

# MALAYSIAN MAHSEER HYBRID

(New hybrid fish for the Aquaculture Industry)

**Trade Secret No: TS2023050201** 



Figure 1 – 3 months old Malaysian Mahseer Hybrid

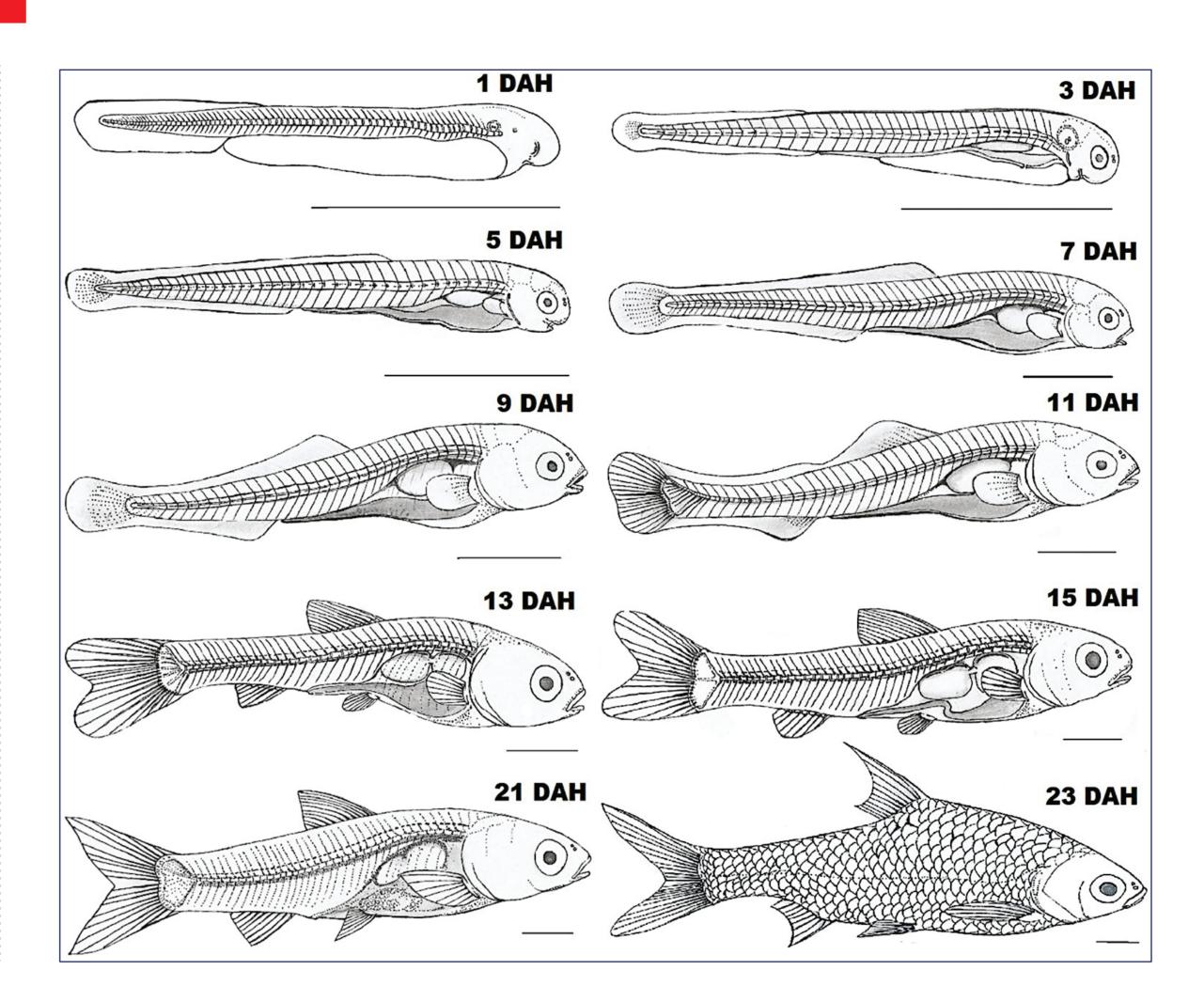


Figure 2 – Larval development of hybrid Malaysian mahseer from 1 to 23 DAH. Scale bar=2 mm. (Azfar-Ismail, et al. 2020)

#### **BRIEF TECHNOLOGY**

This is a new fish hybrid derived from Malaysia (Puntius gonionotus) 😱 . This fish have high potential in the aquaculture industry.

