

# Stunning new species of sea slugs discovered

April 5 2018, by David Stacey

---



Credit: University of Western Australia

A small team of scientists at The University of Western Australia, the Western Australian Museum, and the California Academy of Sciences has identified 18 new species of sea slugs, including some only found in WA.

Chromodoris nudibranchs or sea slugs occur across the Indo-Pacific and are very brightly coloured, with their [colour patterns](#) traditionally used to differentiate between species.

However, new research from Kara Layton and Dr. Nerida Wilson from UWA and the Western Australian Museum and Dr. Terry Gosliner from the California Academy of Sciences suggests colour patterns are not reliable indicators for species identification, with some species actually

found to mimic other already recognised species.

Lead author Kara Layton, a Ph.D. candidate with UWA's Centre for Evolutionary Biology and WA Museum Research Associate, said that flexible colour patterns in these sea slugs were actually masking [new species](#) and the true distribution of many species.

Ms Layton said molecular data has allowed the researchers to gain a much better understanding of the diversity of *Chromodoris nudibranchs* in the Indo-Pacific.

"Sometimes colour patterns are strikingly similar between different species, but then completely different within the same species, which causes confusion when it comes to [species identification](#)," she said.

"We found the first evidence for mimicry in *Chromodoris*, where two species are copying the colour [pattern](#) of other locally abundant species.

"One mimic (*Chromodoris colemani*) occurs in Western Australia and appears almost identical to the endemic species *Chromodoris westraliensis*."

The researchers also documented range expansions in five other species, some of which include the first known records of these species in Western Australia. Two undescribed [species](#) were also recovered from Western Australia, including one from Rottnest Island and the Montebello Islands and another from Port Hedland.

Provided by University of Western Australia

Citation: Stunning new species of sea slugs discovered (2018, April 5) retrieved 26 April 2024 from <https://phys.org/news/2018-04-stunning-species-sea-slugs.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.