

# Request for Expressions of Interest (EOI)

**Department of Environment and Heritage  
Protection**

***Wet Tropics Management Authority***

**EOI Title:**

***Yellow Crazy Ant Eradication Program Research Contract  
2017-19***

**Reference No:** **WTMA/17/945**

**Date of Issue:** **18<sup>th</sup> January 2017**

**Closing Date & Time:** **15<sup>th</sup> February 2017 – Time of closing  
04.00pm AEST (Queensland Time)**

All responses must be submitted electronically through the Wet Tropics Management Authority's email service [wettropics@wtma.qld.gov.au](mailto:wettropics@wtma.qld.gov.au) by the closing date and time listed above. The subject line is to include 'Private and confidential- YCA Research Contract'. Wet Tropics Management Authority may accept a late response at its discretion. Responses are to be received in protected Microsoft Word (or compatible) format, or in PDF.

## Terms of Reference

The Wet Tropics Management Authority (the Authority) is seeking to contract to engage a research partner (the research provider) to provide scientific services and advice to the Authority as part of the Authority's Yellow Crazy Ant Eradication Program over the next two years (2017 to 2019). Expressions of interest should address the scope of the research and the specific research requirements listed below. Some flexibility may be required to address challenges as they arise over the term of the Program in eradicating yellow crazy ants. The research provider will be required to collaborate with research and monitoring activities undertaken by the Authority's on-ground teams as part of the Yellow Crazy Ant Eradication Program. Importantly, the research provider will be required to collaborate closely with the Authority providing expert advice and regular reporting to inform the eradication program.

The Wet Tropics Management Authority encourages the research community to recognise and utilise the traditional and scientific knowledge held by Rainforest Aboriginal people. Individuals and institutions conducting research within the Wet Tropics World Heritage Area are encouraged to give back to Indigenous communities they engage with, through both financial and knowledge transfer arrangements.

### ***General scope of the research***

The main requirements of the research provider will be to:

1. Ensure compliance with specific conditions of the Authority's permits for the use of pesticides (currently Antoff® (fipronil) and Engage P® (S-methoprene)) under the Australian Pesticides and Veterinary Medicines Authority (APVMA) and *Environment Protection and Biodiversity Conservation Act 1999 (CTH)*
2. Deliver periodic reports and advice on the outcomes of the research and monitoring components of the eradication program
3. Analyse on-ground data collected by the Authority's Yellow Crazy Ant Eradication Team
4. Research, report and advise on the efficacy of current pesticide treatments: Engage P® (S-methoprene) and Antoff® (fipronil), as well as any new products as they become available
5. Research, develop and advise on new detection techniques for low density yellow crazy ant colonies
6. Establish and maintain secure facilities to house breeding colonies of yellow crazy ants
7. Deliver detailed research of yellow crazy ant phenology, environmental interactions and environmental influences
8. Undertake and report on biodiversity assessments of the long-term, off-target impacts of treatments on terrestrial and aquatic invertebrates
9. Design and develop further research and monitoring methodologies and protocols related to the Wet Tropics Management Authority's Yellow Crazy Ant Eradication Program
10. Attend and contribute to monthly steering committee meeting and quarterly reference group meetings with presentation of up-to-date results

### ***Background***

Yellow crazy ants were first detected in parts of the Wet Tropics region in 2001. Despite attempts at control and eradication, these invasive ants have now spread to occupy over 800ha south of Cairns and 32ha in the Russett Park area near Kuranda. The southern Cairns infestation has spread into

over 60ha of the Wet Tropics World Heritage Area (WTWHA). The infestation area is a combination of forested, agricultural (predominately sugar cane), residential and riparian areas.

The Wet Tropics Management Authority has been working to eradicate yellow crazy ants from in and adjacent to the WTWHA since 2013. In 2016 the Authority received a commitment from the Australian Government and the Queensland Government to fund a program to eradicate yellow crazy ants from in and adjacent to the WTWHA over the next three years as part of a proposed ten year program.

