

Agribusiness

Everything's coming up...daisies

Contribution from Greg Duncan of Pyrethrum NZ

In late June, Business Hawke's Bay hosted the Land Diversification Opportunities event in Waipawa, supported by Central Hawke's Bay District Council and a range of sponsors. This is the first in a series of follow up articles looking at land diversification in Hawke's Bay.

What does the perfect land diversification opportunity look like? Does it have good financial returns? Does it have international appeal? Does it fit with New Zealand's clean and green positioning? Is it reliable? Is it resilient enough to cope with Hawke's Bay's weather and the effects of climate change? And is it good for the environment?

At PyrethrumNZ, we have found something that meets all of these requirements; Pyrethrum oil.

Extracted from Pyrethrum flowers, Pyrethrum oil is used as an insecticide, and I believe it represents a huge opportunity for Hawke's Bay.

As a crop it generates almost one billion dollars annually for the state of Tasmania where they have more than 3500 Ha of the stuff growing.

Global demand for Pyrethrum is forecast to double in the next 5 years. As a crop, it's easy to grow. It will tolerate temperatures down to -12C and is resistant to drought. Last year, for example, I didn't have to irrigate once.

Unlike other popular land diversification crops like berries, hemp and hops, Pyrethrum requires low overheads to establish and maintain the crop. You don't need to fork out for strainer posts or guide wires or a giant cage of netting to protect the crop from birds.

It's a crop that can complement and have a synergistic effect on normal farm operations. For example you could graze your sheep on the plants after the flowers had been harvested and this would have the same effect as drenching them, saving time and money. Pyrethrum can also be used as a "rest" crop. If you are farming peas, for example then every



six months you will be ploughing the field and turning it over. This is bad for the soil and its biodiversity. Putting in a crop of pyrethrum gives the soil a "rest" from this constant ploughing for a few years

Right now, Hawke's Bay landowners could have first-mover-advantage with Pyrethrum.

Pyrethrum will grow anywhere. It could grow all over Australia but the reason it brings almost one billion dollars into Tasmania's economy is because they established it there first.

This is what we want to do for Hawke's Bay. This crop is not farmed anywhere in New Zealand yet. We want to establish it here first so that Hawke's Bay gets the benefit from being the national centre. Pyrethrum farming will come to New Zealand eventually, it is too valuable not to. It's just a matter of when and where.

My company has spent the last four years working with this crop and towards this goal.

Consumers and manufacturers want Pyrethrum over alternative products is because it is natural and does not persist in the environment.

With this product we can fight nature with nature – which has got to be the best way.

It is the most natural solution for controlling insects that we know of and it has stood the test of time. Over 2000 years ago merchants used it on the Silk Road when travelling to and from China. Napoleon's troops used it to de-lice their clothing, as did our allied troops in both world wars.

Unfortunately since then we have chosen to use products such as DDT and neonicotinoids which is why insecticides currently have such a bad name and why there has been a worldwide decline in bees and other flying insects that pollinate our crops.

Some environments are now perpetually toxic and this has given rise to a new breed of insects that are resistant.

Nature is fighting back and so are consumers and governments around the world. Singapore has recently legislated that only natural pyrethrum is allowed to be used for fogging in public places. In the EU neonicotinoids are now banned. This year EU regulations have limited the level of toxic residues allowable on products. And here in New Zealand, MBIE has identified "global environmental consciousness" as the foremost mega trend likely to affect the future of food and farming.

Pyrethrum uses:

- Against mosquitoes, preventing the spread of diseases (malaria, zika etc)
- For fogging in Asia but also in other densely populated areas
- In mega greenhouses and organic farming
- In household automated aerosol dispensers
- On agricultural crops like kiwifruit and avocados
- In every winery
- As a wash for fruit before it is exported
- For biosecurity to sterilise shipping containers



About Pyrethrum:

- A perennial, with a 4–5 year life
- You can either field sow it, or use a transplanter to create new crops
- 5 plants per m²
- First harvest at 14–18 months, then every December and May
- Dried flowers are processed, oil extracted
- Oil sold as end product or raw ingredient

This is the problem that Pyrethrum solves. This is why the future is so bright for this product.

Pyrethrum does its job, it breaks down quickly and then it's gone. There's no resistance, no residue and no run-off.

In New Zealand, we use Pyrethrum everywhere, but we import all that we consume from Australia.

Our aim is to turn that around and make New Zealand a net exporter of this clean green natural product.

In the past four years PyrethrumNZ has grown, harvested, formulated and created product which is now registered with MPI, have AssureQuality certification and BuyNZ.org.nz certification for both "Made In" and "Grown In" classifications.

We produce 1500 litres of end user concentrate per annum that we sell through a variety of channels, and we have more plantings underway.

What's really exciting are the opportunities in the pipeline. To close on them we are going to need to increase

our scale considerably, connect with investors to help us set up a factory and growers interested in this valuable crop.

To find out more about Pyrethrum and why it could be the right land diversification option for your land, contact greg@pyrethrum.nz

To find out more about land diversification (more generally) in Hawke's Bay, contact Rachel Campbell at Business Hawke's Bay: bizdev@businesshb.nz

\$400k investment for Central Hawke's Bay's Te Paerahi beach community

Contribution from Central Hawke's Bay District Council

Central Hawke's Bay District Council (CHBDC) has secured \$406,896 from the Tourism Infrastructure Fund (TIF) to upgrade drinking water facilities and beach toilets at Te Paerahi, Porangahau Beach.

The improvements include the upgrade of the Porangahau water treatment plant and additional water storage solutions. They will ensure Te Paerahi is well equipped to respond to the increasing demand on facilities generated by recent tourism growth, while minimising the adverse effects on locals. The TIF will also contribute to the operational costs of the facilities for the first two years.

The TIF is administered by the Ministry of Business, Innovation, and Employment, and provides up to \$25 million annually to develop tourism-related infrastructure that supports regions facing pressure from tourism growth. This is the first time CHBDC has been successful with TIF funding.



Central Hawke's Bay has seen a sharp rise in tourism growth in recent years, and in the year 2018–19 total tourism spend increased by 15.1% from \$31.9m in January 2018 to \$36.8m in January 2019.

The secluded beaches of Central Hawke's Bay are a significant draw card for visitors, and the number of freedom campers to the Porangahau area, particularly at the Te Paerahi freedom camping site, are on the rise.

The increase in tourists over the spring–autumn period has not only put pressure on existing toilet facilities, which are no longer fit for purpose, but has also resulted in regular water restrictions, and in the height of summer full non-essential water use bans.

The new toilet facilities are expected to be completed and operational by January 2020, and additional water storage facilities to be operational by March 2020.

CEO Monique Davidson says: "People are awakening to the fact that Central Hawke's Bay is a beautiful and secluded holiday destination, and this is evidenced by our growing visitor numbers and tourism spend".

"We warmly welcome visitors to share in our beautiful slice of paradise, but we are also mindful of the impact that tourism growth can have on our local residents. This funding will significantly improve the experience of tourism for both locals and visitors alike, which is a big win all round."