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RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Production of "Chame" (*Dormitator latifrons*, Pisces: Eleotridae) larvae using GnRH α and LHRH α

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Abstract: The Pacific fat sleeper is a potential species for aquaculture in Latin American countries. Nevertheless, production depends on wild-caught juveniles, thus needing hatchery produced larvae. **Objective:** the purpose of this study was to determine the ideal conditions for viable gamete release and larvae laboratory production. **Methods:** a total of 16 mature male and 16 female fish were allocated to one of four groups (n=4) that were injected with either saline solution, Desgly10-Ala6 LHRH α , salmon GnRH α + domperidone, or implanted with salmon GnRH α . **Results:** spermiation was observed in all treatments. Spawning rates were 100% at 24 and 48 h for the GnRH α implanted group, 25% for the LHRH α group, and 0% for the salmon GnRH α + domperidone group (48-72 h post injection). **Conclusion:** GnRH α and LHRH α are a successful tool for chame induced reproduction. A gross morphological description of oocytes, sperm quality, and first stages of larval development is included.

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