Broad scale aerial treatments are currently conducted three times per year with the pesticides Antoff® (fipronil) and Engage P® (S-methoprene). Over 500 hectares are treated through aerial treatment, and the remaining areas are hand treated. Antoff® is a non-systemic, broad spectrum insecticide that acts on the nervous system of insects by contact or ingestion. It is used in agricultural situations including commercial insecticides and home garden insecticides, and to control fleas, ticks and other parasites in veterinary situations. S-methoprene is a juvenile hormone analogue that acts as an insect growth regulator (IGR). Unlike fipronil, IGRs do not affect an insect's nervous system and are considered biochemical pesticides rather than toxins because rather than controlling target pests through direct toxicity, they interfere with an insect's life cycle and prevent it from reaching maturity or reproducing.

The active ingredients used in these products are formulated into a matrix of fishmeal and sugars. The treatment for yellow crazy ants in environmentally sensitive areas requires the careful application of pesticides to ensure minimal impacts to non-target species. Special care must be taken around waterways to ensure that no pesticide can enter the water. With the active ingredient at very low dose these chemicals are classified as non-hazardous to humans in their respective Material Safety Data Sheets. The active ingredients are incorporated in the matrix at very low doses to ensure that the chemical is transferred from worker ants to their queens.

Monitoring is conducted fortnightly by the Authority's Yellow Crazy Ant Eradication Program staff, using card count and quantitative luring practices to determine yellow crazy ant activity at various locations. Fine scale luring is conducted to determine the extent of the infestations and to declare proof of freedom after successful treatment activities.

### ***Required tasks to be performed (based on the scope above)***

- **Ensure compliance with specific conditions of the Authority's permits for the use of pesticides (currently Antoff® (fipronil) and Engage P® (S-methoprene)) under the Australian Pesticides and Veterinary Medicines Authority (APVMA) and Environment Protection and Biodiversity Conservation Act 1999 (CTH).**

The Wet Tropics Management Authority has strict conditions for the use of pesticides 'off label' (the products used have not been registered for commercial sale). The research provider will be responsible for ensuring the following mandatory permit conditions are achieved:

1. DO NOT treat areas where non-target species of significance are known to be present, unless ant populations are high and bait uptake is certain
2. Over the duration of this permit, bait up-take by yellow crazy ants must be studied and off-target safety considered in the context of bait uptake (see Appendix 1 - permit PER82423).

Meeting condition 1 will require an assessment of terrestrial and aquatic invertebrates within the treatment areas prior to treatment, as well as follow up surveys of bait residue.

- **Deliver periodic reports and advice on the outcomes of the research and monitoring components of the eradication program.**

Current funding commitments for the Authority's Yellow Crazy Ant Eradication Program are for three years of a proposed ten year program. It is imperative that scientifically robust research and monitoring data collection is analysed by the research provider and presented in the reporting format required by Authority. Reports must meet the reporting criteria of the Australian Government's Department of Environment and Energy and Queensland Government's Department of Environment and Heritage Protection. Research data, monitoring data and additional outcomes from the research contract will be used to report on the achievements, challenges and efficacy of the program.

- **Analyse on-ground data collected by the Authority's Yellow Crazy Ant Eradication Team.**

Staff on the Eradication Program currently collect monitoring data through fortnightly card count and quantitative luring practices. The research provider will be responsible for ensuring appropriate monitoring and data collection techniques are in place. The research provider will also be responsible for the analyses of the data to provide periodic snapshots of yellow crazy ant population activity, including densities, and climatic, seasonal and behavioural trends. Analyses of current monitoring practices used to determine bait preference and lure preference of yellow crazy ants will be required by the research provider, to inform the program on the best products to use in treatment and monitoring systems. Additional data to be analysed by the research provider includes further current on-going research (Canopy penetration of pesticide, bait fate observations), and new developments as they arise.

