deemed to be infested plants which pose a significant threat of asymptomatic disease presence;
 - any other requirements imposed by virtue of a notice issued under the *Biosecurity Regulation 2016*.
- Monitoring to ensure the compliant movement of fruit off an infested property or suspect property and the issuing of biosecurity certificates where required.
 - Monitoring to ensure the compliant movement of appliances, vehicles, machinery, tools, equipment and people off infested properties and suspect properties.
 - Monitoring to ensure the compliant movement of water, soil and waste from infested properties and suspect properties.

Activities relating to surveillance for the purpose of determining the presence and extent of Panama disease tropical race 4 in Queensland will be undertaken in accordance with the Surveillance Program for Panama disease tropical race 4 – Detection of disease in Queensland.

Treatment and destruction of Panama disease tropical race 4 infected plants and infested plants will be undertaken in accordance with the Prevention and Control Program for Panama disease tropical race 4, by an authorised officer, where necessary.

2.3 Powers of authorised officers

Entry of place

The Act provides that authorised officers appointed under the Act, may, at reasonable times, enter a place situated in an area to which a biosecurity program applies, for the purpose of taking any action authorised by the biosecurity program.³ These activities must be done in a timely and efficient manner to ensure that the measures are as effective as possible. The Program will authorise entry into places to allow these measures to be undertaken.

In accordance with the Act, a reasonable attempt will be made to locate an occupier⁴ and obtain the occupier's consent to the entry prior to an authorised officer entering a place to undertake activities under the Program. Nevertheless, an authorised officer may enter the place if⁵ -

- (a) the authorised officer is unable to locate an occupier after making a reasonable attempt to do so;
or
- (b) the occupier refuses to consent to the entry.

If, after entering a place an authorised officer finds an occupier present, or if the occupier refuses to consent to the entry, the authorised officer will make reasonable attempts to produce an identity card for inspection and inform the occupier of the reason for entering, and the authorised officer's authorisation under the Act to enter without the permission of the occupier. An authorised officer under the Program must make a reasonable attempt to inform the occupier of any steps taken, or to be taken, and if any steps have been taken or are to be taken, that it is an offence to do anything that interferes with a step that has already been taken, or a step that is to be taken.

³ See section 261 (Power to enter a place under biosecurity program) of the Act.

⁴ The Act defines an **occupier**, of a place, generally to include the person who apparently occupies the place (or, if more than 1 person apparently occupies the place, any of the persons); any person at the place who is apparently acting with the authority of a person who apparently occupies the place; or if no-one apparently occupies the place, any person who is an owner of the place.

⁵ See section 270 (Entry of place under sections 261 and 262) of the Act.

An authorised officer must leave a notice in a conspicuous position and in a reasonably secure way. This notice must state the date and time of entry and information addressing the reason for entry, authorisation to enter a place, and the steps undertaken by the authorised officer after entry.

Obligations

A person who is the owner or occupier of land that is infested, or suspected to be infested, with Panama disease tropical race 4 must comply with obligations imposed under the *Biosecurity Act 2014* or its subordinate legislation.

Under the Program, such a person must allow surveillance (monitoring and compliance) on Panama disease tropical race 4 infested properties and suspect properties to be undertaken to ensure compliance with these obligations. In this respect, a person must provide information that will enable assessment of compliance by an authorised officer. This includes, but is not limited to:

- Geographical, spatial and ownership details for the place;
- Records relating to the requirements of the Act, Regulation including but not limited to vehicle/appliance movements, decontamination and people movements;
- Fruit and other produce movements;
- Farm operating and harvesting times; and
- Farm plans, operational processes and procedures relevant to prevention the spread of Panama disease tropical race 4.

An authorised officer may specifically direct that an occupier or owner of a place:

- facilitate safe and timely access to the place for the purposes of surveillance (monitoring and compliance);
- comply with any reasonable requests or directions given to facilitate the purposes of surveillance (monitoring and compliance); or
- provide reasonable help as required under section.297 of the Act.

General powers of authorised officers

Nothing in the Program or its associated Authorisation limits the powers of authorised officers under Chapter 10 of the Act.

2.5 Consultation

Stakeholder consultation has been undertaken as part of both the Panama emergency response program and the subsequent Panama TR4 Program. This has included consultation with industry, local growers, local governments and the wider community in a variety of forums including the Panama Response and Resilience Taskforce, and various subgroups such as the Regional Working Group. Frequent meetings are held with the Australian Banana Growers Council, the peak banana industry body.

