

NOTE

Size structure of Areolate grouper (*Epinephelus areolatus*) from the Saudi coast of the Arabian Gulf

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ABSTRACT. Areolate grouper, *Epinephelus areolatus*, is one of the reef-associated fish species which is highly sought-after in the seafood trade. Consequently, a high market demand resulted to overexploitation and population decline of the species in the wild. This paper aimed to determine the size structure of *E. areolatus* from the Arabian Gulf. A total of 355 specimens of *E. areolatus* collected over the 12-month sampling period revealed high proportions of females observed throughout the year and in size class. Males (29.3 cm, 358.44 g) were bigger and heavier than females (28.8 cm, 326.66 g). The b values ranging from 2.86 to 2.88 indicated negative allometric growth. The relationship between length and weight showed significant positive correlations with $p < 0.0000$ and r^2 values ranging between 96.05-97.12%.

Key words: Arabian Gulf, areolate grouper, length-weight relationship.

Estructura de tamaño del mero areolado (*Epinephelus areolatus*) de la costa saudí del Golfo Árabe

RESUMEN. El mero areolado, *Epinephelus areolatus*, es una de las especies de peces asociadas a los arrecifes que es muy buscada en el comercio de productos del mar. Consecuentemente, una alta demanda de mercado resultó en la sobreexplotación y la disminución de la población de la especie en la naturaleza. Este trabajo tuvo como objetivo determinar la estructura de tamaño de *E. areolatus* del Golfo Árabe. Un total de 355 muestras de *E. areolatus* recolectadas durante 12 meses de muestreo revelaron altas proporciones de hembras durante todo el año y en la clase de talla. Se observó que los machos (29,3 cm, 358,44 g) fueron más grandes y pesados que las hembras (28,8 cm, 326,66 g). Los valores de “ b ” que oscilan entre 2,86 y 2,88 indicaron un crecimiento alométrico negativo. La relación entre longitud y peso mostró correlaciones positivas significativas con $p < 0,0000$ y valores de r^2 que oscilaron entre 96,05-97,12%.

Palabras clave: Golfo Árabe, mero areolado, relación largo-peso.

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