Compost tea
FOR HEALTHY SOIL AND NUTRITIOUS BANANAS

Horticultural producers on Cape York Peninsula have been very enthusiastic about increasing their use of composts and compost teas, in an effort to improve their soil health and reduce their reliance on artificial fertilisers.

One such producer is Peter Inderbitzen of Swiss Farms, who received a grant to purchase a compost spreader capable of operating within his banana plantation. Peter already shares in the use of a large spreader for broad acre farming, purchased through round one of Reef Rescue, but is keen to increase applications of compost on his rows of bananas. "The use of compost is part of a long term plan for us, so that we can get away from applying artificial fertilisers and the salts they contain. Not only has the quality of our produce improved, with ongoing applications we should see improvements in our soil structure and cation exchange capacity from the increased organic matter content of the soil; which in turn will increase the infiltration capacity and moisture retention of the soil. An increase in microbial activity within the soil is another major benefit of applying compost which, combined with applications of compost tea through the irrigation and foliar sprays, will improve plant health and reduce the need for herbicides, fungicides, and insecticides. These practices may enable us to reduce our use of artificial fertilisers by up to 75%, with the long term goal being 0% artificial fertilisers."

A smaller 200L compost tea brewer has been purchased as part of a Reef Rescue project involving seven properties within the Endeavour Valley, and a workshop was held to educate producers on the benefits of good soil biology, and how it can be achieved. This project also incorporated soil analyses and soil biology tests to monitor the success of these practices and their ability to contribute towards Reef Rescue outcomes. Initial soil testing has shown that soil biology on these farms is very poor, and some producers are heralding this project as a turning point in the way they manage their properties.

Reef Rescue provides a green solution to a brown water problem with Reef Rescue funding. The site covering 2.5ha is a major achievement in engineering. It is part of the larger Barron River Green Corridor Project, which aims to rehabilitate the entire length of the Barron River over 20 years.

This site is a wonderful example of community and local council working together on an environmental restoration project. It also showcases innovative ways to deal with storm water runoff.

The project has had huge community support and participation. Approximately 300 volunteers helped to plant the site, including the local community, international volunteers through Conservation Volunteers Australia, local State Schools, and students from the School for Field Studies, TAFE and trainees from an indigenous job connection farm.

"Toogoolawah School has adopted this site and use it to learn about the importance of upstream effects on the Reef," says Eviez Seymour, Barron Catchment Coordinator. After only a year this site has turned from a drainage area to an attractive parkland.

The ponds are monitored for sediment collection with the use of sediment posts and GIS mapping. Sediment will be removed and deposited back on paddocks in the area as needed. After one wet season we have seen a large amount of sediment trapped, and this site is only receiving 25% of the runoff. Ongoing engineering work undertaken in 2010 above the ponds should ensure that 100% of sediment runoff is captured.

A series of detention ponds constructed on the Atherton Tablelands to slow flood water from rural storm water channels has captured an impressive 150 tonnes of sediment in its first wet season. The result of large engineering and revegetation works has successfully trapped this soil and prevented it entering the Barron River catchment and flowing to the Great Barrier Reef lagoon.

During the wet season, red muddy water flows at high velocity from the nearby range, across rural lands. The flood waters regularly cover the Highway inundating public and private property in Toogoolawah. Local residents Frank and Margaret Bass tell of the nights they have spent sweeping muddy water from their workshops and living area under their house. "Our beautiful garden becomes totally flooded, and then all the weeds from farm land are left behind to grow!" said Margaret.

Three large detention ponds were constructed on council land to slow the water flow, trap sediment and allow the water to seep back into the aquifer. Drop basins channel the storm water during heavy rain events into the ponds, rather than straight down the hill. About 7,500 native trees and shrubs were planted within and around the ponds to prevent erosion and to create a habitat for wildlife (with some species reaching a height of 7 metres in one year).

This project is an innovative partnership between the community Barron Catchment Care group and the Tablelands Regional Council, made possible...
Grooving BETTER GRASS

There’s a stack of poly pipe lying underneath the Smiths’ Charters Towers property, 55 kilometres of it and there’s a lot more to come. It’s to supply the property’s cattle with water because the paddocks are getting smaller.