Consultation with the owners and occupiers of any identified infested property is central to the Program and will be ongoing.

3 Authorisation of a surveillance program in the State of Queensland

I, Dr Elizabeth Woods, the chief executive of the Department of Agriculture and Fisheries (the Department) acting pursuant to section 235 of the *Biosecurity Act 2014* (the Act), authorise the Surveillance Program for Panama disease tropical race 4 – Monitoring and Compliance, on the basis that the disease poses a significant biosecurity risk to the Queensland banana industry and that surveillance to monitor and ensure compliance with both the provisions of the *Biosecurity Act 2014* and the *Biosecurity Regulation 2016* is essential to preventing spread of the disease .

Dr Elizabeth Woods
Director-General
Department of Agriculture and Fisheries

Authorised on 02 / 06 / 2016

3.1 Biosecurity matter

The biosecurity matter to which the Program relates is Panama disease tropical race 4 (also known as fusarium wilt of banana, caused by *Fusarium oxysporum* f. sp. *cubense* tropical race 4).

3.2 Purpose of the Program

The purpose of the Surveillance Program for Panama disease tropical race 4 – Monitoring and Compliance (the Program) is to contain and prevent the spread of Panama disease tropical race 4 by:

- monitoring the movement of matter and carriers from infested properties⁶ and suspect properties⁷, for compliance with Panama disease tropical race 4 requirements in the *Biosecurity Act 2014* and its subordinate legislation such as the *Biosecurity Regulation 2016*;
- monitoring the effects of measures taken on infested properties and suspect properties in response to biosecurity risk to determine their effectiveness and to ensure that biosecurity risk is minimised; and
- monitoring compliance with requirements of a regulatory notice, biosecurity order and/or injunction or other legislative tools, and directions issued by authorised officers.

The Program will apply to any Panama disease tropical race 4 infested properties and suspect properties in Queensland as identified in official records held by the Department under Panama TR4 Program.

3.3 Area affected by the Program

The Program will apply to the whole of the State of Queensland. Whilst the focus of the Surveillance Program for Panama disease tropical race 4 – Monitoring and Compliance is the commercial banana

⁶ An infested property is a property where Panama disease tropical race 4 has been detected using a suite of Panama TR4 Program approved diagnostic tests and is recorded as such in official records held by the Department.

⁷ A suspect property is a property identified to be at risk of having Panama disease tropical race 4 due to significant tracing links with an infested property. Examples of significant tracing links with an infested property include shared ownership, plant material and/or shared appliances. If a suspect property shares tracing links with infested property, it may pose a significant biosecurity risk of disease spread. Alternatively, a suspect property is a property at which plants have positive internal symptoms consistent with Panama disease tropical race 4 and confirmatory diagnostic testing is pending. Suspect properties are identified and recorded as such in official records held by the Department.

growing region in northern Queensland, infested and suspect premises may be identified through surveillance in any part of the State. It is imperative that compliance with any obligations imposed in relation to such premises be monitored to ensure that the spread of the disease is controlled as far as possible.

3.4 Powers of authorised officers

An authorised officer of the Program appointed under the *Biosecurity Act 2014*, may enter a place—other than a residence⁸—without a warrant and without the occupier’s consent within the State of Queensland under the Program⁹. An authorised officer appointed under the *Biosecurity Act 2014* will also have the power to enter a place under the Program.¹⁰

An authorised officer can exercise the powers of an authorised officer under the Act in relation to the Program, if the authorised officer is appointed by the chief executive¹¹.

An authorised officer has general powers after entering a place to do any of the following¹²:

General powers in the Act	Measures an authorised officer may take under the Program
Search any part of the place	<p>Gather any relevant information relating to the requirements of the Regulation including, but not limited to, geographical, spatial and ownership details for the place, vehicle/appliance movements, decontamination and people movements; fruit and other produce movements, farm operating and harvesting times, farm plans, operational processes and procedures, and other records relevant to prevention the spread of Panama disease tropical race 4.</p> <p>Take samples of banana plant material, soil, water, weeds or other items as deemed necessary to test for the presence of Panama disease tropical race 4.</p> <p>Require a document to be removed for copying, for example: planting permits/plans or records of carrier movements, on-farm biosecurity plans, decontamination records, hygiene management records that are relevant to the objectives of the Program.</p> <p>Identify carriers such as plant material, vehicles/appliances, machinery, and tools, processes that carry soil, plant material and contaminated water for any purpose consistent with the Program.</p>
Inspect, examine or film any part of the place or anything at the place	
Take for examination a thing, or a sample of or from a thing, at the place	
Place an identifying mark in or on anything at the place	
Place a sign or notice at the place	
Produce an image or writing at the place from an electronic document or, to the extent it is not practicable, take a thing containing an electronic document to another place to produce an image or writing	
Take to, into or onto the place and use any person, detection animal, equipment and materials the authorised officer reasonably requires for exercising the authorised officer’s powers under this division	
Remain at the place for the time necessary to achieve the purpose of the entry	
The authorised officer may take a necessary step to allow the exercise of a general power	
If the authorised officer takes a document from the place to copy it, the authorised officer must copy and return the document to the place as soon as practicable	

