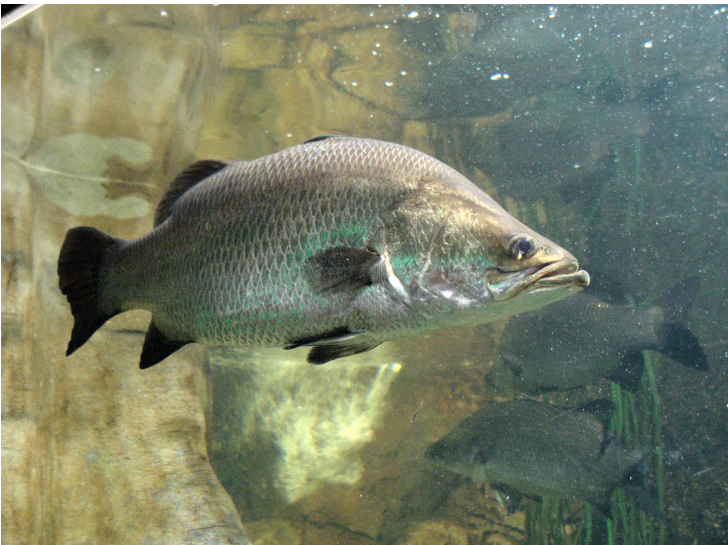


A single test picks up all strains of deadly fish virus threatens Australian fish

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A third variant of the deadly ISKN fish virus can now be identified in a new test developed by scientists at the University of Sydney and the University of Florida.

Scientists at the University of Sydney in Australia and the University of Florida in the USA have developed a new genetic test for the infectious spleen and kidney necrosis virus (ISKNV) that is deadly in fish, affecting aquaculture and ornamental fish varieties worldwide.

ISKNV has three known variants but validated tests to identify the virus only pick up two of these variants.

New research published in PLOS One demonstrates a single test for all three genomic variants of the virus, which can kill 50 to 100 per cent of fish infected.

The third variant â?? known as TRBIV â?? is an emerging pathogen causing fish deaths in barramundi farms in Southeast Asia. While the disease caused by the virus is reportable to the World Organisation for Animal Health, TRBIV is not included in the WOAHP testing requirements.

Joy Becker, Associate Professor from the School of Life and Environmental Sciences at the University of Sydney is a corresponding author of the paper. She said, "The emerging TRBIV variant is a risk to the Australian barramundi industry.

"Our new diagnostic test is the most advanced in addressing WOA requirements for test validation. It can detect all three variants of the virus with very high sensitivity and specificity.

"Once validated, we expect this diagnostic test will help keep this exotic virus out of Australia."

While ISKNV has not been detected in wild fish stocks in Australia, it is regularly detected in ornamental fish in quarantine at the international border and in retail pet shops, according to the Australian Department of Agriculture.