

# POPULATION DYNAMICS OF TIGER HILLSTREAM LOACH *Sewellia lineolata* AND SPOTTED BUTTERFLY LOACH *Sewellia albisuera* DISTRIBUTED IN THUA THIEN - HUE PROVINCE

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## Summary

The study was conducted on tiger hillstream loach *Sewellia lineolata* and spotted butterfly loach *Sewellia albisuera* distributed in Thua Thien - Hue province from jan to dec, 2017 to identify parameters of their population dynamics and growth. The fishes were collected monthly by using scoop nets and gill nets at waters in Nam Dong district, Thua Thien - Hue province. These fish sampling were weighed and measured length (mm) supporting to analyses of population dynamics. The results showed that both tiger hillstream loach and spotted butterfly loach appeared through year at study sites. The growth coefficient ( $K$ ) of tiger hillstream loach and spotted butterfly loach was 1.0/year, respectively. The total mortality rate ( $Z$ ) was 4.30/year for tiger hillstream loach and 4.04/year for spotted butterfly loach. The maximum length ( $L_{\infty}$ ) that fish can attain was 73.5mm for tiger hillstream loach and 90.3mm for spotted butterfly loach. The theoretical ages at a mean length of zero were 0.73 and 0.68 for tiger hillstream loach and spotted butterfly loach, respectively. Regression equations of length-weight relationship were  $W = 5 \times 10^{-5} L^{2.75}$  and  $W = 10^{-5} L^{3.10}$  for tiger hillstream loach and spotted butterfly loach, respectively, and correlation coefficient of length-weight was 0.92 and 0.3 for tiger hillstream loach and spotted butterfly loach, respectively.

**Keywords:** *Population dynamics, tiger hillstream loach, spotted butterfly loach, Sewellia lineolata, Sewellia albisuera.*