# Top Paddock

DEPARTMENT OF **PRIMARY INDUSTRY AND RESOURCES** 



# ISSUE # 65; September 2018

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Figure 1. Fire at Berrimah Farm in September

# Message from the editor

There have been some large wildfires around the place lately. We've recently had a paddock burn right up to the main road here at Berrimah Farm.

Since the end of the bushfire season signals the start of the cyclone season it's not a bad time to check your emergency plans. SecureNT is a great place to go for alerts and warnings across state and federal organisations. It's good to see the Bureau of Meteorology in there along with Bushfires NT, the NT Police, Fire and Emergency Services, along with airports, schools and health alerts amongst others. Have a look and of course, stay safe.

Cheers

**Arthur Cameron** 



# BananaTR4 project

Tropical Race 4 Panama disease collaborative research in the Northern Territory (NT)

Samantha Cullen Technical Officer Plant Pathology

Panama disease is a highly destructive disease caused by the fungus *Fusarium oxysporum* f. sp. *cubense* (FOC). Four races of FOC are currently recognised around the world, with races infecting different banana varieties and *Heliconia* species. Tropical race 4 (TR4), is of particular concern, as it can infect most varieties of banana including the most widely grown and consumed variety, Cavendish. Infection of bananas occurs when the fungus enters through the root system and travels throughout the plant resulting in external symptoms such as wilting, leaf yellowing and stem splitting. The disease is easily spread through the movement of contaminated soil, water, plant material and unsterilised equipment.



Williams variety showing leaf yellowing

Due to the ease of spread and long lifespan of the pathogen in soil, TR4 has spread quickly across South East Asia. It was first detected in the NT in 1997. Recent detections of TR4 in the highly productive banana growing region of North Queensland, where over 95 percent of Australia's bananas are produced, has the potential to decimate the Australian banana industry. TR4 was declared as endemic to the NT in 2012. This provides a unique opportunity for field research to be conducted to understand the disease and test new varieties. Research to overcome the devastating effects of this pathogen is essential to safeguarding and improving banana production in the NT and Australia as a whole.



Internal symptoms of Panama disease

The Department of Primary Industry and Resources (DPIR) in collaboration with the Queensland Department of Agriculture and Fisheries (DAF) and suite of collaborators from universities, government agencies and the Australian Banana Growers Council are conducting a wide range of research with the aim to manage and combat this disease. Extensive testing of emerging varieties for resistance to TR4 continues at the Coastal Plains Research Farm. Round one of variety screening included 27 varieties selected due to potential resistance to the pathogen and availability in Australia. The plants were monitored on a weekly basis with data collected on the presence of external and internal TR4 symptoms as well as agronomic features through to the first ratioon.

An additional screening trial which includes varieties from international breeding programs will commence later this year. This research aims to assist growers by selecting new resistant banana varieties grown in the presence of TR4. This may influence future research decisions.

DPIR in collaboration with DAF are focusing on a collection of other research topics in the fight against Panama disease; including:

- Testing the efficacy of disinfectants.
- Determining whether TR4 can survive in common weeds.
- Identifying potential soil inoculum suppression techniques through rotation and cover crop trials.
- Testing the ability of TR4 to pass undetected through tissue culture processes.
- Developing and improving banana varieties that have known resistance to this pathogen.



This project has been funded by Hort Innovation using the banana research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au

# Save the date: Territory NRM conference this November





NOMINATIONS CLOSE 24TH AUGUST 2018



AWARDS GALA DINNER 14TH NOVEMBER 2018 DARWIN WATERFRONT



NOMINATIONS OPEN

TERRITORYNRM.ORG.AU

# Introducing new DPIR farm manager for the Darwin Region

Pieter Conradie, Coordinator of Research Farms

#### **Meet Anthony Green**



Anthony Green at Beatrice Hill Farm

Anthony Green commenced in the position of Regional Farm Manager for the Darwin region in July. He is responsible for the effective and efficient management and operation of two of the Department's Top End Research Farms. This role includes the day to day management of Beatrice Hill Farm and providing strategic support and direction for Douglas Daly Research Farm.

