

INSTITUTO POLITÉCNICO NACIONAL CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS



Repositorio Institucional

Alcántara-Vázquez, J.P., **S. Dumas**, E. Puente-Carreón, H.S. Pliego-Cortés & **R. Peña Martínez** (2008). Induction of triploidy in spotted sand bass (*Paralabrax maculatofasciatus* Steindachner, 1868) by cold shock. Aquaculture Research, 39(1): 59-63. DOI: 10.1111/j.1365-2109.2007.01869.x

Induction of triploidy in spotted sand bass (*Paralabrax maculatofasciatus* Steindachner, 1868) by cold shock

Juan Pablo Alcántara-Vázquez, Silvie Dumas, Eleonora Puente-Carreón, Hugo Skyol Pliego-Cortés & Renato
Peña Martínez

Conditions for the induction of triploidy with cold shock of fertilized eggs of the spotted sand bass *Paralabrax maculatofasciatus* (Steindachner) were investigated. Different temperatures (12, 8 and 4 °C), timing of cold shock application (5, 10 and 15min after fertilization) and duration of the shock (5,10,15 and 20min) were tested. Triploidy was determined using flow cytometry at 12 h after larvae hatched. Triploids were produced only when the cold shock treatment was applied 5 min after fertilization. No signifiant difference was observed in the percentage of triploidy betweentemperature and the shock duration. At 8 and 4 °C, 100% triploidy was obtained at different durations of cold shock. Survivalwas significantly lower at12 or 4 °C thanat 8 °C. No significant difference was observed for shock duration at the temperature of 8 or 12 °C; however, at 4 °C, survival was signi¢cantly lower at longer durations. We recommend induction of triploidy by applying cold shock at 8 °C for a duration of 15-20 min starting at 5 min after fertilization, in the spotted sand bass

Palabras clave: triploidy, Spotted sand bass, cold shock

Para obtener copia del documento contacta con el autor (sdumas@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).