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Effects of temperature and diet on length-weight relationship and condition factor of the juvenile Malabar blood snapper (*Lutjanus malabaricus* Bloch & Schneider, 1801)

Key words: **Length-weight relationship, Condition factor, Temperature, Growth, Aquaculture, Snapper**

Research Summary

This research mainly focused on the effects of water temperature and diet on the growth form and condition of juvenile Malabar blood snapper *Lutjanus malabaricus and observed the following parameters:*

- **Length-weight relationship**
- **Fulton condition factor**
- **Relative condition factor**

Innovation points

- **FIRST** basic and baseline information on the temperature and diet effect on length-weight relationship and condition of *L. malabaricus* in laboratory condition.

- **Conclusion** of the best temperature for the growth form and good condition of *L. malabaricus.*

- **Suggestion** to the snapper aquaculture industry in getting best growth with minimizing cost.

- **Emphasis** on the fisheries biologists, and sustainable fishery managers to cope with the global warming effect and conserve the important fisheries resources

Figure 4

Innovation points

A number of figures and tables were generated to observe the effect of different temperature and diet on Length-weight relationship and condition of *Lutjanus malabaricus*.

Figure 1 | Length-weight relationship of *L. malabaricus* at different temperature and diet.

Figure 2 | Mean Fulton (*K*) and relative condition factor (*Kn*) observed at different temperature and diets.

Table 1 | Regression coefficients of length-weight relationships of *L. malabaricus* fed different diets at four different temperatures.

Table 2 | Regression coefficients for length-weight relationships in *L. malabaricus* tested with different temperatures and diets compared with other *Lutjanus* species in previous studies.