

Parasites of hapuku and seabass (*Polyprion oxygenios* and *P. americanus*)

Parasite species with potential to cause fish pathology

Polyprionidae: candidate species for aquaculture

There is considerable global interest in the development of *Polyprion* spp. for aquaculture. Seabass (*Polyprion americanus*) is highly prized throughout Europe, with good flesh quality and a high market price. Increasing fishing pressure on deep-water species has reduced catches in commercial fisheries. A premium market position and limited supply of wild fish has created interest in the aquaculture sector. Currently hapuku are being investigated for their suitability for culture in New Zealand. We managed to get our hands on two *Polyprion* species in southern Australian waters with the assistance of the Port MacDonnell Annual Tuna and Sportsfishing Tournament. Here's what we found...



Name: *Calicobenedenia polyprioni*, a capsalid monogenean or 'skin fluke'

Microhabitat: Live on the fins

Appearance: Transparent when alive, opaque when dead (photo of a stained specimen)

Pathology: Unknown. Other *Benedenia* species infections cause anorexia and mortality

Curiosity: This is the first record of this parasite in Australian waters



Name: *Allocotylophora polyprionum*, a monogenean or 'gill fluke'

Microhabitat: Gills

Appearance: Long brown worms

Pathology: Unknown. Other gill fluke species can cause emaciation and anaemia

Curiosity: Possess a symmetrical attachment organ (haptor) with four clamps each side



Name: *Lepeophtheirus polyprioni*, a copepod crustacean or 'sea-louse'

Microhabitat: Body surface

Appearance: Females with elongate paired eggs strings ~5mm long

Pathology: Unknown. Other *Lepeophtheirus* species cause abrasion-like lesions

Curiosity: Female sea-lice are more commonly found than male sea-lice

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Prepared by Kate S. Hutson June 2010