Anthony's experience includes being employed in the role of farm manager for eight years on a grazing farm and stud bull breeding operation on South Australia's Fleurieu Peninsula. During this time he was also involved with running beef field days. As deputy chairman of the beef group he collaborated with Meat and Livestock Australia and the University of Adelaide on research projects trialling the monitoring and reduction of methane gas from bovines. Another successful project was the breeding and widespread release of dung beetles to reduce flies.

He has significant experience with artificial insemination, breeding programs, data recording, livestock registrations, livestock movement, livestock sales, and financial and budget management.

Anthony said, "This position caught my attention as I believe it would suit my existing experience of grass roots to corporate level agricultural management experience. Coupled with my genuine passion for cattle, agriculture, its people and the environment".

Anthony has moved into the farm manager's residence at Beatrice Hill Farm with his wife and three children and is keen to try his hand at the local sport, fishing and pig hunting, when the opportunity arises.

The research farm group and researchers welcome Anthony on board and are looking forward to working with him to support the cattle and buffalo industry in the Top End and explore opportunities for research farms.

# HARPS, fresh food safety certification

Some growers are unaware of the new food safety scheme for domestic fresh produce "HARPS" (Harmonised Australian Retail Produce Scheme). HARPS is a retailer-led scheme designed to assist with compliance with food safety, legal and trade legislation in Australia. It works in concert with Hazzard Analysis Critical Control Point (HACCP) and certification schemes such as Freshcare, GlobalG.A.P (Good Agricultural Practices), BRC Global Standards and Safe Quality Food Institute (SQFI). The project has been funded by Horticulture Innovation Australia Ltd using across-industry levies and funds from the Australian Government.

In the past producers who supplied multiple different retail chains had to provide certification through multiple schemes. HARPS links in with participating standards and systems allowing growers and packers to complete a single audit (in two parts) against a single standard.

Application for certification is open to all fresh produce businesses that undertake the following activities growing, packing and distributors/brokers/agents. The project has been supported by ALDI, Coles Supermarkets, Costco, Metcash (IGA), Woolworths, as well as the Australian Competition and Consumer Commission (ACCC) and the Australian Food and Grocery Council (AFGC).

The HARPS team have recently been touring Australia to provide information and awareness sessions to industry groups, including a recent session at the NT Farmers office in Coolalinga. If you were unable to attend the session, or, you would like to hear the information again, the presentation is available on their website: https://harpsonline.com.au/



HARPS for domestic fresh produce

# **BIOSECURITY ALERT**

Have you seen the Asian honey bee?



#### **BIOSECURITY ALERT: ASIAN HONEY BEE**

The Northern Territory Government has a biosecurity response underway to detect the presence of Asian honey bee. Asian honey bees are a serious threat to the community, beekeeping and plant industries, because they could carry the varroa mite which feeds on bees.

They can also spread other pests or diseases to European honey bees, which are used to produce honey and pollinate fruit and vegetable crops. The Asian honey bee is already in Queensland and a swarm was found in Karama in May 2018.

Although the bees were not carrying the varroa mite or other pests and diseases, authorities are asking the community to report any suspect bees to help protect beekeeping and plant industries.



Figure 2: The standard European honey bee (left) compared with the Asian honey bee (right)

#### How to identify Asian honey bees

Asian honey bees:

- are yellow and dark brown with black stripes on their body and legs
- similar to the common European honey bee, but about 5mm smaller
- move in very tight clusters that range from the size of a closed hand to that of a basketball when swarming
- are more aggressive than European bees and more likely to sting.

#### Monitoring bees through rainbow bee eater sightings

The rainbow bee eater is a colourful native bird that eats honey bees. Bee eaters can be used to monitor for the presence of honey bee species by tracking roosts and collecting their pellets for testing. Bee eaters roost in large colonies in single trees. They move collectively to their roost tree shortly before sunset. You can track them by following the birds at sunset.

