

## CASE STUDY: MARK ERICKSEN

# World-class orchardist relies on irrigation

Fourth generation orchardist Mark Ericksen relies on irrigation to grow 45 hectares of apples and Kiwifruit on Korikipo Road, Hawkes Bay. Working in partnership with wife Leah and parents Peter and Lesley, the 2006 World Fruit Grower of the Year is passionate about SMART irrigation and its benefits for their horticultural enterprise.

Using water carefully and planning for future efficiencies is integral to good business at the family farm 'Waima' which means clean, white water in Maori.

Using a modern micro-sprinkler system, divided up into a number of blocks, Mark and Leah run a deficit irrigation strategy for both Kiwifruit and pipfruit. Getting irrigation right is crucial for fruit quality, he says.

"Early in the season we ensure that water is readily available to the plant as this results in a good fruit set and fruit growth. We then gradually start to stress the trees and vines more and more in the lead up to harvest, as this improves dry matter content. Higher dry matter improves the quality of the fruit, its taste and ability to be stored," says Mark.

Each irrigation block has a different variety on it. As certain varieties and cultivars are better suited to certain soil types, for example Fuji apples do very well on the lighter sandy soils, and the soils on the property range from sands through to silt loams, the irrigation blocks reflect the different soil types. This also makes irrigation scheduling easier.

Irrigation is scheduled using a Diviner probe that measures soil moisture content. From this Mark can work out how much water is left in the soil for the tree to use. Understanding Waima's soil types and their water retention abilities means the Ericksens can make accurate decisions about how much water to apply.

Annual maintenance is important and includes flushing all the lines. Each block then gets checked every second irrigation to ensure all sprinklers are working and there are no leaks.

Water usage is metered and the couple intend to move to a telemetered system in the near future.

As well as ensuring they do not break their consent conditions, the water meters give Mark an assurance that each block is receiving the right amount of irrigation. "If anomalies occur we know there is a problem that needs fixing. A meter is more than a compliance tool."

Mark and Leah's professional approach to irrigation is reflected in their achievements and results to date. The seven varieties of apples and two cultivars of gold Kiwifruit they grow are exported around the world. The Ericksens were the first primary producers in New Zealand to be accredited with Global GAP – the horticultural Good Agriculture Practice quality assurance scheme and in 2006 the couple won the World Fruit Grower of the Year award – assessed on their production, profitability and environmental commitment.

They have also taken out numerous other kiwifruit production and rural environmental awards for their business and are genuine advocates for sustainability.

"Water is key to everything we do in our business; it also underpins the Heretaunga Plains community. Everyone has to be involved in its careful management if we are to leave profitable businesses and a healthy environment for our children to live and work in."

While Mark believes farmers need to take the lead in water management, "councils need to recognise the importance of working with farmers and orchardists to find pragmatic solutions".

The Ericksen's careful approach to irrigation is reinforced by prudent planning for the future – with succession discussions complete – which could see the couple's three boys become the fifth generation to farm at Waima.

