



An enigmatic snapper parasite (Trematoda: Cryptogonimidae) found in an unexpected host.

Helen Armstrong (Murdoch University); Storm Martin (Murdoch University); Alan Lymbery (Harry Butler Institute, Murdoch University); Scott Cutmore (Queensland Museum).

The Cryptogonimidae are a group within the Trematoda that have a three host life-cycle: snail, fish, fish. The previously known final fish hosts of cryptogonimids have been larger reef associated fish such as snapper (Lutjanids), likely due to the intermediate stage relying on its host fish being eaten by a larger fish. During a field expedition to Ningaloo Reef, I discovered a cryptogonimid infection in the thick-lipped wrasses, *Hemigymnus fasciatus* and *H. melapterus*. Most wrasses (*Labridae*) do not prey substantially on fishes and so are atypical hosts for cryptogonimids and this worm is apparently absent in Queensland where these fishes have been well-examined. I have targeted multiple single marker regions, (ITS2, 28S and 18S and cox1 mtDNA) to identify the worm species and gut contents analysis to identify the host fish diet, I aim to provide taxonomic descriptions of these cryptogonimids. This study would be the first biogeographic comparison of cryptogonimids from Australia.

Helen Armstrong: helen.armstrong18@gmail.com