Any information on location of roost trees, or sightings of small groups of bee eaters travelling in a specific direction at sunset may help us locate the presence of Asian honey bees.





Figure 3: Rainbow bee eater (left), a native bird that can be used to monitor for the presence of honey bee species. Right: DPIR Asian honey bee surveillance officers.

# How can you help?

Anyone can help by reporting suspect bee sightings to NT Plant Biosecurity to protect our honey bee industry.

- Call the apiary officer on 0401 115 853 to report sightings of bee eaters or Asian honey bees.
- Reports can also be made to the exotic plant pest hotline on 1800 084 881.

For more information or visit the NT Government website:

https://nt.gov.au/industry/agriculture/livestock/honey-bees-and-beekeeping/asian-honey-bee-alert

# A bright future: students of all ages learning about horticulture

Sarah Tsai, Maddison Clonan, Dallas Anson, Chelsea Moore Agriculture Branch

From a central Australian high school visit, science week activities with primary school children, national tree day activities and Vocational Education and Training(VET) in Alice Springs; staff at the Department of Primary Industry and Resources (DPIR) have recently been hosting visits and working with students of all ages and from all regions.

In Alice Springs, Glen Oliver, Technical Officer – Plant Industries, has been providing hands on experience and training to local VET students. The Department of Education shares facilities with DPIR at AZRI to deliver a number of courses – Certificate III in Agriculture; Certificate II in Rural Operations; Certificate II in Conservation and Land Management and Certificate I in AgriFood Operations under the Pastoral Futures Program. This is a joint partnership between the Central Land Council, Indigenous Land Corporation, NT Cattleman's Association and DPIR. The program skill sets are developed in consultation with industry, and students often assist AZRI staff at the farm. Recent activities include pollen collection from date flowers.

On another front, DPIR staff helped Wulagi Primary School students enjoy National Science Week with some natural history and horticultural science. The pre-schoolers released ladybugs, donated by Bugs 4 Bugs, into their garden to try to control aphids.

"It's so wonderful getting the little kids involved, they get so excited about everything. They can't believe they are holding real live ladybirds, and many of them have never caught or held a ladybird before", DPIR staff said.

The older students looked at invertebrates under the microscope and talked about microscopic organisms such as fungi and bacteria ("germs"), which they grew on petri dishes. The event was part of an ongoing collaboration through the STEM professionals in



Glen Oliver showing VET students (Cert I in AgriFood Operations) how to collect pollen from male date flowers.



Pre-schoolers from Wulagi Primary School released Bugs 4 Bugs ladybugs

schools program, and funding from a National Science Week grant. STEM in Schools is a CSIRO led national volunteer program that facilitates partnerships between schools and STEM professionals (Science, Technology, Engineering and Maths) to bring their work and inspiration into the classroom. For more information on the program click <a href="here">here</a>.

#### **Growing future foresters**



Dallas Anson talking about tree rings with Nightcliff Primary School students.

Dallas Anson, Technical Officer from the Plant Industries Division recently joined Frank Miller from African Mahogany Australia (AMA) to deliver a National Tree Day lesson to Nightcliff Primary Grade 1 and 2 students.

The lesson, Every tree for itself, taught the students about the various physiological responses trees have when in situations of abundance or limitation of the three key resources; water, sunlight and nutrients.

After delivering the session and playing a game based on the lesson concepts, Dallas, Frank and the students paid a visit to the schoolyard where they planted a variety of trees and grass species in Finch's Garden. The plants were contributed to the school by the department and AMA.

"The students thoroughly enjoyed getting their hands dirty and were very enthusiastic about being responsible for the ongoing care and

maintenance of the species we planted," Dallas said.

The lesson is one of a suite of national curriculum approved modules from <u>Forest Learning</u>, a website where forestry specialists and educators collaborate to develop educational resources.

DPIR and AMA are planning continued engagement with Northern Territory primary schools to increase awareness of environmental issues and ignite a passion for forest science in young people.