⁸ The Act defines a **residence** to mean a premises or a part of a premises that is a residence with the meaning of section 259(2) and 259(3).

⁹ See section 259 (General powers to enter places) of the Act.

¹⁰ See section 261 (Power to enter a place under biosecurity program) of the Act.

¹¹ See section 255 (3) (Powers of particular authorised officers limited) of the Act.

¹² See section 296 (General powers) of the Act.

General powers in the Act	Measures an authorised officer may take under the Program
If the authorised officer takes from the place an article or device reasonably capable of producing a document from an electronic document to produce the document, the authorised officer must produce the document and return the article or device to the place as soon as practicable	Inspect carriers such as appliances, vehicles, machinery, tools, equipment and footwear moving off an infested property to ensure decontamination.
Destroy biosecurity matter or a carrier if— (i) the authorised officer believes on reasonable grounds the biosecurity matter or carrier poses a significant biosecurity risk; and (ii) the owner of the biosecurity matter or carrier consents to its destruction	Observe, inspect, examine or film as necessary for monitoring purposes to ensure compliance with the requirements of the legislation. Producing a written and/or electronic note(s) to support Program activities. Taking GPS coordinates to ensure accuracy of location details to support Program activities.

An authorised officer may make a requirement (a help requirement) of an occupier of the place or a person at the place to give the authorised officer reasonable help to exercise a general power.¹³

3.5 Obligations imposed on a person under the Program

A person who is the owner or occupier of land that is infested, or suspected to be infested, with Panama disease tropical race 4 must comply with obligations imposed under the *Biosecurity Act 2014* or its subordinate legislation.

In this respect, a person must provide information that will enable assessment of compliance by an authorised officer. This includes, but is not limited to:

- Geographical, spatial and ownership details for the place;
- Records relating to the requirements of the Act, Regulation including but not limited to vehicle/appliance movements, decontamination and people movements;
- Fruit and other produce movements;
- Farm operating and harvesting times; and
- Farm plans, operational processes and procedures relevant to prevention the spread of Panama disease tropical race 4.

An authorised officer may specifically direct that an occupier or owner of a place:

- facilitate safe and timely access to the place for the purposes of surveillance (monitoring and compliance);
- comply with any reasonable requests or directions given to facilitate the purposes of surveillance (monitoring and compliance); or
- provide reasonable help as required under section 297 of the Act.

3.6 Commencement and duration of the Program

The Program will begin on 1 July 2016 and will continue until such time as the disease is considered no longer containable or the Director General revokes the program.

¹³ See section 297 (Power to require reasonable help) of the Act.

3.7 Consultation with relevant parties

As required by the Act¹⁴, I have consulted all local government authorities in Queensland, prior to the authorisation of the Program. This consultation has included the local governments immediately affected by Panama disease tropical race 4:

- Cassowary Coast Regional Council
- Tablelands Regional Council
- Mareeba Shire Council
- Cook Shire Council
- Cairns Regional Council

3.8 Notification of relevant parties of requirements

As required by the Act¹⁵, I will give public notice of the Program 14 days before the Program starts by:

- giving the notice, by way of letter, to each government department or government owned corporation responsible for land in the area to which the Program relates; and
- publishing the notice on the Department of Agriculture and Fisheries website.

A copy of the Program (including its Authorisation) is available for inspection at the Department of Agriculture and Fisheries head office at 80 Ann Street Brisbane and the Panama TR4 Program office at 20 Moresby Road, Moresby.

A copy of the Program is also available to view and print at no cost on the Department of Agriculture and Fisheries website at www.daf.qld.gov.au. A copy of the Program Authorisation will be provided on request by contacting the Department of Agriculture and Fisheries Customer Service Centre on 13 25 23.

¹⁴ See section 239 (Consultation about proposed biosecurity program) of the Act.

¹⁵ See section 240 (Notice of proposed biosecurity program) of the Act.