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**Title:** **Development of digestive enzymes in larvae of Mayan cichlid *Cichlasoma urophthalmus***

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**Abstract:** The development of digestive enzymes during the early ontogeny of the Mayan cichlid (*Cichlasoma urophthalmus*) was studied using biochemical and electrophoretic techniques. From yolk absorption (6 days after hatching: dah), larvae were fed *Artemia* nauplii until 15 dah, afterward they were fed with commercial microparticulated trout food (45% protein and 16% lipids) from 16 to 60 dah. Several samples were collected including yolk-sac larvae (considered as day 1 after hatching) and specimens up to 60 dah. Most digestive enzymes were present from yolk absorption (5–6 dah), except for the specific acid proteases activity (pepsinlike), which increase rapidly from 8 dah up to 20 dah. Three alkaline proteases isoforms (24.0, 24.8, 84.5 kDa) were detected at 8 dah using SDS–PAGE zymogram, corresponding to trypsin, chymotrypsin and probably leucine aminopeptidase enzymes, and only one isoform was detected (relative electromobility, Rf = 0.54) for acid proteases (pepsin-like) from 3 dah onwards using PAGE zymogram. We concluded that *C. urophthamus* is a precocious fish with a great capacity to digest all kinds of food items, including artificial diets provided from 13 dah.

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