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RESEARCH REPORTS

SUSTAINABLE AQUACULTURE FOR A SECURE FUTURE

Title: Masculinization of Nile tilapia with steroids: Alternate treatments and environmental effects

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Abstract: Steroid-treated food is widely used to masculinize tilapia. We have previously shown that short-term immersion in steroids can also masculinize Nile tilapia. In the following study, we determined that a single immersion of tilapia fry in Trenbolone Acetate for 3 hr on 12, 13, or 14 days post-fertilization (dpf) or multiple immersions in combinations of days between 12 and 15 dpf, can result in masculinization. However, effectiveness of immersion treatment varied between experiments, suggesting that sensitivity to treatment may differ between individual broods. We also found that the use of 17α -methyltestosterone (MT)-treated food to masculinize Nile tilapia results in accumulation of MT in sediments even after cessation of treatment.

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