EFFICACY OF TERRAMYCIN® 200 FOR FISH (OXYTETRACYCLINE DIHYDRATE) FOR THE SKELETAL MARKING OF RAINBOW TROUT

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In 2009, we conducted a study to evaluate the efficacy of Terramycin® 200 for Fish (TM200; 44.1% active oxytetracycline dihydrate) administered in feed at a target dosage of 3.75 g/100 lbs fish/day for 10 days for the skeletal (fluorescent) marking of fingerling rainbow trout (Oncorhynchus mykiss). The in-life phase of the study was conducted indoors at a mean water temperature of 10.3 °C and comprised a 1-day acclimation period (no feed administered), 10-day treatment period (TM200-treated feed fed to six treated tanks; nontreated control feed fed to three control tanks), and 22-day post-treatment period (control feed administered to all tanks). At the end of the posttreatment period, all fish were collected and individually frozen. One month later, all fish were thawed, and two vertebrae were extracted from each fish. Each vertebra extracted was cleaned and then evaluated under ultraviolet light and a dissecting scope for the presence and quality of a fluorescent mark. All vertebrae extracted from TM200-treated fish (n = 120) had clearly visible marks, whereas no vertebrae extracted from control fish (n = 60) were marked. Consequently, in this study, TM200 administered in feed at a target dosage of 3.75 g OTC/100 lbs fish/d for 10 day was effective for the skeletal (fluorescent) marking of fingerling rainbow trout. Results will be used to support a U.S. approval of an expanded skeletal marking claim for TM200.