

Feeding Habits of the Thornfish, *Terapon jarbua* (Forsk.) from the Estuary of Tanshui River and its Adjacent Waters

Kevin Lin¹ and Sin-Che Lee²

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In this paper, feeding habits of *Terapon jarbua* were studied in the estuary of Tanshui River and its adjacent inshore bays from August 1989 to September 1990. The strong mandibular, maxillary and pharyngeal teeth, the widely spaced short gill rakers as well as the short intestine strongly suggest that *T. jarbua* is a carnivore, with a tendency of being solely piscivorous in large adult. The juvenile below 2 cm SL feeds principally on planktonic copepods and amphipods. As the fish grew, there was a general tendency to eat crustaceans mainly juvenile shrimps (mysis) and crabs (megalopa), followed by young fishes, young molluscs and young polychetes. The large-sized fish elements as a source of food are only taken by large *T. jarbua* which may even attack larger fish of its own kind for scales. Larval and juvenile crustaceans are abundant in the area, which may be partly due to the ecological role played by mangrove forest in the lower reach of the river.

Key words: Stomach contents, Food selectivity, *Terapon jarbua*, Tanshui area.

關鍵詞：胃內容物分析，食物選擇性，花身鵝魚，淡水地區。

INTRODUCTION

Like other animals, fishes need to utilize food as energy source to carry out their basic functions of body maintenance, growth and reproduction. *Terapon jarbua* is one of the commonest fishes in the estuary of Tanshui River and its adjacent inshore waters, and spawns in deep offshore waters during April and October or slightly prolonged. After hatched, a mass of larvae move to estuary during May and November for feeding (Miu *et al.*, 1990). They live in shallow water while growing to a certain size, until sexual maturity they move to deep waters offshore again.

The fish plays an important role that characterizes as a predator in estuarine ecosystem. They prey juvenile crustaceans or high trophic level fishes. Outflow of nutrients from upstream and the mangrove forest along the lower reach make a tremendous contribution to the enrichment of soft-sediment bottom in the outer margin of estuary and its vicinity, for preferable colonization of burrowing or surface living fauna. The above mentioned area becomes appropriate nursery ground for the studied species as well as other marine fishes which often congregate there in search of food. Fishes normally take the food which is readily available from the grounds where they live in, but when there is in shortage of food, they migrate to wherever a rich food can supply.

1. Institute of Fisheries Sciences, National Taiwan University, Taipei, Taiwan 10764.

2. Institute of Zoology, Academia Sinica, Nankang, Taipei, Taiwan 11529. To whom the reprint request should be sent.