It would be advantageous for the research provider, working in collaboration with the Authority, to have the ability to publish applicable data in reputable scientific journals.

- **Research, report and advise on the efficacy of current pesticide treatments: Engage P® (S-methoprene) and Antoff® (fipronil), as well as any new products as they become available**

Efficacy of treatments is paramount to the success of the program. Products currently used are to be reviewed periodically to ensure that the best products for the program are utilised at all times. With three years of treatments thus far by the program, the products used have resulted in mixed successes.

In particular, treatments of infestations with Engage P® has produced varied results identified through monitoring and field observations. It is the responsibility of the research provider to evaluate if Engage P® is a product that should be maintained by the program through rigorous scientific research of the product, on locally sourced breeding colonies of yellow crazy ants. This will require the research provider to develop appropriate methodologies in this research, action the methodologies and report to the program the results as they arise. Results will be influential in guiding the treatment activities of the program and have financial implications to the program regarding the products used.

Additionally, other products, new products and novel techniques are consistently being developed by researchers and management programs nationally and internationally. The research provider will maintain up-to-date knowledge of developments as they arise externally

and work with the Authority to implement novel and innovative approaches and techniques to yellow crazy ant eradication.

- **Research, develop and advise on new detection techniques for low density yellow crazy ant colonies**

As the goal of eradication becomes closer, new techniques need to be developed and implemented to determine the location of low density yellow crazy ant colonies. It has been identified that approaches need to be incorporated into the program ensuring techniques in delimitation and post treatment validation are appropriate for yellow crazy ants specifically. This is to be managed collaboratively with the research provider and the Authority to ensure best practice is maintained by the eradication program in determining presence or absence of yellow crazy ants. Novel and innovative detection techniques are also encouraged.

- **Establish and maintain secure facilities to house breeding colonies of yellow crazy ants**

Program staff are currently implementing the use of detection dogs for satellite nests and remnant colonies in areas surrounding the main infestations. It is planned for extended use of detection dogs as yellow crazy ant numbers decrease. It is a requirement of the research provider to maintain secure facilities to house breeding colonies of yellow crazy ants (sourced from the Cairns region infestations) for scent production for training aids to be provided to the canine management team. The training and management of detection dogs is reliant on these on-going long term colonies.

- **Deliver detailed research of yellow crazy ant phenology, environmental interactions and environmental influences.**

Lessons learnt from the program to date have highlighted the highly adaptive and responsive nature of yellow crazy ants to environmental conditions and interactions. It has been identified that environmental conditions in the Cairns region vary considerably to other areas where yellow crazy ants are managed both nationally and internationally, and that a locality management approach is required. There has also been intriguing variances in micro-climates within the Cairns region infestations and yellow crazy ant behaviours. It is the responsibility of the research provider to further investigate yellow crazy ant life cycles and the influence of environmental factors on yellow crazy ants including weather patterns, seasonal changes and baiting interactions. Detailed analyses of phenology, environmental interactions and environmental influences are required to inform the program, improve treatment plans and determine best practice eradication techniques for yellow crazy ants. Environmental interactions and influences include bait matrices, seasonal preferences, bait shyness, and baiting frequencies. Further interactions and influences identified by the research provider will be considered and negotiated if required.

- **Undertake and report on biodiversity assessments of the long-term, off-target impacts of treatments on terrestrial and aquatic invertebrates.**

As the program further develops throughout the eradication stages, greater emphasis will be placed on biodiversity assessments. It has been identified that greater knowledge on the current state of the environment in and around the yellow crazy ant infestations in Cairns needs ongoing assessment. It is a requirement for the research provider to conduct invertebrate assessments as

an initial indicator on biodiversity assessment. A report is to be provided to the Authority on the measured impacts (if any) on rainforest and aquatic biodiversity as a result of;

- a. Yellow crazy ant infestation
- b. Treatment regimes

- **Design and develop further research and monitoring methodologies and protocols related to the Wet Tropics Management Authority's Yellow Crazy Ant Eradication Program.**

As the program develops and evolves through the various stages of eradication it has been identified that new methodologies and protocols will need to be designed and developed for implementation by program staff and/or the research provider as necessary. These non-specified inclusions will value-add to the outcomes of the program and will be required as circumstances change. This cooperative approach by the Authority and research provider will allow flexibility within the contract goals to develop new protocols and research questions as they arise. The ability of the research provider to leverage funds from other sources for additional research related to the program would be highly advantageous.

