

Biological studies on the commercial juvenile fish of the eastern coast of Libya.

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Abstract

The structures of juvenile commercial fish in the shallow water of eastern coast of Libya, Mediterranean Sea were investigated. Size composition, fish abundance, length frequency distribution, length-weight relationships, condition factors and food habits of the most common species were studied. *Lithognathus mormyrus* juvenile dominated the catch from February till December and the recruitment appeared in February, November, and December. *Liza carinata* and *Diplodus annularis* appeared from April until November and the recruitment showed in April, *Liza ramada* were recorded from April till August and recruitment were in April. *Salpa sarpa* appeared from March till November and recruitment appeared from March till June, Lichia amia appeared from April till December and recruitment appeared in June. All the species illustrated significant Length-weight relationships with high correlation coefficients indicating isometric growth. The condition factors of *Lithognathus mormyrus*, *Liza ramada*, *Lichia amia* were similar, increasing as the size increased. The monthly variation in conditions was influenced by feeding activities. The highest values of condition factors appeared in autumn for all the species reached the maximum values by the end of spring except *Liza ramada* where the highest values were shown at the end of summer. The feeding intensity was higher and food habits were varied.

Key Words: Juvenile, abundance, length frequency distribution, length-weight, condition factors, food habits

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