## **CURRENT ISSUES**

The desire to produce Malaysian mahseer hybrid fish was due to:

- Inadequacy of mahseer eggs
- Mahseer are seasonal breeder
- Population decline due to environmental stress and overfishing
- Price reach up to RM 600/kg
- Slow growth rate with high FCR
- However, mahseer sperms are available all year around

## **INVENTIVENESS & NOVELTY**

Hybridization is usually aimed the positive traits that enhanced performance with respect to:

- Survival rate
- Disease resistance
- Feed conversion
- Tolerance to low dissolved oxygen
- Vulnerability to angling and fillet yield

Expertise

#### **USEFULNESS & APPLICATION**

The new fish hybrid have faster growth compared to their parents. Generally stronger and have high tolerance in low dissolved oxygen condition and higher fillet yield. The Mahseer hybrid can be produced all year round (no season).

# **IMPACT OF THE PRODUCT**

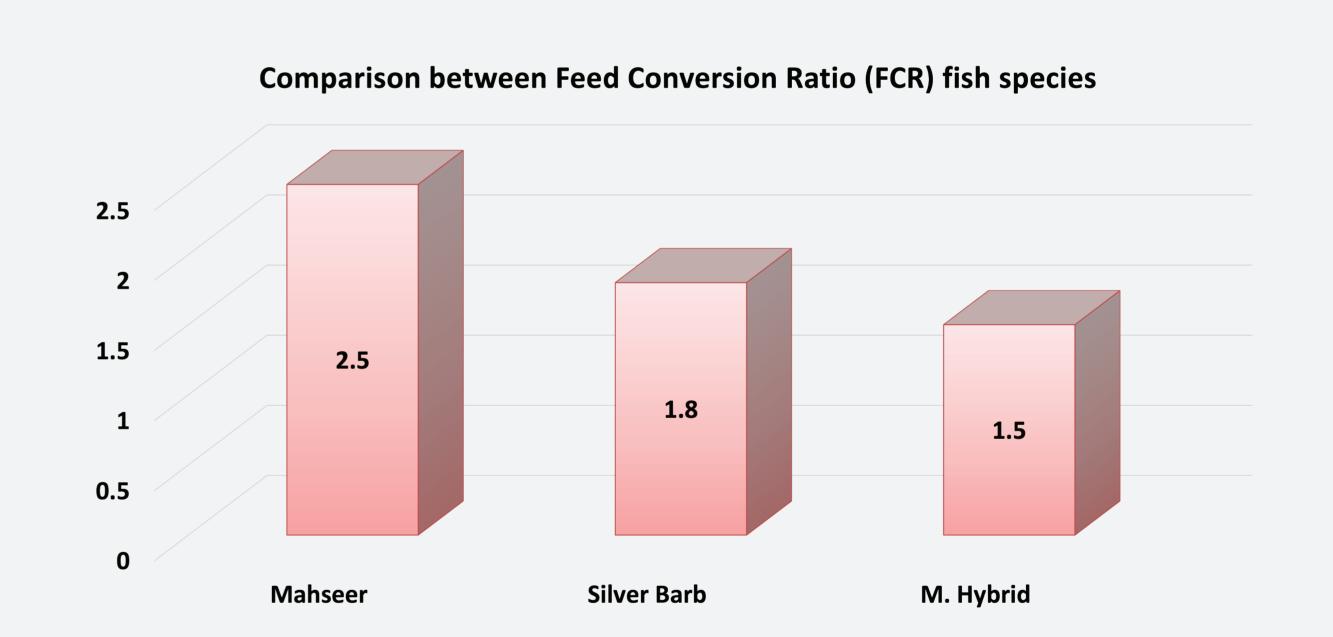
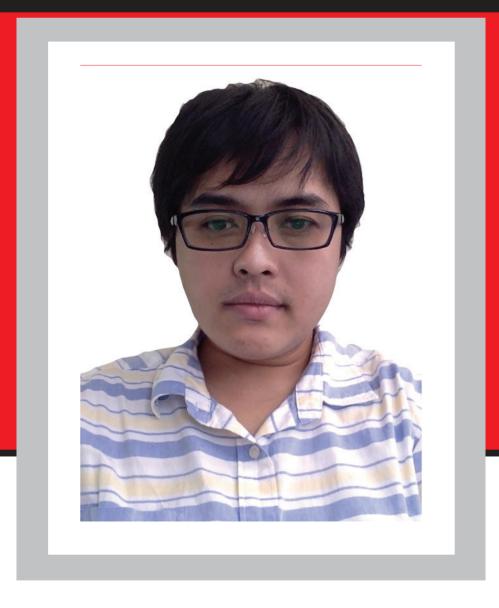


Figure 3 – comparison of FCR between parental fish and the new hybrid. FCR indicated the amount of feed needed to produce 1 kilogram of fish weight. The lowest FCR was observed in the new fish hybrid.

#### **MARKET POTENTIAL**

The aim of this newly hybrid fish is mainly for the aquaculture industry, especially in Malaysia. The market price of the Mahseer Hybrid are expected to be at RM 50-70/kg.

#### TRL: 6 – Demonstration in real environment



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