



KIWI COMPANY DEVELOPS SOPHISTICATED SEED TREATMENTS

WHEN PAUL OLIVER ESTABLISHED HIS FEILDING-BASED COMPANY H&T AGRONOMICS IN 2003, THE AIM WAS TO PROVIDE FARMERS THE BEST AVAILABLE SEED GENETICS AND THE ADVICE NEEDED TO GET THE MOST OUT OF REGRASSING AND FORAGE CROPS.

Because it was as an independent seed supplier, H&T could source seed from all leading merchants, but it did not stop there. It went on to purchase the machinery needed to apply crop protection coatings to its seed.

H&T business manager Duncan Thomas says treated seed reduces the reliance on foliar agrichemicals and bait. It also provides a better means to deliver many products where they can be most effective.

“We can apply a range of synthetic and biological coatings to seed. When they take up moisture, these products create a halo

around the seed and the forming root zone,” Duncan says.

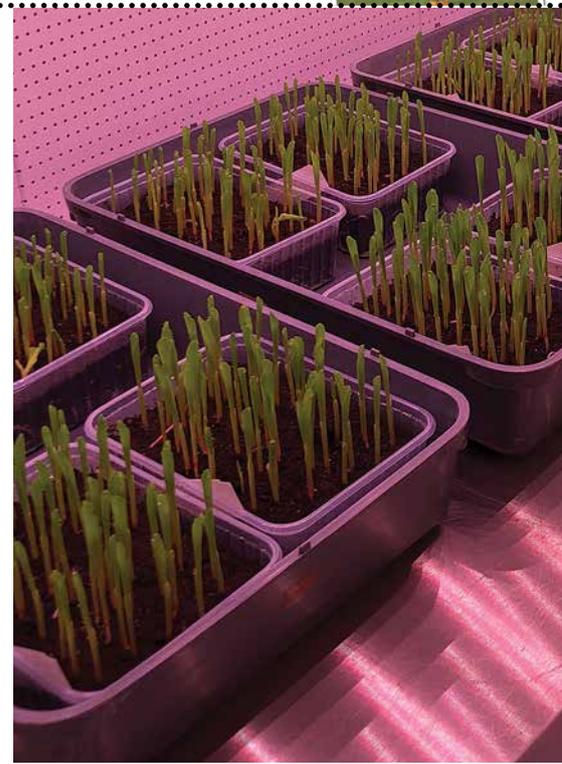
“Because they are well-protected and stimulated, the seeds achieve faster and more consistent emergence. Since the seedlings are under less stress, they can maximise their root mass and more make it through to the viable plant stage. This sets up the potential for yield gains.”

H&T South Island manager Fred Milford-Cottam says applying seed coatings is not straight forward.

The dose must be accurate, multiple products must be compatible to ensure their efficacy and the safety of those handling the seed, and the chemicals must be secured with polymer coatings so they do not “dust-off” the seed.

Fred says, to keep up with current trends in the industry, H&T staff regularly attended the International Seed Federation’s World Seed Congress.

“Because we followed international developments, we knew where the technology was heading. After seeing a dozen leading



AFTER IT HAS FORMULATED SEED TREATMENTS, H&T RUNS GERMINATION TRIALS AND FIELD TRIALS TO CONFIRM THEIR EFFECTIVENESS.

experts on seed treatment at the Congress in Berlin, we had the confidence to invest in the most advanced machinery available.

“With it we can hold different products in holding tanks and apply them as separate layers to the seed. We can apply up to seven layers and we have binding polymers that are designed for specific seed types.

“Along with our own range of treated seed that we sell under the ‘Optimised’ brand, we can customise coatings. We have done contract treatments for a range of seed types – from spinach to sweet corn and even pine trees.

“We can layer on the best available insecticides, bio-stimulants to promote germination and root growth, and specific fungicides or trace elements for particular crops.”