#### Centralian school visit

As part of their annual pilgrimage to Darwin for careers advice, Centralian High School students from year 10 visited Berrimah Farm and Darwin Aquaculture Centre to learn about careers in agriculture and fisheries.

Students arrived on the morning of Thursday 16 August and were greeted by Dr Mila Bristow, Research Manager of the Plant Industries Division, who introduced the wide range of career opportunities available to students interested in STEM. Nikki Elliot, Bacteriologist, then led the students through a site tour of the Berrimah Veterinary Laboratory, followed by an inspection of native stingless bee hives and the entomology collection led by Dr Mary Finlay-Doney, Research Entomologist and Haidee Brown, Technical Officer. Plant Industries staff then hosted rice variety tasting and fungal spore identification activities. Over lunch, students were given the opportunity to quiz Dallas Anson, Technical Officer; Dr Matt Hall, Extension Officer and Dr Samantha Cullen, Technical Officer, about their career pathways into science, revealing a range of unique and unconventional career options.



Students learning about native stingless bee hives.

In the afternoon students moved into the fisheries laboratory where they had the opportunity to hold and inspect a range of aquatic specimens collected for anatomical assessments. Dr Mark Grubert, Senior Fisheries Scientist, described the work of the Fisheries Division; and introduced fisheries staff and PhD students from Charles Darwin University. These researchers shared their work on training sea rangers for conservation of Northern Territory coastlines, tagging and tracking local shark species, studying newly identified aquatic species and developing fish protection zones. The students were then given a tour of fisheries vessels.



Students and teachers inspecting the quality of different fish species. To finish off the day, students were treated to a tour of the Darwin Aquaculture Centre on Channel Island. Here aquaculture technicians Paul Armstrong and Morris Pizzutto showed the students breeding systems for sea cucumber, giant clam and barramundi, and described their industry value. Inside a laboratory students studied barramundi at different stages of development, the production of live feed and types of non-living food sources used in aquaculture. To complete the tour, students learned the design of the aquaponics system and competed in a race to build aquaculture cages.

Thank you to all those staff who participated in and assisted in the organisation of the student tour: Mila Bristow, Dave Lovelock, Nikki Elliot, Paul Armstrong, Haidee Brown, Mary Finlay-Doney, Samantha Cullen, Dallas Anson, Matt Hall, Mark Grubert, Ian Hutton (NAILSMA), Grant Johnson, Shane Penny, Amy Kirke (CDU), Paul Armstrong, Morris Pizzutto, Jessie Cagney, and Shanika Arachchi.

#### Next Gen weather station installed at KRS

Nick Hartley, Ian Biggs, Plant Industries Branch



The new weather station and soil probe at Katherine Research Station (KRS)

Accurate data is a must for precision agriculture. A Nimbus weather station has been installed at Katherine Research Station (KRS), along with a 1.6m soil probe. The system has been set up to monitor soil moisture and temperature at 10cm intervals every 10 minutes. This information along with an array of weather data can be accessed online through Goanna Telemetry Systems.

"This will provide really valuable information for precision research especially to that depth"

Nick Hartley, DPIR technical officer

Along with the soil probe the weather data collected will include: rainfall, wind speed and direction, air and soil temperature, humidity, dew point, solar radiation, barometric pressure, ETo and delta T.

The soil type at the weather station is a red Kandosol (Tippera). While the weather station and soil probe have been installed in the south west corner of the horticulture block, additional soil probes installed at other location around KRS can be monitored through the Nimbus weather station.



Figure 4: location of the new weather station and soil probe at KRS, courtesy of Goanna Telemetry Systems (online).

The information gathered can be accessed online and downloaded as either excel spreadsheet or in pdf format. If you are interested in having a look at the system or the online data, contact Nick Hartley on 08 8999 2225 for more information.

#### Connections made at the Crawford Fund Conference

Maddison Clonan, Research Horticulturalist

# Global agriculture insights from the Crawford Fund Parliamentary Conference, Canberra

I attended the Crawford Fund Parliamentary Conference in Canberra on Tuesday 14 August 2018. This year's conference titled 'Reshaping Agriculture for Better Nutrition: The Agriculture, Food, Nutrition, Health Nexus' aimed to shift the focus of agricultural development from increasing yields to increasing food quality and nutritional value.