- **Attendance and contribution at monthly steering committee meeting and quarterly reference group meetings with presentation of up-to-date results.**

The Yellow Crazy Ant Eradication Program's Steering Committee is a panel of Wet Tropics Management Authority staff, local invasive ant experts and key stakeholders that guide aspects of the eradication program. It is a mandatory requirement that an appropriately informed representative of the research provider will attend and contribute to meetings, correspondence, and deliberations of the steering committee. Additionally, the reference group is a collaborative group of all stakeholders involved in the program, including government agencies, industry, residents, environmental groups and Traditional Owners. The Reference Group meets quarterly and it is expected that an appropriately informed representative of the research provider will attend and contribute to these meetings. The research provider representative will give presentations at Steering meetings and Reference Group meetings with up-to-date results of the research and monitoring conducted.

#### ***Timeframes:***

The research contract is required to commence March 2017, for a two year period, and terminate end of February 2019 (with the possibility of extension). For the term of the contract milestones and timeframes will be strictly adhered to and relate to the following (to be negotiated, and conditional in the contract of services):

- Reporting timeframes will correspond with reporting requirements from DoEE, EHP and APVMA, as outlined in the Reporting Requirements (below)
- Up-to-date presentations and written summaries are to be delivered by the research provider at Steering and Reference meetings
- Efficacy of S-methoprene and fipronil- initial results within one year with ongoing research required (new techniques are continually developed and bait efficacy continuously monitored)
- New detection techniques for low density yellow crazy ant colonies- one year
- Phenology and environmental interactions- Ongoing

- Invertebrate Assessments- Ongoing
- Data analysis- Ongoing

### ***Project Resources:***

#### ***What the researcher will provide***

The research provider will need to be able to supply:

- Secure and safe handling facilities for the study of breeding colonies of yellow crazy ants
- Equipment necessary for the secure and safe handling of the breeding colonies
- Supply and ability to purchase equipment necessary to conduct all tasks outlined in the terms of reference
- Key personnel- Principal scientist/ Research technicians
- Monthly and quarterly presentations

#### ***What the Authority will provide***

The Authority's Yellow Crazy Ant Eradication Program will provide project management and resources as listed:

- Existing and ongoing data for all monitoring activities related to the eradication program. The data includes (though not limited to):
  - card counts
  - quantitative luring
  - lure preference
  - bait preference
- A dedicated monitoring team of four personnel will ensure all relevant monitoring data is collected and entered by agreed timelines with research provider.
- Equipment related to current research activities of canopy penetration and bait fate observations
- Mapping (through GIS) of infestation and research areas for planning and operational needs; additional mapping required for the research contract can be provided through negotiation
- Access to the infestation areas and yellow crazy ants from within the known infestation areas

### ***Reporting Requirements:***

Reports shall be provided:

- In monthly presentations and written summaries for each Steering Committee and Reference Group meeting
- Six month progress reports, associated with milestone payments, to provide evidence of completion of activities for that period, demonstrating results and expenditure of the activities
- Final report, associated with milestone payments, to provide evidence of completion of contract deliverables, demonstrating results and expenditure of the contract

Reports shall be provided in formats determined in the contract of services.

