SEVERAL BIOLOGICAL ASPECTS OF JINGA SHRIMP *(metapenaeus affinis - h.milne-edwards, 1837) IN THE GULF OF TONKIN, VIETNAM

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Summary
Several biological parameters of jinga shrimp in Gulf of Tonkin, Vietnam were analysed and identified using the independent fisheries surveys data collected by bottom trawl net in combination with the biological data collected from commercial fisheries in periods from May 2014 to May 2015 in Hai Phong and Thanh Hoa landing places. The surveyed area was limited from 30 m depth to the shore with sixty sampling stations. The survey result showed that, the size of Jinga shrimp in catches was in the range 56-155 mm (Total length) and dominated by the cohort of 80-115 mm. The length-weight relationships of shrimp were identified as $W = 0.000011 \times TL^{2.87}$ and $W = 0.000021 \times TL^{3.03}$ for male and female respectively. Regression coefficient ($b$) value in the length-weight relationship differed significantly between males and females ($P<0.05$). The von Bertalanffy growth function was estimated as $TL_t = 163 \times (1-e^{-1.8(t-to)})$ with $\phi' = 2.68$. The Jinga shrimp was first mature at 70 mm (TL) and size at first maturity $(TL_{m50})$ was 118 mm. The Spawning seasons of this species was from May to October with the peak in June. It is noted that the density of Jinga shrimp in the Northeast monsoon was higher than that in the Southwest monsoon seasons with the highest density was recorded at 105 kg/km$^2$.

Keywords: Jinga shrimp, breeding season, Northeast monsoon, Southwest monsoon, density.