

Feed technology and production performance of Thai koi (*Anabas testudeneus*) in Bangladesh

ABSTRACT

Thai koi farming is relatively new in the aquaculture industry of Bangladesh. Costly industrial feed pellets is the main factor influencing the productivity of Thai koi (*Anabas testudineus*). Two types of feed, namely, floating and sinking, are commercially available in the country. The ingredients of both types of feed are more or less the same. Floating feed requires high technology, high pressure and temperature and hence is more expensive than sinking feed. Most of the Thai koi farmers use either floating or sinking feed, while some farmers use a mix of both types of feed. This article investigated the effects of these three feed types on Thai koi productivity using primary data collected from the Mymensingh district of Bangladesh. The performance of different feed types on productivity was investigated using the Cobb-Douglas production function and propensity score matching (PSM) methods. Floating feed led to the highest daily mean weight gain of fish, feed conversion ratios, and net returns. The regression and PSM results revealed that farmers using floating feed produced significantly higher quantity of fish per unit compared to those using the other feed types. The cost of feed per hectare was higher in the farms using the floating feed, but these farms earned extra return from the additional investment, compared with the farms that use the other feed types. Thai koi farmers are advised to use floating feed to reap higher production and returns on investment.

Keyword: Bangladesh; Floating/sinking/mixed feed; Production; Thai koi