### ***Other desirable requirements***

Registration for Goods and Services Tax (GST) purposes

### ***Insurance Requirements:***

The research provider must have and maintain for the duration of the 'Yellow Crazy Ant Eradication Program Research Contract';

- Public Liability insurance for a minimum amount of \$10 million per claim;
- Professional Indemnity insurance for a minimum amount of \$20 million per claim.
- Workers' Compensation insurance in relation to all employees of the research provider as required at law.

### ***Intellectual Property:***

The development of critical intellectual property generated as a result of the project and appropriate acquisition/ownership/retention by the Authority of that intellectual property will be issues critical to the Authority. The Authority expects that intellectual property in all data, analysis, reports, summaries and other documentation generated or developed as part of this project shall vest in the Wet Tropics Management Authority. The research provider may suggest in its EOI appropriate levels and forms of ongoing use of and access to the intellectual property and that will be negotiated through the negotiations which will take place for entry into the research contract.

Each party to the research contract will retain all of its intellectual property rights which exist at the starting date of the research contract.

### ***Budget:***

The budget for the research contact will be negotiated between the Authority and the research provider after receipt of EOI's and as part of the negotiations for entry into the research contract. In accordance with the Queensland Government's State Procurement Plan the Authority will be seeking to ensure that it receives value for money through its engagement of the research provider and as part of that the Authority will not be disclosing as part of its EOI process its budget for the research contract.

However, as a general guide the Authority expects that the value of the research contract will be below \$500,000 and it is expected that the competitive nature of the procurement process for this engagement will result in a contract being awarded that is likely to be significantly under that amount,

### ***Payment Details:***

Progress payments would be made in instalments based on deliverables (including reporting) and milestones negotiated with the research provider and the Authority, outlined in the contract of services.

### ***Form of Contract:***

The Authority intends to develop the form of contract to be entered into between the Authority and the research provider during the EOI period. However, for the information of prospective research providers the form of contract is at this time expected be based on the pro-forma General Contract Conditions developed by the Queensland Government, with additions and caveats determined as necessary be the Authority after advice from our solicitors. A copy of those General Contract Conditions can be accessed via this link:

<http://www.hpw.qld.gov.au/SiteCollectionDocuments/GeneralContractConditionsV2.pdf>

### ***Evaluation Criteria:***

Offers will be evaluated based on the following criteria:

- Capacity to undertake the commission as set out in this Terms of Reference
- Relevant experience in the field required, and specific tasks required
- Proven history in administrating research contracts
- Skills, expertise and experience of personnel to be engaged
- Fee structure, and total cost, plus details of expenses envisaged

Collaboration is encouraged where appropriate, with offers submitted by a consortium of institutions if desired. Offers that provide opportunities for doctorate research will be favorably considered.

### ***Project Contact:***

Chris Clerc

Senior Project Officer (Scientific Coordinator)

Yellow Crazy Ant Eradication Program

Wet Tropics Management Authority

(W) 07- 4241 0511

(M) 0472 875 985

Chris.Clerc@wtma.qld.gov.au

### ***Submission of Offers:***

Prospective research providers wishing to submit an EOI in response to this request must ensure that their offer submission includes as a minimum:

- Demonstration of the ability to fulfil the requirements outlined in the term of reference, including any impediments or limitations to the project;
- Details of proposed methodology;
- Evidence of competence to carry out work required including names, qualifications and experience of staff to be engaged on the project and their roles in relation to the project;
- Assessment of capacity to comply with the suggested time scale;
- Details of costs;
- Proposed fee schedule;
- Any other works involved in undertaking the contract;
- Details of Workers' Compensation, Professional Indemnity and Public Liability Insurances;
- The research provider's proposal as to how intellectual property issues will be managed between the Authority and the research provider.

### ***Acceptance:***

The Authority reserves the right to:

- Accept one offer, or more than one offer, for the whole of its requirements;
- Accept separate offers for any portion of its requirements;
- Accept offers or parts of offers on different terms than contemplated by this EOI document; and/or



- Not accept any of the offers

***Post Offer Negotiations:***

The Authority reserves the right to enter into post offer negotiations with applicants who have been short listed on the basis of their offer or otherwise in the Authority's sole discretion.