Kirk has been on the property ‘Dreghorn’ since 1963. He took over from his father two decades ago and his son will succeed him. ‘Dreghorn’ has about 30 large paddocks; the Smith family wants to double that. When you split paddocks you need more water troughs and poly pipe to deliver water to the troughs.

Splitting up paddocks will allow areas to be rested for two months during the wet season. The Smiths didn’t return cattle from agistment immediately after rain in 1988. The positive effects of this first wet season spell could be seen years after. Since then the Smiths have been resting paddocks and Kirk says they’ve noticed significant changes.

“We’re able to maintain better ground cover and pasture mix. We’re seeing the return of the better native grasses - the three p Grasses, mainly Mitchell blue grass. We’re also getting some black spear grass back. After we saw benefits of doing this we just wanted to keep doing it to be honest.” Kirk said.

Improving the pasture and continually turning cattle into fresh paddocks has given the Smiths access to a lucrative market they could not access before. The pasture is supporting cattle that now have the weight for age that meets feedlot standards.

They sell most of their cattle at two years old at a higher value per kilo rate. Kirk said this wasn’t achievable in the past. He said it’s taken a long time before the pasture could give them a return in production terms. In their case it was probably a 20 year cycle.

Local natural resource management group NQ Dry Tropics allocated Reef Rescue funding to the Smiths for land type fencing materials, some poly piping and a tank to provide additional watering points. The Smiths paid for most of the improvements.

‘Dreghorn’ falls into a priority region that was deemed to be in need of rehabilitation in order to reduce the sediment that runs off land and into rivers and ultimately into the Great Barrier Reef.

The property also has some gullies on it that will get bigger without intervention. The family has ideas about how to reduce the erosion. Kirk said, “We aim to take the energy out of the water and make it spread and go away slowly. We’re trying to keep the water on the property so it doesn’t run down the gullies.”

Kirk said the erosion is caused in part by a landscape that’s still changing due to a natural process. “In geological time the Burdekin is a young river, it’s still cutting its way through the Great Dividing Range. As it cuts down the surrounding landscape weathers down with it. When we put cattle on the land it changes the dynamic and exacerbates the process. It is our intention to reduce our impact.”

Kirk has a long association with looking after the land. He’s been on the national and state Landcare councils and was the first Chairman of NQ Dry Tropics.

“There’s a time in your life when you can do the public stuff and get ideas out there and I think I’ve done that. Now my major focus is to pass that thinking on to the next generation and that’s my son. He’s bright and very smart and challenges me all the time but that’s a healthy relationship! He understands what I’m on about.” Kirk said.

GRAINS BMP FACT BOX:

- Of the 108 000 hectares benchmarked in the Fitzroy cropping region, approximately 90 per cent of the farmed area is being managed at best practice standard or above.

- The average farmed area across all management practices at below industry standard is approximately 6000 hectares or 5% of the total production area.

- The current use of improved farming practices is delivering $41.6 million per annum in natural resource management benefits to the Fitzroy catchment.

Grains BMP HERALDED A SUCCESS

The Queensland grains industry has been congratulated by the joint Australian and Queensland Government Strategic Investment Panel for the successful roll out of the Grains Best Management Practice (BMP) program.

Joint Strategic Investment Panel (JSIP) co-chair Fred Tromp said: “We wish to acknowledge the work that AgForce and other industry organisations have put into the development, roll-out and cross-regional benchmark reporting of land management practices through the Grains BMP program.

“Similarly, the substantial task of coordinating the development of a common benchmark model for measuring the adoption of improved land management practices in the grazing industry is acknowledged by JSIP.”

The voluntary Grains BMP program is now in its fifth year and is a collaborative effort between the Department of Employment, Economic Development and Innovation (DEEDI), AgForce, and Fitzroy Basin Association Inc (FBA). In the Fitzroy region, roll-out of the program has been assisted by funding from the Australian Government’s Reef Rescue component of Caring for our Country, administered by FBA.

Grazing BMP modules are currently being developed by the same partners, with DEEDI development extension officer Lindy Symes taking the lead and supported by industry and science experts and a landholder steering group comprising of graziers from FBA, Burdekin and Burnett–Mary regions. It is also receiving a funding contribution through Reef Rescue.