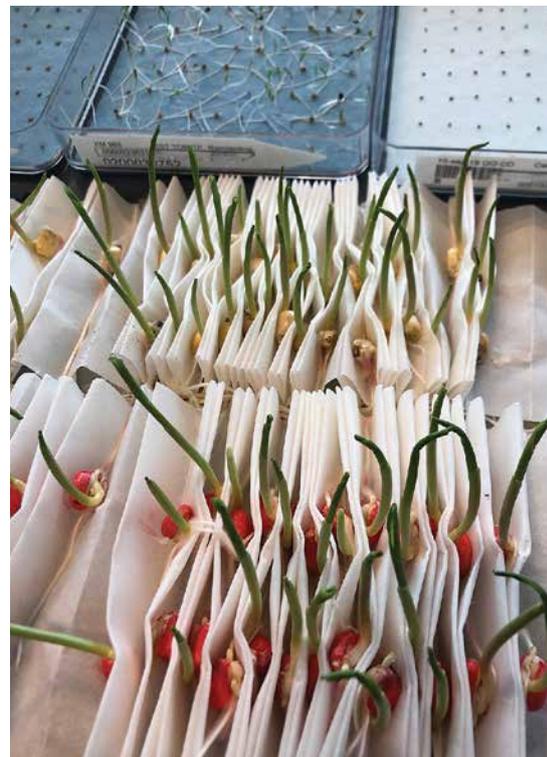
H&T develops its own coating formulas for coating that maximise germination, establishment and yield, and it then holds replicated trials to demonstrate the advantages over control. The trials take place over several years and are conducted scientifically and peer reviewed.

Its Optimised range of products includes maize, cereals, brassicas and a full range of pasture mixes. All Optimised seeds include a bio-stimulant that contains humic and fulvic acids, which promote root growth and vigour.

“Another product we have developed is Rappel, a patented seed applied slug-repel- ▶

H&T AGRONOMICS USES A CIMBRIA CC 150 TO APPLY THE COATINGS ON ITS OPTIMISED AND RAPPEL SEED RANGES.





◀ lent seed coating. The seed coating protects individual seedlings through establishment rather than spread as a bait through the paddock,” Duncan says.

“Rappel also contains a biological product that makes the seedlings more repellent to slugs. The aim is to repel the slugs and not kill the slugs, maintaining the biodiversity in the paddocks. The focus is allowing the crop to establish itself.

“With Rappel, farmers and contractors have less chemicals to handle and they are not spreading baits that can get into waterways or impact non target species”

Due to chemical restrictions in the UK, H&T has found an overseas market for Rappel as an alternative method to protect establishing oilseed rape crops from slugs.

The connections that the Kiwi company has

made with British companies through Rappel is leading to an exciting new project – a fungus that can target cabbage stem flea beetle (CSFB), which is a serious pest.

Fred says oil seed rape is a major crop in the UK because it is an economical break crop in cereal rotations.

“Neonicotinoids seed treatments, such as Gaucho and Poncho, are banned in the UK, and the CSFB has developed resistance to pyrethroid sprays, so farmers are running out of options. Over the past six or seven years the amount of oil seed rape grown there has declined from around 850,000 ha to 390,000 ha.”

The CSFB is a particularly difficult pest to combat because it lays eggs in the soil, and the larvae burrow into the oilseed rape plants. With autumn sown crops, the adult

↗ **BARLEY SEED TREATED WITH H&T'S PATENTED RAPPEL SLUG-REPELLENT SEED COATING.**

eat the germinating plants and then lay their eggs. In the spring the larvae emerge and hammer whatever plants are left.

“British researchers have discovered a fungal isolate that acts on both the CSFB adults and larvae. It appears to be vigorous and stable, and we are working with the team to develop a mechanism to deliver the fungus into the soil.

“We are excited about it because it could be a great product for farmers and it will also please our urban friends, who want bees and other pollinators and beneficials protected.” **RC**

Chief Executive required for essential industry role



Agriculture is the mainstay of New Zealand's economy and the rural contracting industry provides a wide range of services to farmers to ensure the industry remains a major income earner for the country.

The industry is also involved in agrichemical application on farms and in public places.

The membership of Rural Contractors New Zealand seeks a full-time Chief Executive who can represent the industry to the government, local bodies, public and other industry groups.

Reporting to an industry representative Board, the Chief Executive will provide a range of services to members including accreditation programmes, as well as representing the industry on a number of organisations and to local and central government.

The successful candidate will have excellent advocacy and communication skills and experience across policy, agriculture or similar disciplines. Experience of the agriculture sector is desirable but not essential.

If you are ready for the challenge of representing this essential industry at all levels, you can obtain a detailed Position Description from: office@ruralcontractors.org.nz

Applications addressed to the President Rural Contractors New Zealand close at 4pm on 27 April 2021.

