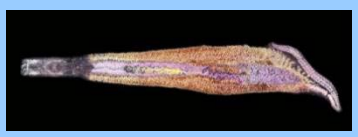
Parasites of Samson fish (*Seriola hippos*)

Name: *Benedenia seriolae,* flatworm parasites commonly called 'skin fluke'
Microhabitat: Live on the surface of the fish and feed on skin cells
Appearance: Transparent when alive, but turn white when they die (scale = 1mm)
Pathology: Heavy infections cause irritability, anorexia and mortality in *Seriola* aquaculture
Curiosity: Their circular attachment organ acts like a suction cap so they stick on the fish!

Name: *Caligus* spp., copepod crustaceans commonly called 'sea-lice' or 'skin crawlers'
Microhabitat: Live on the surface of the fish including the skin and gills
Appearance: Often with elongate paired eggs strings, scuttling around on the fish skin
Pathology: Can cause irritation and anaemia in heavy infections
Curiosity: Samson fish tend to get a lot of caligids on their skin and they can be easily seen in photos in fishing magazines!



Name: *Zeuxapta seriolae,* flatworm parasites commonly called 'gill fluke'
Microhabitat: Live on the gills and feed on blood
Appearance: Brown, thin worms that look like blobs on gills when not immersed in water
Pathology: Infections in *Seriola* farms can cause emaciation, lethargy and lethal anaemia
Curiosity: You find out how old they are by counting the clamps on the attachment organ!

Name: *Paradeontacylix* spp., digenean flukes commonly called 'blood fluke'
Microhabitat: Live in the circulatory system, including the heart and gills
Appearance: Adult worms are ~3mm long, eggs can cause white lesions in the gills
Pathology: Eggs in the gills can impede blood flow, mass mortality in *Seriola* farms
Curiosity: Samson fish are infected by multiple species of blood fluke

Photo kindly supplied by C. Whipps

Name: *Kudoa* sp. are myxosporeans, which can cause 'milky flesh' or 'soft flesh
Microhabitat: Live in the muscle tissue
Appearance: Microscopic parasites that can only be observed under high power scopes
Pathology: In heavy infections they can cause musculature liquefaction post-harvest
Curiosity: It is thought that placing fish on ice may prevent flesh turning 'milky'
*NB: This photo is of *Kudoa thyrsites* infection in Atlantic mackerel (*Scomber scombrus*)

Further contact:

Kate S. Hutson
Marine Parasitology
School of Earth & Environmental Sciences
DX 650 418 Darling Building
The University of Adelaide
Adelaide SA 5005
P: +61 4 8303 5282
F: +61 4 8303 4364
E: kate.hutson@adelaide.edu.au

A research initiative supported by:

Australian Biological Resources Study

Fisheries Research and Development Corporation

The University of Adelaide