



TOXIN ADVANCE

NZ scientists help develop new poison to target pests

Helen Murdoch Nelson

A new pest poison that may provide the chemical blueprint for 1080 alternatives has been developed by New Zealand and Australian scientists.

Para amino propio phenone (PAPP) follows years of research into the results of British studies for the treatment of radiation poisoning. It is the first new anticoagulant poison developed in 30 years.

Last week Auckland-based conservation research company Connovation applied to register PAPP with the New Zealand Food Safety Authority (NZFSA).

However, 1080 opponents are concerned Connovation has also applied to register an internationally used rodenticide, zinc phosphide, as a toxin paste.

Connovation scientist Dr Charles Eason said PAPP was a cat and stoat-specific ground-based bait and trials this year resulted in a 90 per cent kill rate.

Unlike the slow-acting anticoagulant brodifacoum, which took two or three weeks to kill

an animal, PAPP was humane, he said.

"It prevents the red blood cells from carrying oxygen so animals become dozy, fall asleep and die," Eason said.

The poison broke down as the pest died, alleviating the secondary poisoning of scavenging animals, he said.

Its anticoagulant compounds could also be developed to target the red blood cells of possums.

Eason said the best long-term option for New Zealand's pest control was to develop a suite of specific toxins.

"PAPP is a boutique product, a minor-use product that goes under the international radar, but in New Zealand it is a big deal."

Eason said he would not support its use, or the use of zinc phosphide, in aerial operations at this stage.

Environmentally Safe Pest Control spokesman (ESPC) Graham Sperry said zinc phosphide was a cruel poison and highly toxic to birds and

aquatic life.

It reacted with an animal's gut fluids, causing it to vomit and produce a gas that killed it.

Animal Health Board spokesman Nick Hancox said the board had considered the toxin a possible 1080 alternative, as it was less likely to kill carnivorous animals, such as dogs, which ate poisoned pests.

However, research showed it was possibly more hazardous than 1080 and it was unlikely it would be used as an aerial alternative.

Karamians Advocating Kahurangi Action (KAKA) spokesman Paul Murray said any poison had to be "clean, green specific and humane".

The aerial distribution of any poison was unacceptable and gambled with New Zealand's tourism and agricultural export earnings, he said.

PAPP and zinc phosphide would have to pass NZFSA and Environmental Risk Management Authority scrutiny before they could be used commer-

cially.



Pesticide expert: Charles Eason is professor in wildlife management at Lincoln University and director of research for Connovation in Auckland.