



The Hon. David Littleproud MP
Minister for Agriculture and Northern Australia
Deputy Leader of the Nationals

MEDIA RELEASE

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eDNA set to revolutionise biosecurity detections

- **Australian Government rolling out National eDNA Testing Program**
- **Environmental DNA technology detects biosecurity pests and pathogens from environmental samples on-site in under an hour**
- **Ensures reliable results consistent with national and international standards**

The Australian Government is investing \$7 million in a new national program that sets the scene for game changing eDNA technology testing capability and revolutionise the frontline of Australian biosecurity.

Minister for Agriculture and Northern Australia David Littleproud said this initiative would formalise how Australian biosecurity officers would use this powerful eDNA technology.

“When our frontline staff and scientists use eDNA testing to identify pests or pathogens, the results will be rock solid under national and international standards,” Minister Littleproud said.

“New technology will give frontline biosecurity officers and scientists a portable CSI-like tool to detect DNA samples from the environment, with consistent results every time.

“It means they can take samples from shipping containers, tarmacs or out in the field and quickly confirm the presence of biosecurity threats via target DNA in the air, waterways and environment.

“The program will establish a National eDNA Reference Centre, an eDNA Collaboration Centre Network; national standards and protocols to ensure all testing is fit-for-purpose; and accreditation standards for laboratory partners.

“eDNA is a gamechanger for national biosecurity risk management.

“We’ll eventually have air-sampling machines set up at key locations around the country, able to detect airborne DNA from things like exotic bee and moth pests.

“eDNA results can also tell us what region pests and pathogens come from so we can target risk management activities offshore.”

Fast Facts

- **Department of Agriculture, Water and the Environment is working with research partners to develop eDNA tests that can detect DNA from environmental samples taken on site.**
- **Researchers had a world-first detection of khapra beetle eDNA in samples of dust and dirt from shipping containers.**
- **This technology is now being used successfully to screen incoming shipping containers, target high-risk entry pathways, and rapidly respond to threats.**
- **High priority biosecurity pests being targeted include exotic invasive ants (e.g. red imported fire ant & browsing ant), giant African snail, brown marmorated stink bug, fish pathogens, exotic myrtle rust, and exotic bees and bee pests such as varroa mite.**
- **Collaboration with the Centre for Invasive Species Solutions, the EcoDNA laboratory at the University of Canberra, universities, CSIRO and other specialised eDNA laboratories.**

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