

Hospital care coordinator Venus Tan, 49, spotted the two mandarin dragonets at One°15 Marina on Sentosa while on a leisure dive there at about 5.30pm on April 22. PHOTO: COURTESY OF VENUS TAN



Mandarin fish spotted in S'pore waters for first time

Colourful creatures known for mating dances likely released from aquarium trade

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A pair of mandarin fish – colourful reef fish known among scuba divers for their mating dances in the moonlight – has been spotted for the first time in Singapore.

The species is not known to be found naturally in the Republic, although they do occur in nearby waters, such as in the Philippines, and Java in Indonesia.

Fish scientists *The Straits Times* spoke to yesterday think it is likely that the pair was released from the aquarium trade.

Hospital care coordinator Venus

Tan, 49, spotted the two mandarin dragonets (*Synchiropus splendidus*) at One°15 Marina on Sentosa while on a leisure dive there at about 5.30pm on April 22.

Ms Tan said: “I had not used my camera for some time, so I was hovering near some stones on the seabed, trying to adjust the settings, when I saw a dark shape moving in and out of the rubble.”

Visibility that day was not great, Ms Tan said.

She slowly drifted closer to the rock pile, trying not to spook the fish, and shone a faint beam of light from her dive torch on to the rubble.

That was when she saw flashes of the mandarin fish’s signature

colouring – wavy patterns of bright blue and orange.

“My first thought was: Isn’t that a mandarin fish? I quickly set up my camera and got a few shots,” Ms Tan said.

Ms Tan’s sighting was confirmed by National University of Singapore (NUS) fish scientist Zeehan Jaafar. The observation was published as a biodiversity record in the scientific journal *Nature* in Singapore on May 31.

Dr Jaafar, who suspects that the two fish were released from the aquarium trade, said the fish are assumed to be a breeding pair.

Asked if the two could eventually start a population in Singapore, she said: “They may lay eggs and the eggs may be fertilised.

“But the larvae are planktonic – free-floating – so they would have to return to the area when they become juveniles.”

Fish from the aquarium trade, when released into natural environments where they are not usually found, can disrupt ecosystems.

In the western North Atlantic, populations of introduced lionfish – a predatory species native to the Indo-Pacific region – have swelled dramatically, and are harming native coral reef ecosystems in the Atlantic, Gulf of Mexico, and the Caribbean Sea. Adult lionfish eat other fish and have very few predators outside of their home range.

Researchers have discovered that a single lionfish residing on a coral reef can reduce recruitment of native reef fish by 79 per cent.

Dr Tan Heok Hui, a fish scientist at the NUS Lee Kong Chian Natural History Museum, said it was unlikely that the mandarin fish could have such an impact on local waters, as they may end up as food for local resident predators instead.

Still, he cautioned that introducing non-native species into Singapore’s marine environment could have other harmful effects.

Dr Tan said: “There are far more impacts than one can see immediately. There is also the potential spread of disease. If they mate with other closely related species in Singapore waters, there is also the possibility of hybridisation and weakening of the local gene pool.”

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