Population characteristics, length-weight and length-length relationships of Acetes vulgaris (decapoda: Sergestidae) of the Coastal waters of Pontian, Johore, Peninsular Malaysia

ABSTRACT

The population structure, length-weight and length-length relationships of Acetes vulgaris were examined based on 1141 specimens collected in the months of June and July 2006 from Pontian, Johor Bahru. The morphological characteristics of A. vulgaris were examined and the result was found to be similar when compared with the previous research. Mean length of males was 23.18 ± 2.95 mm while for females was 23.91 ± 3.53 mm. The range of total length for the males and females was 14.00-33.00 and 13.00-32.00 mm, respectively. The relationship between the total length and body weight of A. vulgaris was W = 0.0178L2.6368 (r2 = 0.829) for males and W = 0.0082L2.9144 (r2 = 0.902) for females. The carapace length and total length, relationship for males and females were CL = 4.1844TL + 2.3983 (r2 = 0.732) and CL = 4.0872TL + 1.8879 (r2 = 0.732), respectively. The sex ratio of female to male was found to be at 1: 3.27 with the number of males exceeded that of the females.

Keyword: Population structure; Sex ratio; Acetes vulgaris