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草鱼同工酶发育遗传学研究 II. 早期发育过程中的同工酶分析

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摘要 采用淀粉凝胶电泳技术研究了草鱼早期发育过程中（受精后。--200小时）6种同工酶系绕(LDH, MDH, GDH, ADH, IDH, EST）的表达谱式。除了ADH以外，其余5种同工酶系统均具有明显的发育变化谱式。根据早期发育过程中同工酶的变化谱式及其组织分布，草鱼的同工酶可分为三大类型：(1)在未受精卵及早期发育过程中一直存在，并常有较广泛的组织分布；(2)未受精卵及早期发育过程中均不存在，一般仅分布于少数几种组织中；(3）未受精卵及胚胎发育早期不存在，直到早期发育过程中某一特定时期才开始出现。

关键词 同工酶沌泳；个体发育谱式；草鱼

分类号

Study on the Developmental Genetics of isozymes in Grass Carp （Ctenopharyngodon idellus）Ii. Analysis of Isozymes During the Early Development of Grass Carp

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Abstract

In the present paper, the patterns of expression of six isozymic systems, lactate dehydrogenase (LDH)，malate dehydrogenase（MDH)，glutamate dehydrogenase (GDH)，alcohol dehydrogenase 『(ADH), isocitrate dehydrogenase（IDH) and esterase (EST)，were investigated in the early developmental stages of grass carp by starch gel electrophoresis. All six isozvmic systems except ADH exhibit rich patterns of ontogenetic change. The isozymes detected in grass carp could be divided into three groups according to their ontogenetic electrophoretograms and tissue distributions. The first group includes those isozymes which present in unfertilized eggs and all stages of early development and most of them exhibit extensive tissue distribution. The scond includes those isozymes which are absent in unfertilized eggs and the early developmental stages, and mostly appear only in a few differentiated tissues. The third includes those isozymes which are absent in unfertilized eggs, and early embryogenetic stages but are first detected in certain specific stages of early development.

Key words Isozymes Electropbotesis；Ontogenetic Patterns Grass Carp

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