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Sustainable Aquaculture for a Secure Future

Title: Haematological and biochemical characteristics of two aquacultured carnivorous cyprinids, topmouth culter (*Culter alburnus*) and yellow cheek carp (*Elopichthys bambusa*).

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Abstract: AquaFish will not be distributing this publication. Copies may be obtained by writing to the authors.

The haematological and biochemical characteristics of two healthy farmed cyprinids, the topmouth culter *Culter alburnus* and yellowcheek carp *Elopichthys bambusa*, were investigated in this study. Erythrocytes, thrombocytes, lymphocytes, monocytes and granulocytes (i.e. neutrophils and eosinophils) were observed in these two fish. Every type of these cells (excluding the erythrocyte and lymphocyte) showed similar sizes in the topmouth culter and yellowcheek carp. Thrombocytes and neutrophils were the two most abundant leucocytes in the topmouth culter while thrombocytes and lymphocytes were the two most frequent leucocytes observed in the yellowcheek carp. The erythrocyte counts, haemoglobin concentrations and values of serum glucose in these two fish were high. There were significant differences in the leucocyte counts, haemoglobin concentrations, mean cellular haemoglobin contents, mean cell haemoglobin concentrations and values of serum glucose, triglyceride, total bilirubin, alkaline phosphatase and chlorine between the topmouth culter and the yellowcheek carp. The information of haematology and blood biochemistry obtained here would be useful for the prevention and diagnosis of diseases of farmed topmouth culter and yellowcheek carp.

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