

Experience with AQUAFLO[®] (florfenicol) type A medicated article in North Carolina Trout

By Skip Thompson | AREA SPECIALIZED AGENT - AQUACULTURE
NC Cooperative Extension • NC State University



INTRODUCTION

Coldwater disease has been a growing problem in North Carolina trout production and tends to be seen in trout less than 5 to 6 inches. In the past, mortality escalated rapidly and producers lost anywhere from 5% to 20% of the fish and in some cases as high as 50% to 60%.

Caused by the pathogen *Flavobacterium psychrophilum*, the disease had also led to considerable size variation, slower growth and longer times to market by 1 or 2 months, despite treatments with oxytetracycline.

AQUAFLO[®] (florfenicol), an in-feed antibiotic, is approved for the control of mortality in freshwater-reared salmonids with coldwater disease. This bulletin summarizes the experience with AQUAFLO on 12 North Carolina farms. In total, 28 treatments were administered.

RESULTS

- As in previous studies,¹ mortality in fish treated with AQUAFLO declined to acceptable levels within 4 to 5 days of initiating the 10-day treatment (figures 1 and 2).
- In the North Carolina experience,² fish treated with AQUAFLO did not have a recurrence of coldwater disease.
- AQUAFLO potentially saved up to 600,000 to 700,000 trout in North Carolina in 2007 with an estimated value of \$245,000 (~15% of total North Carolina production). On one medium-sized trout farm, losses due to coldwater disease after the use of AQUAFLO were only a few hundred fish – down from 70,000 fingerlings (28% of the producer's production) the previous year, before AQUAFLO was available.²

SUMMARY

- Coldwater disease has been a growing problem in North Carolina trout, resulting in mortality, size variation and slower growth.
- Trout on 12 North Carolina farms were treated for coldwater disease with AQUAFLO, an in-feed antibiotic.
- After one AQUAFLO treatment, mortality declined to acceptable levels and coldwater disease did not recur in treated raceways.

AQUAFLO[®]

(florfenicol) TYPE A MEDICATED ARTICLE

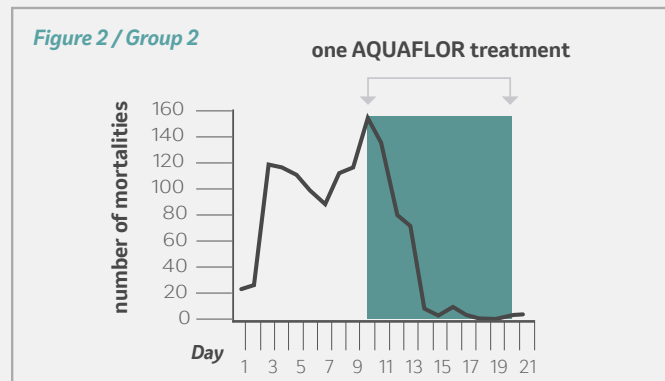
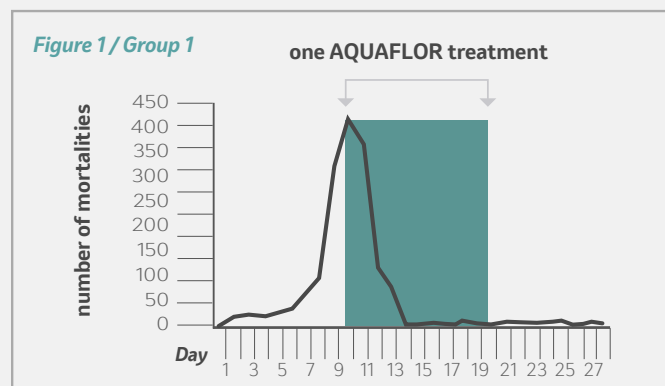
DISCUSSION

- ➔ Even though mortality is often observed to decline within just a few days after initiating AQUAFLO[®] treatment, AQUAFLO[®] must be used for 10 consecutive days to provide full therapeutic benefit.
- ➔ Trials have shown that fish consume feed medicated with AQUAFLO[®] at the same rate as unmedicated feed.¹
- ➔ Trials have also shown that fish continue to gain weight throughout the treatment period.¹

- **Representative results from one farm show mortality before and after one treatment with AQUAFLO[®], administered days 10 through 19.**

Each group consisted of fish in multiple raceways. Day 1 represents 10 days before initiation of treatment.

- **Even though mortality is often observed to decline within just a few days after initiating AQUAFLO[®] treatment, AQUAFLO[®] must be used for 10 consecutive days to provide full therapeutic benefit.**



¹Target Animal Safety (TAS) Study on Florfenicol Administered in Feed to Rainbow Trout (*Oncorhynchus mykiss* Walbaum). (Study No. X00-241-01).
²Thompson, Skip. Efficacy of AQUAFLO[®] in North Carolina. United States Trout Farmers Association Mid-Year Meeting, Sept. 2007, Twin Falls, Idaho.



For more information go to aquaflo-usa.com or call 800.521.5767.

CAUTION: Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian. Salmonid feeds containing AQUAFLO[®] (florfenicol) must be withdrawn 15 days prior to slaughter. The effects of AQUAFLO[®] on reproductive performance have not been determined. See product label for more information.