Leader of the Grains BMP, Blinda-based DEEDI development extension officer Rod Collins, said the success of the program is underpinned by its productivity enhancement drivers for producers.

“Any BMP needs to focus on the productivity enhancement drivers for growers, otherwise you won’t get producers involved,” he said.

“I’m pleased to say a recent study of the Grains BMP has shown moving from conventional farming practices to using zero tillage and controlled traffic farming (CTF) has the potential to lift growers’ profitability by $190/ha in the Dawson-Calilfe and $162/ha in the Central Highlands.”

The successful Grains BMP development team (from left) Agforce grains director Nina Murray, DEEDI development extension officer Rod Collins, Fitzroy Basin Association Inc operations manager Claire Rodgers, DEEDI development extension officer Hayley Eames, Ben Lawrie of Westwood near Rockhampton, DEEDI’s Lindy Symes, and Roz and Victor Hartin of Capella pictured at the Reef Rescue showcase held in Cairns, 2010.
GRAZIER RECEIVES A LUCKY BREAK

Juggling a cattle property and full time work in the mining industry is a challenging act.

For seven years John Gauci has worked full time at Moranbah North Mine, while improving a 470 acre grazing property and raising two children.

While the farm located near Kuttabul, 35 kilometres north of Mackay, is a childhood dream for Mr Gauci, it has brought more than its fair share of challenges.

In March 2010, a cyclone hit Mackay and 100 km/h winds destroyed boundary fences and wild dogs killed most of the heifers’ calves.

However he also received a lucky break; a substantial grant through the Australian Government Caring for our Country Reef Rescue initiative to riparian fence eight kilometres of creekline and attend the Department of Employment, Economic Development and Innovation’s (DEEDI) Stocktake course and a property planning workshop.

“There were no internal fences to begin with, so we’ve made a lot of progress,” Mr Gauci said.

“I’d like to clean up the creek to keep on top of the weeds. I’ve got 12 gates into the creek, so I can still get in and do some slashing, but importantly I can lock the cattle out to spell the alluvial country or keep them safe when it’s flooding.”

Mr Gauci’s wife, Coleen, said the training was the most enjoyable part of the grant.

“The workshops have been so helpful to us,” she said.

“Being new to farming, I really appreciated the training from industry experts.

“We’ve now set up photo monitoring points and I can see the benefit of it for John’s sake and all the work he puts in; we can photograph it and look back on it in years to come and examine what has worked and what hasn’t.”

Between January and June 2010, Reef Catchments incentives manager Jon Graffdyk, DEEDI project officer Jim Fletcher and AgForce Projects key contact officer Carrie Mayne assisted graziers to complete 59 pasture management projects (land type fencing and pasture monitoring sites), 46 nutrient management projects (soil testing), 13 riparian fencing projects amounting to a total of 34.05km of fencing and protecting 99.52 hectares of riparian habitat, and the construction of 24 off-stream watering points. A further 3.5km of stream bank, and 7ha of native riparian vegetation was enhanced to stabilise eroding stream bank areas.

Mr Graffdyk said there is still about $550,000 up for grants for graziers to carry out similar projects in this financial year.

For more information call Mr Graffdyk on 4968 4216 or Ms Mayne on 0428 720 651.

Quickly movie making competition

$20,000 in prizes is up for grabs in CANEGROWERS’ make a movie for thecanetube competition.

“Anyone can enter by submitting short, entertaining video segment showing Aussie sugarcane growers doing good things with the land and how they form and important place in the strength of our nation,” says Suzi Moore from CANEGROWERS.

CANEGROWERS is expecting entries from farmers, university and school students and musicians alike.

“There is a brochure on our website containing all the information they need to help get people started,” she said. “It also spells out conditions and guidelines so entrants can ensure their entry qualifies them for the prize money on offer.”

There is a total prize pool of $20,000: 1st prize $10,000, 2nd prize $5,000; School prize $5,000. As long as it is rated G, under two minutes, features farming relevant content including the importance of the industry to Australia’s economy and the good practices being supported by the Australian Government’s Reef Rescue program, video’s entries can take any style – it could be a music video, a comedy skit, a cartoon, or a documentary, to name just a few of the many forms the entry may take.