I was one of the Northern Territory Crawford Fund travel awardees in 2017 and with this support, I worked in Cambodia to develop mango post-harvest and export systems. The department has been involved in this work through the Australian Centre for International Agricultural Research (ACIAR) project 'Building a resilient mango industry in Cambodia and Australia through improved production and supply chain practices' since 2013. The Crawford Fund works with ACIAR to support researchers in development roles overseas.



Attendees at the Crawford Fund Annual Conference (Crawford Fund)

This year's conference program included presentations from nutrition and agricultural researchers from organisations such as CSIRO, WorldFish, World Vegetable Center, ACIAR and UN FAO. The importance of diversifying production systems to include more nutritious food, associated challenges and case studies from Papua New Guinea, Timor-Leste, Bangladesh and Africa were presented. Professor Andrew Campbell, CEO ACIAR, presented a case from the Philippines where conversions from cassava production to perennial mixed vegetables increased the diversity of food options and improved land management practices. Dr Alessandro Demaio, CEO EAT Foundation introduced the integration of Sustainable Development Goals into food systems research, and Dr Jessica Fanzo, co-chair of the UN FAO Global Nutrition Report, provided the most recent statistics of global undernourishment and its wide-reaching effects. Australian Federal Foreign Minister Julie Bishop concluded the conference proceedings by emphasising the value of agricultural aid investment to Australia, 'for every \$1 Australia spends in aid, we receive \$7 back'.

During my stay, I was generously hosted by the networking organisation, Researchers in Agriculture for International Development (RAID), for who I am the Northern Territory representative and where I learnt from the experiences of other state/territory representatives. I also attended a networking event hosted by RAID, where I was able to connect with researchers from all over Australia who work in the development space.

# NT Pomelos head South under tight new biosecurity protocol

For the first time since the citrus canker restrictions were put in place earlier this year, a commercial grower from Northern Territory (NT) has sent citrus fruit to the Melbourne markets.

A Lambells Lagoon grower legally sent a total of 250 kilograms of pomelos, a popular citrus fruit, to market in late July. The resumption of trade takes place under a stringent new protocol agreed upon by all state governments. The protocol stipulates a procedure for growers and pack houses to follow in order to move citrus fruit outside the control area, including zero detections on the property, surveillance, pre-treatment and quarantine inspection of fruit prior to it being sent to market.

NT Executive Director for Biosecurity and Animal Welfare, Sarah Corcoran said "the department recognises biosecurity incursions place a huge strain on local growers, we worked very hard to get these protocols in place so that growers could resume trade where the conditions were met".

"To date there has been no detection of citrus canker on any commercial citrus growing properties and we continue to work with the Northern Territory Farmers Association to help keep growers informed," Ms Corcoran said.



Figure 5: NT biosecurity officer Shane Cross examines a pomelo prior to shipment.

Growers and pack houses wanting to move fruit must be registered under the Northern Territory Government's new protocols, as agreed with other Australian States and Territories, and require permit approval.

For more information contact Plant Biosecurity on 08 8999 2118.

# Central Australian horticulture promoted at conference

Sarah Tsai, Horticulturist Alice Springs

A spotlight was shone on central Australian horticulture at the recent Developing Northern Australia conference in Alice Springs and the Food Futures Conference in Darwin. Department of Primary Industry and Resources (DPIR) horticulturist Sarah Tsai has been busy researching and promoting horticultural opportunities for the red centre.

DPIR presented a poster on *Horticulture in Central Australia* at both the Food Futures and the Developing Northern Australia conferences, summarising the huge horticulture potential in Central Australia. The work listed areas of interest, existing commercial production with room to expand, and crops with great potential in the centre that are still waiting to be developed.

"I have always enjoyed talking to people that did not know much about the Northern Territory (NT), letting them know that we have a horticulture industry in central Australia. People just can't believe it! Sometimes even people who have lived in Alice Springs for a long time find that surprising".

