

Published: 8 August 2011

Genetics identifies new miniature frog in Pilbara

A new miniature frog or 'toadlet' species has been discovered in the resource-rich Pilbara region of Western Australia – an area previously thought to support very few amphibians.



Credit: Marion Anstis

Researchers from the Australian National University (ANU), the Western Australian Museum and the University of Western Australia used genetic techniques to estimate the number of frog species in the Pilbara.

Ms Renee Catullo, a PhD student from the ANU's Research School of Biology, says the findings included a species previously unknown to science.

'The deserts of Australia are often believed to be empty regions with few species. However, genetic work on reptiles and amphibians has shown that there are large numbers of species in what looks like a barren landscape to most people,' says Ms Catullo.

'We have also identified a new species of burrowing frog called the Pilbara toadlet (*Uperoleia saxatilis*), which is just over two centimetres long.

'Little is known about this small, brown creature, but it has been found following cyclonic rains and occurs in rocky gorges and creeks of the region. The good news is that it appears to be secure from a conservation perspective.

'Toadlets are native to Australia and this new species brings the total number to 27, the second largest group of frog species in the country.'

The discovery was part of a research project funded by the Herman Slade Foundation, which uses genetic techniques to try and understand the true number of species of toadlets.

'Genetic techniques are increasingly being used to identify new species across Australia that use calls, pheromones, or behaviour to tell each other apart,' Ms Catullo says.

In these cases, genetic techniques can tell scientists which groups are interbreeding, even when it's hard to visually differentiate them.

'This new breakthrough emphasises the need for further research into understanding the biodiversity of Australian deserts.'

From **ECOS** online <http://www.ecosmagazine.com/?paper=EC11007>