Effect of microparticulate diets on growth and survival of spotted sand bass larvae, *Paralabrax maculatofasciatus*, at two early weaning times

Roberto Civera-Cerecedo, Carlos A. Alvarez-González, Rubén E. García Gómez, Víctor Carrasco Chávez, José Luis Ortiz Galindo, Martín Oscar Rosales Velázquez, Tanos Grayeb del Alamo & Francisco J. Moyano-López

Early weaning in spotted sand bass larvae, *Paralabrax maculatofasciatus*, was evaluated, testing a combination of two weaning times, 17 and 22 d after hatching (d.a.h.), and three different microparticulate diets. Protein in diets was mainly from sardine meal and from 15% squid meal, beef blood meal, or fish protein hydrolysate. Anatomical (standard length), histological (gut development), and biochemical (highly unsaturated fatty acids) parameters were measured in larvae, as well as survival and resistance to a stress test measured 40 d.a.h. For larvae weaned at 17 d.a.h., the best growth and survival were obtained with diets containing fish protein hydrolysates; for larvae weaned at 22 d.a.h., best results were obtained with squid meal and fish protein hydrolysate. Growth and survival were significantly lower when using beef blood meal in both weaning treatments. The best relative and total survival were for larvae weaned at 22 d.a.h. After the resistance test, 100% survival occurred in larvae fed on any microparticulate diet and either weaning treatment. No significant differences in arachidonic acid, eicosapentaenoic acid, or docosahexaenoic acid concentrations in fish fed on any diet occurred. Results suggest that weaning at 22 d.a.h. with diets containing fish protein hydrolysate or squid meal is preferred by this species.

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