

Intraspecific aggression in the jewel cichlid *Hemichromis bimaculatus* reared under different background colours

ABSTRACT

The jewel cichlid *Hemichromis bimaculatus* is a popular freshwater ornamental fish with high market demand. However, it is aggressive and difficult to be maintained in captivity. Background colours are known to influence fish aggression, but there is still no such information available on *H. bimaculatus*. This study was conducted to examine the influence of 6 background colours (black, white, blue, yellow, green or red) on the aggression (chasing frequency), survival, weight gain and feed intake of the *H. bimaculatus*, through a 60-day culture trial. At the end of this trial, since the total feed intake and fish weight gain (except black) were similar among all treatments, the green was the most recommended background colour for the *H. bimaculatus* culture as it has the highest fish survival, followed by the white and yellow. Low fish survival was found under the black, red and blue; hence, these background colours were not recommended. In this study, we suspected that different background colours may induce different aggressiveness degree in the *H. bimaculatus*, and biting may have occurred to cause low fish survival. Also, the blue was speculated to be a stressful background colour to the *H. bimaculatus*. Nevertheless, further study is necessary to elucidate these hypotheses.