

HEALTH MANAGEMENT

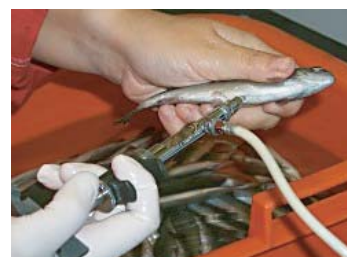
Fish health management is a term used to describe management practices that are designed to prevent fish disease. Successful fish health management begins with prevention of disease rather than treatment. Sub-optimal water quality, poor nutrition, or immune system suppression generally associated with stressful conditions allow these potential pathogens to cause disease. Sedating fish with AQUI-S® during health management handling procedures such as vaccinations, bath treatment and health checks will maximise the ability of fish to withstand re-infection by ensuring the immune system is not compromised. It will also prevent mechanical injuries from the handling process and help fish recover faster.

HANDLING FISH USING AQUI-S®

It is usually the process of capturing the animal which causes a stress response. In order to maximise the benefit of using AQUI-S® we recommend that fish are carefully crowded using low stress handling techniques and then sedated. Once fish are handleable, showing no response to being removed from the water, handling procedures such as vaccinations, bath treatments and health monitoring can be conducted.

VACCINATIONS

Vaccines are various preparations of antigens derived from specific pathogenic organisms that are rendered non-pathogenic. They stimulate the immune system and increase fish resistance to disease from subsequent infection by the specific pathogen. Fish are commonly vaccinated either by immersion in a vaccine for a short period of time (generally 30 seconds to 2 minutes) or they are injected, usually intraperitoneally (in the abdominal cavity). Sedating fish with AQUI-S® before these handling procedures has been shown to improve fish survivability after handling.



BATH TREATMENT

Some bath treatments use compounds that are effective at removing a particular infection but may also be toxic to the fish such as hydrogen peroxide and formalin. These treatments are stressful to the fish which means they have an increased likelihood of causing negative repercussions with regard to growth and immune response. Sedating fish with AQUI-S® during the bath treatment to a level which ensures they maintain their swimming motion yet are unaware of the treatment compound in the water is ideal.

HEALTH MONITORING

Routine monitoring of fish for bacterial, viral and parasitic disease is critical for the management of fish health. Sampling fish for disease symptoms involves removing a sub sample from the enclosure. Fish are transferred to a container with AQUI-S®. After a few minutes fish should be in a handleable state of anaesthesia and suitable for inspection.



A sedated yellowtail kingfish with a heavy monogenean skin parasite infestation



Yellowtail kingfish being sedated with AQUI-S® prior to inspection. infestation