

# BIOLOGICAL CHARACTERISTICS OF THE THREE SPOT SWIMMING CRAB *Portunus sanguinolentus* (Herbst, 1783) AT COASTAL CENTRAL REGION OF VIET NAM

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## Summary

Biological characteristics of the three spot swimming crab *Portunus sanguinolentus* (Herbst, 1783) were analyzed using data collected from January 2018 to December 2019 at Coastal Central Region Vietnam. The carapace width of male and female *P. sanguinolentus* were ranged from 30 mm to 151 mm, dominated by group of 60-90 mm, the mean carapace width 78.6mm. The carapace width - body weight relationship pooled data were  $W_{\text{pooled}} = 0.0000623 \times CW^{2.98}$ . The Von Bertalanffy growth function of three spot swimming crab is expressed as  $L_t = 168 * (1 - e^{-1.2 * (t - (-0.082))})$ , growth performance index ( $\phi'$ ) is 2.53. Total mortality rate (Z), fishing mortality rate (F) and natural mortality rate (M) were estimated to be 4.74 yr<sup>-1</sup>, 3.47 yr<sup>-1</sup> and 1.27 yr<sup>-1</sup>, respectively. The exploitation ratio (E) was 0.73. Males were dominant throughout the period of study, the overall sex ratio 1.09:1. The three spot swimming crab breeds throughout the year but the spawning peaks are observed from January to April, got a peak in March. The estimated carapace width at first maturity ( $CW_{m50}$ ) was 76.1 mm for pooled data. The results showed that *P. sanguinolentus* population is marginally over exploited at coastal central region.

**Keywords:** *Three spot swimming crab, biological characteristics, Coastal Central Region.*