

Closing in on feral pigs



Feral pigs are close to outnumbering Australians, and the damage caused by them is estimated to be in the vicinity of \$107 million per year in production losses and control costs. Pigs impact agriculture and the environment through livestock predation, crop and infrastructure damage, native vegetation destruction, and through being vectors of endemic and exotic diseases.

Researchers at the Pest Animal Control Cooperative Research Centre have been working to uncover the weakness in the pig's formidable defences, and are close to deciding on a pig-specific toxin which will be delivered in an ingeniously designed bait.

According to Dr Steve Lapidge, the 'Achilles heel' approach to pest management is the best option to bring feral pigs under control.

'Pigs, like humans, are brilliantly adapted to survive in a variety of environments, and they have become a formidable force in many areas of Australia. They are intelligent, resourceful and hardy,' says Dr Lapidge.

'In the first instance, we had a look at the characteristics of the pig which make them uniquely piggy,' says Dr Lapidge. 'Pigs have strong jaws, they are omnivorous, they have a keen sense of smell and poor eyesight. Mostly, feral pigs feed at night.

Australia's feral pigs – often big, black and hairy – are all descended from two strains of domestic pig, the European and Asian boar, both familiar pigs on Australian farms. CSIRO Sustainable Ecosystems

'These characteristics led to the design of a bait which really only pigs find attractive' he says. 'Tough packaging deters other scavengers; a "meaty" smell deters herbivores, while a grain matrix deters carnivores. A bright colour serves a warning to creatures with good eyesight, including humans.'

Baits for pigs usually contain a toxin such as 1080 poison, but Dr Lapidge says that following successful target and non-target species uptake trials, scientists at the CRC are ready to pick a final prototype manufactured 'pig-specific' toxin, adding that a feral dog- and fox-specific toxin has recently been found.

'A previous search of the scientific literature revealed a drug, originally developed as a human medication, which was lethal to dogs,' says Dr Lapidge.

'Today's electronic data recovery enables us to conduct an extensive search of international research reports, and the project we are launching this year is attempting to find the Achilles heel for feral pigs,' he says.

Dr Lapidge's research into the control of Australia's feral pigs is in collaboration with Animal Control Technologies Australia and funded by Meat and

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Livestock Australia and the National Feral Animal Control Program.

The feral pig bait project is now at a stage of incorporating toxins into the chosen manufactured prototype and re-testing them in 'live' field trials in Queensland. Simultaneously, non-toxic manufactured feral pig baits will be exported to the US Department of Agriculture later this year for testing in Texas. Should they prove effective, baits will be modified to carry vaccines for diseases of economic importance to America.

More information:
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