Length-weight relationships of the pond-cultured spotted barb (Puntius binotatus)

ABSTRACT

Length-weight relationship and relative condition factor of the pond-cultured spotted barb, Puntius binotatus were calculated to determine its growth and health conditions in order to evaluate the efficiency of present culture practice. The cultured fish were growing well in the ponds as they attained strong positive allometric growth as the b value was 3.356 (>3), and the linear relationship r2 value (0.96) was significant at level 0.01. Nevertheless, the relative condition value of the pond cultured fish (1.008) was lower than those of the wild fish caught from the Upper Kerian River and Serdang River. The fish from Upper Kerian River were in much better condition than the pond cultured fish. Such differences could be due to the gaps in the water quality between the ponds and the rivers. Further studies should be conducted to determine the optimum range of water parameters especially temperature, pH and total dissolved solution (TDS) level of the culture environment for this fish, in order to optimize its culture condition.