The poster is an extension on the prospectus we rolled out last year: "Investing in the Horticultural Growth of Central Australia". The prospectus was created with input from several departments within the Northern Territory Government as a 'one stop shop' information booklet on horticultural investment opportunities in the centre. The prospectus covers the horticulture opportunities from Tennant Creek down to the South Australia-NT border.



Figure 6: DPIR horticulturist Sarah Tsai with her poster on horticulture in central Australia

A recent ABC news article asked the question "Why doesn't the tropical north produce more agriculturally?" I resonate with what Greg Owens (CEO of NT Farmers Association) said: developing a horticulture industry takes time. The NT horticulture industry was worth almost nothing in 1981 and now it is worth almost a quarter of a billion dollars, in just 37 years. At these conferences a lot of emphasis is placed on developing the mango, melon and Asian vegetable industries for the NT in the north. It is important to remind people that down here in the centre we have semi-arid climatic conditions suitable for other crops, as well as room for the established industries to expand (such as table grapes, dates, and bushfoods).

Current horticultural industries in central Australia were established and supported through ongoing work that the department conducted in the 1980s and 1990s at AZRI and Ti Tree Research Station. However as new varieties of crops are evolving, new and novel crops which have not been grown or trialled in the centre are in demand. A lot of work is still needed to de-risk potential crops for the region and to facilitate expansion.

The demands from consumers are changing, market opportunities are shifting. We live in a global era where markets are dynamic and competitive, how can we better utilise all of the different climate zones the NT covers, to diversify our horticulture industry and to increase the variety of produce the NT has the potential to offer? That is what we want to explore.

The Developing Northern Australia conference and the Food Futures conferences were held on the 18-19 June and the 2-4 July respectively.

#### **AMIA Market Tour**

The Australian Mango Industry will be hosting the 2018 Grower Market Tour in Sydney from Friday 30 November to Monday 3 December. This event is a highlight in every mango season and growers from across the country, from all regions and growing all varieties are encouraged to attend.

The tour, now in its fifth year, will provide growers with a deep understanding of the industry marketing plan and just what it takes to create an insatiable appetite for Australian mangoes. The three day event will cover all aspects of the supply chain and promises to be full of learnings and rich with insights, as well as providing enormous networking opportunities.

The tour will give you the opportunity to see and hear things you wouldn't normally be exposed to; to go behind doors you wouldn't ordinarily walk through and to share in conversations you wouldn't otherwise have. It promises to give you a much greater understanding of just what it takes to market a great mango experience.

You'll visit the Sydney markets, and meet with wholesalers and exporters, be guided through the distribution centres of major retailers, 'shop' for mangoes across the full range of retail formats including ALDI, Coles, Costco, Green Grocers, Harris Farm Markets, IGA, and Woolworths, and experience all the energy and excitement of the Mango Mess-tival.

Now in its seventh year, Mess-tival is the industry's signature event, held on the first Sunday in summer on Australia's iconic Bondi Beach. The day is an upbeat festival of all things mango, a fun-filled event where growers get to share their passion and tell their stories whilst introducing consumers to the taste of their varieties.

You'll be amazed as thousands of Aussies flock to Bondi with togs and towels, eager to have their first 'official' taste of summer, your deliciously sweet & juicy Aussie Mangoes. Don't miss this extraordinary opportunity.

#### REGISTER NOW FOR A SEAT ON THE BUS

Call Treena Welch, Australian Mangoes Marketing Manager on 0417 001253.



# Northern Territory seasonal outlook September 2018

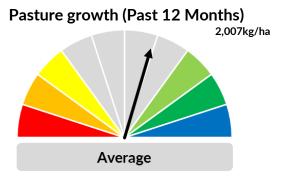
Dionne Walsh and Chris Materne, Livestock Industry Development

The purpose of this quarterly outlook is to summarise information relevant to the pastoral industry such as current feed supplies, seasonal conditions, the development of drought conditions in central Australia and fire risk.

