

Additional Q&A for Freshwater Science: Fungal-Like Disease Detection in Aquaculture Operations

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1. Any medications that are commonly used in the field for treatment/prevention of these fungal outbreaks? Have we seen any antimicrobial resistance to these medication trends?

Yes, if you would like the eco-friendly treatment, you can use hydrogen peroxide or peracetic acid (PAA). A non-friendly chemical is Triclosan. I know copper sulphate has been used but it is not approved by the USDA.

Reducing mortality associated with opportunistic infections in Atlantic salmon *Salmo salar* fry using hydrogen peroxide and peracetic acid. repository.library.noaa.gov/view/noaa/37442

Ghosh S. 2019. Molecular detection and quantification of the fish pathogen *Saprolegnia* spp. using qPCR and loop mediated isothermal amplification, page 65-71. etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=bgsu1573814311236554&disposition=inline

Peracetic acid aquaculturealliance.org/advocate/peracetic-acid-products-expand-sanitizing-organic-water-treatment-options

Peracetic acid ars.usda.gov/research/publications/publication/?seqNo115=369344

Triclosan frontiersin.org/articles/10.3389/fmicb.2020.571093/full

I have not seen any work regarding antimicrobial resistance in *Saprolegnia*. So, I don't know the answer to this, I am sorry.

2. Are we at a point where DETECTR tests could be sent out as opposed to sent in for a one-step test? Similar to COVID tests for example?

We are not there yet, hopefully soon. I am one step closer to get the “send out” kit similar to COVID test for on-site detection.



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