

Description of pathogens - fish

Pathogen	Symptoms	Evidence	Investigation interval
Mycobacteria sp.	Bacterium infects spleen, liver (shrunken), kidney, intestinal loops, abdominal ascites, white, grey granuloma in almost all organs, emaciation, pop eyes, dermatitis, spinal curvature	PCR, histology (sagittal section of whole fish)	3 month
Pseudoloma neurophilia (Microsporidia)	emaciation, spinal curvature	histology brain, spinal cord	as required
Ichthyophthirius multifiliis	Ichthyophthiriose, parasite nests under fish epidermis = white points on skin, epithelium with severe epithelial hyperplasia	histology of skin	as required
Myxidium sp./Zschokkella sp. (Myxozoa)	The parasite appears in mesonephros and sometimes in channels and lumen of renal tubuli	histology of kidney	as required
Piscinoodinium sp.	The parasite appears at gills and skin. In the gills, this often leads to an epithelial hypertrophy, a focal and diffuse hyperplasia and oedema.	histology of gills and skin	as required