应用生态学报 2006 17 (08): 1517-1520 ISSN: 1001-9332 CN: 21-1253/Q

研究报告

养殖密度对史氏鲟消化率、摄食率和生长的影响

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收稿日期 2005-11-24 修回日期 2006-5-22 网络版发布日期 接受日期

摘要 以体重（43.90±1.75）g史氏鲟为研究对象，研究了0.525、1.171和2.138 kg·m^{-2} 3种养殖密度对史氏鲟幼鱼生长、摄食率和消化率的影响，实验时间为60 d.结果表明，养殖密度对史氏鲟的生长、摄食率和消化率具有显著影响.高养殖密度不利于史氏鲟的生长，低密度组中史氏鲟的特定生长率和日增重显著高于高密度组，食物转化率显著低于高密度组；特定生长率和日增重随养殖密度的降低而显著增高.低密度组、中密度组中史氏鲟的消化率无显著差异，但均显著高于高密度组.中密度组摄食率显著低于高密度组和低密度组，低密度组摄食率介于两者之间；食物转化率和消化率呈显著负相关，特定生长率与消化率呈显著正相关.

关键词 史氏鲟 养殖密度 消化率 摄食率

分类号

Effects of rearing density on juvenile *Acipenser schrenckii* digestibility, feeding rate and growth

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Abstract

A 60-day rearing experiment was conducted in this study. The initial weight of juvenile *Acipenser schrenckii* was 43.90 ± 1.75 g, and the initial rearing density was 0.525 (LSD), 1.171 (MSD), and 2.138 (HSD) kg·m^{-2}, respectively. The results showed that with increasing rearing density, the specific growth rate (SGR) and daily weight gain (DWG) of juvenile *A. schrenckii* were significantly decreased, while net yield (NY) was increased. The digestibility was significantly higher in LSD and MSD than in HSD, while that in LSD and MSD was nearly the same. The feeding rate in MSD was significantly lower than that in HSD, but slimly higher than that in LSD. There was a significant negative linear correlation between food conversion ratio (FCR) and digestibility, and a significant positive linear correlation between SGR and digestibility.

Key words *Acipenser schrenckii* Rearing density Digestibility Feeding rate

DOI:

通讯作者