



**PEST CONTROL**

# NZ firm takes aim on coyotes in Colorado

**KIMBERLEY VILLARI**

Humane pest control compounds developed in New Zealand could soon be used to eradicate coyotes in Colorado and mongoose in Japan, as a local company looks set to expand overseas.

Auckland-based wildlife pest control specialist Connovation Ltd had been working for 11 years to develop pest eradication products which were humane and had minimal effect on the environment.

One of the products Connovation has developed is Para aminopropiophenone, or PAPP.

The compound was worked on in the United Kingdom during the 1970s and 1980s during the Cold War as a protection agent against radiation poisoning.

PAPP was the first of a new generation of vertebrate pesticides and rodenticides for stoat and feral cat control. The company had also successfully trialled it on wild foxes in Australia.

Chief executive Duncan MacMorran said the product was likely to attract a lot of interest internationally once it was registered in Australia about July.

"A lot of companies around the world have tried unsuccessfully to develop PAPP-based toxins, but no one else has yet been able to make it work.

"We've already had interest from the UK and expect a lot more once the product is available."

Leading the research and development is Lincoln University professor and Connovation director Charles Eason, one of the world's top toxicologists in the field.

Eason said opportunities for innovation in the area of pesticides were great because there had been no major developments in pest control since the 1980s.

Multinational pharmaceutical and agrochemical company investment was small, leaving a niche market open to companies such as Connovation.

"Most of the research in this field is going on in Australasia.

"Worldwide, there's no innovation

in the multinationals.

"They've stuck with the same compound. It's not a big deal for them, but it's a definite niche market for small-to-medium enterprises in New Zealand.

"New Zealand expertise in conservation, rodent control and control of other vertebrate pests for protection of native species is world-leading, as are our product development initiatives."

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*Connovation director Charles Eason.*

Eason would be presenting at a conference in March at the National Wildlife Research Centre in Fort Collins, Colorado, on how PAPP compounds could be applied to coyote control.

To date Connovation's core product had been Feratox (R) – encapsulated cyanide pellets coated in resin developed for possum eradication.

Unlike 1080, Feratox kills pests quickly and humanely, and had a low risk of secondary poisoning for domestic pets and livestock.

The company was recently awarded an \$A300,000 grant by the Tasmanian government which was looking for more humane alternatives to 1080 to control wallabies and possums. Eason was hopeful Feratox would be selected to control the pests.

He preferred a varied approach of developing old products such as cyanide, presented in a more effective way, and new products such as PAPP over the one-size-fits-all 1080 application.

Connovation was looking at compounds similar to PAPP to control other species, such as rats, in a bid to attract the global market.

"It's all very well saying we're going to kill possums and stoats and

feral cats, but the market would be for the international species – the rodents.

"We've already getting people contacting us from Japan for mongoose control.

"We have experience of Australasian markets and are poised for wider international markets and products that will service those markets."

Although Connovation was a private company it had strong links with Lincoln University, Otago University, Crop & Food Research, the Department of Conservation and Australia's Invasive Animal Co-operative Research Centre.

Eason said the difficulties in getting pest control products registered in New Zealand meant it was essential to have a team with core competencies in all areas, from research and development through to full-time registration specialists.

While the Environmental Risk Management Authority and the New Zealand Food Safety Authority product registration requirements were intended to be protective, meeting the data requirements for innovative products had been a challenge.

"They raise the bar for new compounds coming through and getting registered, even though they may be better replacements.

"The intentions are good, but the outcomes of some of these systems aren't that great."

Eason said regulatory and registration challenges were a hurdle for innovation and hindered the process of replacing higher risk products.

"Sometimes the actual innovation in the lab is the easiest part.

"I guess that's why there's not hundreds of players in this field.

"You've got to be pretty sharp and smart, or you wouldn't make it."

One of the key learnings from his background in the Crown Research Institute environment was to move away from having one or two people working for years on a project, in favour of employing more people to push products through to a commercial reality in a shorter period.

"It's about getting that consortia of



people who really can take things through to commercialisation.

“That’s the strength of this group.”

In the next 12 months Connovation would be reaching for more elusive, and consequently more lucrative, opportunities.

It had been working towards acquiring research funding from the US

to further develop PAPP products.

The company expected to make a profit from its new products within the next two to three years.

As products and sales grew Eason intended to employ high-calibre graduates to join its team, as opportunities in private sector research in New Zealand were few

compared to Europe and the US.

“As we grow our products and product sales we are in turn growing our in-house R & D capability.

“For a small to medium enterprise the level of R & D in this little company is huge.”



**Connovation’s director Charles Eason (left) and chief executive Duncan MacMorran with a tray of pest eradicator Feratox.**

**SUPPLIED**