Why CANEGROWERS and Reef Rescue are running the competition

Sugarcane growers are recognised world-wide for their adoption of cutting-edge farm practices and the latest technologies – but people in their own back-yards haven’t been kept posted about the enormous progress made by farmers in the past couple of decades in particular. They, together with farmers of food, fibre and energy across Australia, have been asked to step up and tell the neighbours and local communities what is happening in the agricultural sector.

“After all – farming is the future – and with the world population escalating beyond the capacity to grow food to feed the increased numbers, people will be turning to farmers for fresh, safe, nutritious foods,” says Moore.

“And that’s where Australia excels. Australia is recognised internationally for having one of the safest food production systems around and hand in hand with that, we are recognised as being a clean and green country. Aussies have spent serious research dollars on ensuring we grow nutritious food, cost effectively.

“We want to help spread the word about how important farming is. This competition will use websites and mechanisms such as YouTube and FaceBook which deliver the message in an entertaining way.”

Examples

• This clip was developed by Yeo Valley Organic in the UK to promote their good farming practices and commitment to protecting the environment and producing good quality foods – all in a fun way: http://www.youtube.com/watch?v=6OHAuIvbVYo

• CANEGROWERS have started on an example. We posted the lyrics on our blog at www.canegrowers.com.au/thecanetube - which entrants can use - or better still - use the brochure on the website to make their own from scratch.

All the information entrants need about the Australian sugarcane industry and the water quality benefits from programs from like the Australian Government’s Reef Rescue program (competition sponsor) can be found on our website www.canegrowers.com.au/thecanetube

“Make it quirky, make it fun, but make sure you make it informative,” says Moore.

Robin Murphy was surprised to discover he was applying up to three times more chemical than he actually needed on ‘Malani’, his mixed beef and grain enterprise near Emerald in central Queensland.

Through his involvement in the Grains Best Management Practice (BMP) program, Mr Murphy was able to access expert advice and is now saving money and the environment by using chemicals more efficiently.

“I realized I had been using the incorrect nozzles and applying much more chemical than I needed – I was applying three tanks of chemical mix to a paddock where I only needed one tank,” Mr Murphy said.

“Already I have saved close to $1400 per spray in a season on this particular paddock.”

Grains BMP is a voluntary industry benchmarking process developed in partnership between AgForce, the Fitzroy Basin Association Incorporated, and the Department of Employment, Economic Development and Innovation.

To assist growers undertaking the pesticide application module of Grains BMP, Fitzroy Basin Association Inc. (FBA) engaged two spray equipment and technique experts with $64,500 in funds under the Reef Rescue component of the Australian Government’s Caring for our Country.

Mr Murphy worked with the consultants, who assessed his spray rig and gave recommendations on nozzle selection and other modifications to improve chemical application and reduce non-target drift into sensitive areas like waterways.

“Other components such as taking note of the correct chemical mixing order, the use of adjuvants, and setting up the system to make it more efficient, have also helped me a lot,” Mr Murphy said.

“During the training it became clear to me there is a definite need for documentation, an important part of the BMP process, so I purchased a hand held weather meter, a calibration kit and got hold of a log book,” he said.

“All these tools are helping me ensure that I am applying the correct amount of chemical and that I am applying it during the most suitable weather conditions.”

FBA’s Sustainable Landscapes Coordinator Piers Harper said in 2010 the consultants visited more than 40 growers to help them reduce the potential for pesticide movement to the Great Barrier Reef through reduction in overlap and accidental over-application of pesticides.

“The consultants also improved growers’ skills and knowledge in using the correct settings for their equipment and situation, which promotes lasting benefits in reducing pesticide movement off-farm,” Mr Harper said.

“Growers who complete BMP modules and access training may also then develop an individual project with FBA to access financial incentives to help them modify their equipment or purchase new equipment.”

For more information about Reef Rescue or the projects profiled in this newsletter, contact Queensland Farmers Federation on 07 3857 3747 or Queensland Regional NRM Groups Collective on 07 4699 5002.