## Appendix 1.



**PERMIT NUMBER – PER82423**

This permit is issued to the Permit Holder in response to an application granted by the APVMA under section 112 of the Agvet Codes of the jurisdictions set out below. This permit allows a Supplier (as indicated) to possess the product for the purposes of supply and to supply the product to a person who can use the product under permit. This permit also allows a person, as stipulated below, to use the product in the manner specified in this permit in the designated jurisdictions. This permit also allows the Permit Holder, the Supplier (if not one and the same) and any person stipulated below to claim that the product can be used in the manner specified in this permit.

**THIS PERMIT IS IN FORCE FROM 28 OCTOBER 2016 TO 30 SEPTEMBER 2019.**

*Permit Holder:*

WET TROPICS MANAGEMENT AUTHORITY  
Cairns Port Authority,  
Ground Floor, Cnr Grafton and Hartley St  
CAIRNS QLD 4870

*Supplier:*

Animal Control Technologies (Australia) Pty Ltd  
46 - 50 Freight Drive  
Somerton VIC 3062

*Persons who can use the product under this permit:*

Persons generally.

## CONDITIONS OF USE

### Product to be used:

ANTOFF FIPRONIL ANT BAIT

Containing: 0.01 g/kg FIPRONIL as their only active constituent.

### Directions for Use:

Situation	Pest	Rate
Commercial and industrial areas, rural, residential, parks, forest reserves, non-crop areas pasture and Sugarcane.	Yellow Crazy Ant ( <i>Anoplolepis gracilipes</i> )	Broadcast: 10 kg bait per/ha.  Bait station: equivalent of 10 kg/ha.

### Critical Use Comments:

- Apply by hand held applicator, blower, aerial hopper and/or broadcast units and bait station.
- DO NOT apply by broadcast application in agricultural situations other than sugarcane.
- DO NOT apply in pasture without the use of bait stations.
- Apply a maximum of 3 applications per year.
- DO NOT apply if rain is present or imminent within 24 hours.
- DO NOT treat areas where there are non-target species of significance known to be present, including areas of known habitat for endangered frogs.
- Use the higher rate (10 kg/ha) only where ant infestation levels are high and it is likely that ants will monopolise the bait;
- DO NOT treat areas where non-target species of significance are known to be present, unless ant populations are high and bait uptake is certain.

### Application to riparian or wetland areas:

- Undertake aerial or on-foot survey before any fipronil treatment to determine where waterways are flowing and where waterbodies remain
- DO NOT spread over open water.
- Where there are standing pools of water within a dry creek bed, treatment between the standing water should only be undertaken by hand.

### Withholding Period:

#### Sugarcane

Harvest: DO NOT harvest for 14 days after last application

Grazing: DO NOT graze or cut for stock food for 14 days after last application

### Jurisdiction:

QLD only.

### Supply

The supplier must supply the product in a container that complies with the requirements of section 18(1) of the Agricultural and Veterinary Chemicals Code Regulations. Attached to

this container must be a label which is identical in content and format to the label in Attachment 1.

### **Use Records**

The permit holder must maintain records of the use of the fipronil bait under this permit. Specifically details must include the date, location and situations treated, rates and frequency of application, total amount of product used and the names and addresses of the persons using the product. These details must be maintained for a minimum period of two years from the date of expiry of this permit and must be made available to the APVMA upon request.

### **Areas to be treated**

The maximum area that can be treated under this permit is 1030 hectares comprising up to a maximum of 300 hectares of sugarcane and 730 hectares for all other situations combined.

#### *Additional Conditions:*

Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.

Persons who wish to prepare for use and/or use products for the purposes specified in this permit must read, or have read to them, the details and conditions of this permit.

#### **Permit renewal Condition:**

Over the duration of this permit, bait up-take by Yellow Crazy Ant (YCA) must be studied and off-target safety considered in the context of bait uptake. These data must be submitted to the APVMA for review if the permit is renewed.

