

Growth pattern and condition factor of the common silver-biddy *Gerres oyena* (Forsskål, 1775) juveniles from seagrass ecosystem of Karang Congkak Island, Kepulauan Seribu

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Abstract	<p>A seagrass bed of Karang Congkak Island has been known as the nursery habitat for many marine fishes. The common silver-biddy (<i>Gerres oyena</i>) is one of the temporary resident fishes that inhabits seagrass beds of Karang Congkak Island before they migrate to their adult habitat to join the adult population. The aims of this research are to analyze the growth pattern, condition factor and food preferences of the common silver-biddy while they utilized the seagrass beds of Karang Congkak Island as their nursery ground. Sampling was conducted from March 2018 to March 2019 with 10 times frequency of sampling in total. Sample was towed using a beach seine net with 10x1 m in dimension and 3 mm mesh size. Parameters that were analyzed in this research were a length-weight relationship, condition factor, and food preferences. A total of 2762 juveniles of the common silver-biddy were collected and were classified into 10 length classes. The results showed that in general, the growth pattern of the common silver-biddy was positive allometric ($b > 3$), although some months were isometric ($b = 3$). The overall condition factor ranged from 0.87 – 2,05 and it fluctuated throughout the months. The diet which has the main role in determining the fish growth of the common silver-biddy was dominated by the group of copepods. The positive allometric growth pattern of the common silver-biddy and the high value of condition factor describe that seagrass ecosystem of Karang Congkak Island is a suitable nursery ground for the juveniles of the common silver-biddy.</p> <p>Abstrak Ekosistem lamun Pulau Karang Congkak merupakan habitat pengasuhan yuwana berbagai spesies ikan laut. Ikan kapas-kapas (<i>Gerres oyena</i>) merupakan salah satu ikan penghuni sementara lamun Pulau Karang Congkak sebelum akhirnya beruaya ke habitat induknya untuk bergabung dengan populasi ikan dewasa. Penelitian ini bertujuan untuk menganalisis pola pertumbuhan dan faktor kondisi yuwana ikan kapas-kapas selama menghuni perairan ekosistem lamun Pulau Karang Congkak. Penelitian dilakukan dari Maret 2018 sampai Maret 2019 dengan total frekuensi pengambilan sampel selama 10 bulan. Contoh ikan diambil dengan menarik pukat tarik pantai berdimensi 10 m x1 m dan mata jaring 3 mm. Parameter yang diamati pada penelitian ini adalah hubungan panjang-bobot ikan, faktor kondisi, dan preferensi makanan ikan. Selama penelitian terkumpul sebanyak 2765 yuwana ikan yang dapat dikelompokkan menjadi 10 kelompok kelas ukuran panjang. Pola pertumbuhan panjang ikan kapas-kapas secara keseluruhan bertipe alometrik positif ($b > 3$), namun pada beberapa bulan tertentu ditemukan pola pertumbuhan isometrik ($b = 3$). Faktor kondisi selama penelitian berkisar antara 0,87-2,05 dan berfluktuasi setiap bulan. Makanan ikan yang merupakan faktor penentu pertumbuhan ikan kapas-kapas didominasi oleh kelompok kopepoda. Pola pertumbuhan ikan kapas-kapas yang alometrik positif dengan faktor kondisi yang tinggi memberikan gambaran bahwa padang lamun Pulau Karang Congkak merupakan daerah asuhan yang baik bagi yuwana ikan kapas-kapas.</p>
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Author	ADINDA KURNIA PUTRI, S.Pi, M.Si