Importance of Tien Yen Estuary (Northern Vietnam) for Early-Stage *Nuchequula nuchalis* (Temminck & Schlegel, 1845)

Hau Duc Tran[1*], Thuy Thi Ta[2] and Thanh Trung Tran[1]

[1]*Hanoi National University of Education, 136 Xuan Thuy, Cau Giay, Hanoi, Vietnam*
[2]*Hanoi Metropolitan University, 98 Duong Quang Ham, Cau Giay, Hanoi, Vietnam*

**Corresponding author. E-mail: hautd@hnue.edu.vn*

ABSTRACT

To understand the importance of an estuary for the early stage of Nuchequula nuchalis (Spotnape Ponyfish), we collected samples (5,430 individuals) from the shallow areas of the Tien Yen estuary, northern Vietnam, from March 2013 to February 2014. The water temperature, salinity and turbidity at the collection sites varied from 18 to 29°C, 0 to 19 psu, and 4 to 96 NTU, respectively. The fish caught were mainly postflexion larvae, with a few juveniles. While the fish occurred from April 2013 to January 2014, they were heavily concentrated during two months only – April and May 2013, when more than 99% of the postflexion larvae were collected. The fish were distributed mostly in the middle part of the estuary, implying that this area is its main habitat during the early stages of its lifecycle.

Keywords: *Nuchequula nuchalis*, Larvae and juveniles, Occurrence, Estuarine habitat, Northern Vietnam

INTRODUCTION

Nuchequula nuchalis (Spotnape Ponyfish) is distributed in East Asia (Kimura et al., 2008b), including Taiwan and from south of Fujian to the Gulf of Tonkin (Woodland et al., 2001); this probably includes northern Vietnamese coastal waters. This species, with others in the Leiognathidae family, are commercially important in Asian wild fisheries and aquaculture, and inhabit coastal and estuarine waters (Woodland et al., 2001). Occurrence of the early stage of *N. nuchalis* has only been recorded in northern Kyushu, Japan, and its spawning season is from the middle of May to the end of July (Fujita, 1960); little is known about the distributional pattern of the early stages of this fish in an estuary.

Tran and Ta (2014a) recorded 193 fish species, belonging to 142 genera and 83 families, in the Tien Yen estuary. Some research has been conducted on the early life stages of fish in this estuary, such as descriptions of *Sillago sihama* (Tran et al., 2014) and *Nuchequula nuchalis* (Tran et al., 2014). The distribution patterns of some species have also been elucidated, namely *Oryzias curvinotus* (Ta et al., 2014) and species of *Lateolabrax* (Tran and Ta, 2014b); it is presumed