Issued by Australian Pesticides and Veterinary Medicines Authority

ATTACHMENT 1



**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

# **ANTOFF® Fipronil Ant Bait**

**ACTIVE CONSTITUENT: 0.01 g/kg FIPRONIL**

For the control of invasive ant species as specified in the directions for use.

**FOR EMERGENCY USE ONLY. THIS PRODUCT IS NOT REGISTERED**

**NET CONTENTS: 12.5 KG**

**DIRECTIONS FOR USE**

GROUP 2C INSECTICIDE

<b>Situation</b>	<b>Pest</b>	<b>Rate</b>	<b>State</b>	<b>Critical Comments</b>
Non-crop situations, undeveloped bush locations, mine sites, commercial, industrial, public service areas and waste land.	Yellow crazy ant, <i>Anoplolepis gracilipes</i>	10 kg/ha	NT	Apply broadcast baiting areas where ant colonies are active
Commercial and industrial areas rural, residential, parks, forest reserves and non-crop situations. Agricultural situations including livestock and cropping situations (Bait stations only – except in sugar cane)	Yellow crazy ant, <i>Anoplolepis gracilipes</i>	10 kg/ha	QLD	Apply broadcast baiting in areas where ant colonies are active. DO NOT apply bait by broadcast method within 5 meters of stormwater drains or waterways or in agricultural situations including livestock or cropping situations (except sugarcane).
Sugarcanes within Pest Quarantine Area for Electric ant.	Electric ant, <i>Wasmannia auropunctata</i>	5 kg/ha	QLD	Apply broadcast baiting in areas where ant colonies are active. Apply between May and December with 3 to 4 applications per year.

**NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**

**GENERAL INSTRUCTIONS**

**INSECTICIDE RESISTANCE WARNING**

For insecticide resistance management, ANTOFF® is a Group 2C insecticide. Some naturally occurring insect biotypes resistant to ANTOFF® and other Group 2C insecticides may exist throughout normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if ANTOFF® or other Group 2C insecticides are used repeatedly. The effectiveness of ANTOFF® on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, ACTA accepts no liability for any losses that may result from the failure of ANTOFF® to control resistant insects. ANTOFF® may be subject to specific resistance management strategies. For further information contact your local supplier, ACTA representative or local agricultural department agronomist.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

**STORAGE AND DISPOSAL**

Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertiliser. Shake bag contents into granule applicator. Do NOT dispose of undiluted chemicals on-site. Puncture or shred and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

**SAFETY DIRECTIONS**

May irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use.

**FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre. Telephone 13 11 26 Australia-wide.

**MSDS**

Additional information is listed in the Material Safety Data Sheet.

**CONDITIONS OF SALE AND DISCLAIMER**

This product is solely sold for use in Australia and must not be exported without the prior written consent of ACTA.

ACTA provides no warranties, either expressed or implied, and assumes no responsibility for the use of the product. The product is supplied on the condition that the persons using the product will make their own determination as to the suitability for their purposes prior to use of this product. ACTA will not accept responsibility for losses or damage arising from the supply or use of this product other than the responsibility for the merchantable quality of the product. To the extent allowed by the relevant laws in each State, the liability of ACTA is limited to the replacement of goods in the event that a valid claim of deficiencies in merchantable quality is proven. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

©ACTA, 2009.  
Batch Number:  
Date of Manufacture:  
Website: [www.animalcontrol.com.au](http://www.animalcontrol.com.au)

**IN A TRANSPORT EMERGENCY**  
**DIAL 000**  
**POLICE OR FIRE BRIGADE**

**FOR SPECIALIST ADVICE IN AN**  
**EMERGENCY ONLY:**  
**PHONE 03 9308 9688**



Animal Control Technologies Australia Pty Ltd (ACTA)  
46-50 Freight Drive  
Somerton VIC 3062