

Media Release:

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Half Fish, Half Lizard, Predator of the Sea

A Northern Territory Government Marine Biodiversity Scientist has been awarded a prestigious Australian Academy of Sciences travel award to visit Taiwan early next year to research lizardfishes (genus *Saurida*).

Dr Barry Russell, from the Department of Natural Resources, Environment and The Arts, Marine Biodiversity Group, said it's one of the more unusual looking creatures of the sea.

"Lizardfish have wide mouths that are completely filled with sharp, needle-like teeth and even their tongues have teeth on them," Dr Russell said.

"They are voracious ambush predators and play a key role in the food web; they sit on the bottom of the sea and wait for their prey, such as prawns and smaller fish, to come to them before grabbing it in its sharp jaws and then they in turn get eaten by larger fishes."

Dr Russell said the proposed research project will establish scientific links and collaboration between researchers in Taiwan and Northern Australia.

"Lizardfishes are found throughout the Indo-Pacific area in shallow seas and the deep sea, on soft bottoms and reef areas," Dr Russell said.

"In Australia they are predominately found in the north and of the sixty-odd species found worldwide there are about ten species in the Northern Territory."

Dr Russell will undertake the collaborative taxonomic research with Taiwanese scientists at the Research Centre for Biodiversity, Academia Sinica, Taipei.

"The Research Centre has an international reputation as a regional centre for research on biodiversity, systematics, evolution, ecology and conservation," Dr Russell said.

"The Centre also has excellent facilities for undertaking biomolecular research on fish."

Dr Russell said the biomolecular research will involve extracting DNA from tissue samples and comparing the samples to determine if they are genetically distinct, then using this information to distinguish different species.

"Species of lizardfish are notoriously difficult to identify because most of them are similarly coloured and have similar features," Dr Russell said.

"The research in Taiwan will not only build and strengthen scientific links between the Territory and Taiwanese research but also allow a comparison of South East Asian and Australian species.

Through an ability to identify the species we can gain a better understanding of the relationships and ecology of the lizardfish species throughout our region.

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Media Note – for more information contact Dr Barry Russell on 8920 9241

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