The age, growth and mortality characteristics of Pseudophoxinus fahrettini Freyhof and Özuluğ, 2009 caught from Aksu Stream - Köprüçay River (Isparta - Turkey) between March 2009 and February 2010 were determined. The use of scales for age estimation and age composition varied between age groups 0 and IV. Mean fork length, weight and condition factor values of the individuals were calculated as FL=14.14±0.21 cm, W=47.24±1.98 g and CI=1.25±0.04, respectively. Length-weight relationships and von Bertalanffy growth equations were estimated as \( W=0.03 \times FL^{2.61} \) \((r=0.962)\) and \( Lt=31.50[1-e^{-0.22(t+1.25)}] \) and \( Wt=384.25[1-e^{-0.22(t+1.25)}]^{2.61} \), respectively. Survival rate, total mortality coefficient, natural mortality coefficient, fishing mortality coefficient, annual mortality rate, expectation of fishing mortality, expectation of natural mortality, and the exploitation ratio were estimated as \( S=0.64 \text{ year}^{-1} \), \( Z=0.44 \text{ year}^{-1} \), \( M=0.34 \text{ year}^{-1} \), \( F=0.10 \text{ year}^{-1} \), \( A=0.36 \text{ year}^{-1} \), \( u=0.08 \text{ year}^{-1} \) and \( v=0.28 \text{ year}^{-1} \), respectively.

Key words: Pseudophoxinus fahrettini, endemic, age, growth, mortality, Aksu stream, Köprüçay River, Turkey