

Length/Length-Length/Weight Relationships for 2 Erythrean mantis Shrimp Species, *Erugosquilla massavensis* (Kossmann, 1883), and *Clorida albolitura* (Ahyong&Naiyanetr, 2000) from the Yumurtalik Cove, Northeastern Mediterranean of Turkey

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Abstract : A total of nine stomatopod crustaceans have been reported from the eastern Mediterranean, with the eight from the Turkey coasts and three from the Levantine coast of Turkey (*Squilla massavensis* (Linnaeus,1758), *Erugosquilla massavensis* (Kossmann, 1880), *Clorida albolitura* (Ahyong&Naiyanetr, 2000)). *E. massavensis* is the most successful Red Sea immigrant, and it is now the dominant eastern Levantine stomatopod. At this research, carapace length/total length- weight relationship of 2 erythrean mantis shrimp, *E. massavensis* and *C. albolitura* was studied in Yumurtalik Cove, in the Northeastern Mediterranean of Turkey. Samples were collected monthly from July 2014 to June 2015 (except February), using bottom trawl net into three different depth strata; 0- 10 m, 10-20 m, 20-50m. *E. massavensis* samples were caught all studied time, except winter, in the three depth range but *C. albolitura* samples were caught only in July, October and May's months. A total of 572 specimens of the *E. massavensis* and 12 specimens of the *C. albolitura* were collected and analyzed. Morphometric equations for the conversions of total length and weight, carapace lengths were constructed for males, females, combined sexes for *E. massavensis* and *C. albolitura*. The b-values for total length (TL)-weight (W) in males and females for *E. massavensis* were 2.738 and 2.725 respectively and for carapace length (CL)-total length (TL) they were 1.041 and 0.978, relatively. The b-values (total length-weight) were determined for combined sexes of *E. massavensis* and *C. albolitura* as: 2.771, 1.852 relatively. In both species, the relative growth of weight and total length was found highly positively allometric. However, carapace length showed negative allometry in females of *E. Massavensis*.

Keywords : *Clorida albolitura*, *Erugosquilla massavensis*, Erythrean stomatopod, length/length-weight relationships

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