

三倍体草鲂杂种及其双亲的红细胞（核）大小和DNA含量¹⁾

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 采用血液涂片、Wright和Giemsa染色、CMSD微测目镜数显仪测量草鱼、三角鲂及其杂交一代（简称草鲂杂种）的红细胞和核的大小。草m杂种红细胞和核的面积明显增大，其中比草鱼的红细胞和核都增大1.3倍，比三角鲂的红细胞和核分别增大1.3和1.5倍。用Fuigen染色，MP V-II型显微分光光度计测定草鲂杂种及其双亲的红细胞DNA含量，草鲂杂种的红细胞DNA相对含量分别是草鱼和三角鲂的1.57和1.27倍，也表现出增大的现象，作者认为草鲂杂种是一个通过杂交产生的异源多倍体。另外，本文还就鱼类多倍化形成的途径及其应用作了探讨。

关键词 [草鲂](#)；[三角鲂](#)；[红细胞（核）测量](#)；[DNA含量](#)；[三倍体](#)

分类号

On the Erythrocyte Nucleus Size and DNA Contents of Ctenopharyngodon idellus, Megalobrama terminalis and F₁ Hybrid

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Abstract

The size of erythrocyte and nucleus of Ctenopharyngodon idellus, Megalobrama terminalis and their F₁ hybrid were measured by dyeing in Wright. Those of the F₁ hybrid increase obviously. The size of erythrocyte and nucleus of the F₁ hybrid increase 2.3 times than Ctenopharyngodon idellus and increase 2.3 times and 2.5 times separately than Megalobrama terminalis. The relative DNA content of erythrocyte of the F₁ hybrid is 1.57 times that of Ctenopharyngodon idellus and is 1.27 times that of Megalobrama terminalis, measured with MPV11 microspectrophotometer. We feel that the F₁ hybrid is a heterogenetic polyploid by hybridize, maybe the mechanism formed polyploid is the endomitosis. In addition, the author studied the chromosomes. It is found that the F₁ hybrid is a triploid fish and the amount of chromosomes is seventy-two but the parents both are diploid fish and the amount of chromosomes are forty-eight. It is shown that the DNA content is redoubled and the nucleus and cell area also increased in proportion to it with the polyploidy occurring or genome repeating.

Key words [Ctenopharyngodon idellus](#)；[Megalobrama terminalis](#) [Erythrocyte measure](#) [DNA content](#) [Triploid](#)

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