The entire document and all districts are available from the department's website: <a href="https://dpir.nt.gov.au/primary-industry/primary-industry-publications/northern-territory-pastoral-feed-outlook">https://dpir.nt.gov.au/primary-industry/primary-industry-publications/northern-territory-pastoral-feed-outlook</a>

#### **Darwin district**

- The 2017/18 pasture growth was similar to the long-term median
- 41% of the district has been burnt since 1 July 2018
- 58% of the district had a high fire risk as at 1 September 2018



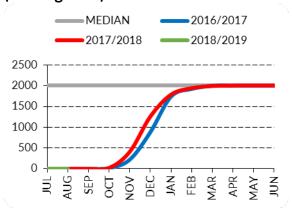
as at 1 September 2018

In a typical wet season, pasture growth in the Darwin region tends to be limited by available soil nitrogen rather than soil moisture. Therefore, a poor wet season may not generally affect the total quantity of pasture grown on upland country.

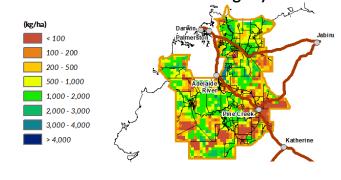
#### As at 1 September 2018

(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2018/19 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	65%	29%	5%	1%

# Median pasture growth (kg/ha) (running total)



#### Current estimated total standing dry matter



# Agrifutures Rural Women's Award

Sonia Morris, Seftons

Applications are now open for the 2019 AgriFutures™ Rural Women's Award - Australia's leading Award in acknowledging and supporting the essential role women play in rural and regional businesses, industries and communities.

The AgriFutures™ Rural Women's Award encourages innovation and problem solving, looking for projects and initiatives in various stages of development that offer solutions to rural industries and the communities they support. Projects or initiatives can be commercially focused, providing they still align with AgriFutures'™ strategic priorities of innovation, creativity, community sustainability, education, productivity, agribusiness, regional development and technology

Each state and territory winner receives a \$10,000 bursary provided by Platinum sponsor Westpac, to bring their idea or project to life, access to professional development opportunities and national Alumni networks

Location is also no barrier – applicants can live in rural and regional Australia, or in the city –their applications will be measured on the impact and benefits to rural and regional Australia.

Applications for the Northern Terrirtory AgriFutures™ Rural Women's Award close on Sunday, 27 January 2019 at 11pm AEDT.

Apply at www.agrifutures.com.au/rwa

The 2018 Northern Territory AgriFutures™ Rural Women's Award Winner & National Finalist was Linda Blackwood from Katherine. Linda was named the 2018 Northern Territory AgriFutures™ Rural Women's Award Winner and National Finalist for her idea to build an app which will hold important insurance records and station-site access documents. The app will mean less paperwork for both station workers and their employers as well as a better guarantee of confidentiality.

http://elink.agrifutures.com.au/m/1/87846174/02-b18245-0380984ca370427b92568d9395a1e6b5/7/640/fa590cff-9ab6-4197-9bc4-c1b14d8720f9

#### Calendar of events

13- 15/11/2018	Territory NRM conference (Darwin)
30/11/2018	AMIA market tour
02/12/2018	AMIA Messtival (Bondi beach)



# Keep up to date with the latest information from the NT Department of Primary Industry and Resources

You can find hundreds of publications on our website. Check our publications page to search for information sheets and agnotes.

Can't find what you are looking for? Drop us an email and we will help you out.

Subscribe to our newsletters, Top Paddock, Katherine Rural Review, and Animal Health eNews to catch up on what we are doing, subscribe online here:

dpir.nt.gov.au/primary-industry/primary-industry-publications/regional-newsletters

Our YouTube channel has a selection of "how to" videos on practical topics such as stock handling, grafting mangoes and date pollination. There are technical videos looking at measuring nitrous oxide emissions through to research updates.





#### Contact us:

Website: www.dpir.nt.gov.au

YouTube: www.dpif.nt.gov.au/youtube

Email: horticulture@nt.gov.au