



Alvarez-González, C.A., F.J. Moyano-López, R. Civera-Cerecedo, V. Carrasco Chávez, J.L. Ortiz Galindo, H. Nolasco-Soria, D. Tovar-Ramírez & S. Dumas (2010). Development of digestive enzyme activity in larvae of spotted sand bass *Paralabrax maculatofasciatus*. II. Electrophoretic análisis. Fish Physiology and Biochemistry, 36(1): 29-37. DOI: 10.1007/s10695-008-9276-4

Development of digestive enzyme activity in larvae of spotted sand bass *Paralabrax maculatofasciatus*. II. Electrophoretic análisis

C.A. Alvarez-González, F.J. Moyano-López, R. Civera-Cerecedo, Victor Carrasco Chávez, José Luis Ortiz Galindo, H. Nolasco-Soria, D. Tovar-Ramírez & Silvie Dumas

The activities of several digestive enzymes during larval development of the spotted sand bass (*Paralabrax maculatofasciatus*) were evaluated using electrophoretic techniques. The results show the presence of three isoforms of alkaline protease from day 2 after hatching (ah) and the early appearance of one pepsin-like band from day 12 ah onwards. In addition, two lipase bands first appeared on day 2 ah, and there was a change in the molecular weight of one band from day 15 ah onwards. Several α -amylase isoforms were observed from hatching up to day 5 ah. These results indicate that the important digestive enzymes develop rapidly in these larvae, supporting the possibility of early weaning at day 12 ah using artificial diets.

Palabras clave: Spotted sand bass, Ontogeny, α -amylase, Electrophoresis, Lipase, Proteases, Zym

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