

ABSTRAK

(Devi Monica Sari. 26010120122120016. Dinamika Populasi Ikan Teri (*Stolephorus* sp.) di Perairan Pantai Utara Kota Semarang. Suradi Wijaya Saputra dan Wiwiet Teguh Taufani).

Ikan teri (*Stolephorus* sp.) merupakan komoditas utama hasil tangkapan nelayan di PPI Tambak Lorok, Kota Semarang. Produksi ikan teri pada tahun 2025 yang didaratkan di PPI Tambak Lorok berada pada urutan kedua yaitu sebesar 21.545 ton atau 24% dari total produksi ikan. Pemanfaatan yang tinggi mengakibatkan terjadinya penurunan produksi dan dapat mengganggu kelestarian sumber daya ikan. Penelitian ini bertujuan untuk mengetahui parameter dinamika populasi ikan teri di Perairan Pantai Utara Kota Semarang. Penelitian dilaksanakan pada Bulan Agustus - Desember 2025. Pengambilan sampel tiap bulan dilakukan dua kali di PPI Tambak Lorok, Kota Semarang dengan total sebanyak 722 ekor ikan. Metode pengambilan sampel menggunakan *systematic random sampling*. Data yang diambil meliputi data panjang dan bobot ikan. Analisis data yang dilakukan meliputi struktur ukuran, hubungan panjang-bobot, faktor kondisi, ukuran pertama kali tertangkap ($L_{C50\%}$), parameter pertumbuhan, mortalitas, eksploitasi, dan pola rekrutmen. Analisis data menggunakan software RStudio dalam *package* TropFishR. Hasil penelitian menunjukkan ukuran panjang ikan berkisar 29-64 mm. Hubungan panjang bobot diperoleh persamaan $W = 0,00000548 L^{3,0467}$. Nilai $b = 3,0467$ artinya pertumbuhan bersifat isometrik. Faktor kondisi 1,0016, artinya ikan teri berbentuk kurang pipih. Parameter pertumbuhan didapatkan $L_{\infty} = 72,90$ mm, $K = 1,02$ tahun⁻¹ dan $t_0 = -0,12$ tahun serta nilai $L_{C50\%}$ sebesar 42,11 mm, artinya penangkapan ikan teri sudah layak tangkap karena nilai $L_{C50\%} > \frac{1}{2} L_{\infty}$. Mortalitas total (Z) = 3,15/ tahun, mortalitas alami (M) = 1,01/ tahun, mortalitas penangkapan (F) = 2,14/ tahun, dan (E) = 0,68/ tahun. Puncak rekrutmen tertinggi terjadi pada Bulan Januari dan Februari. Hasil ini menunjukkan adanya eksploitasi berlebih dan didominasi ukuran kecil, yang mengindikasikan potensi tekanan terhadap keberlanjutan populasi ikan teri di wilayah ini.

Kata kunci: Dinamika populasi, Ikan Teri, Kota Semarang, Pertumbuhan isometrik, PPI Tambak Lorok.

ABSTRACT

(Devi Monica Sari. 26010120122120016. Population Dynamics of Anchovy (*Stolephorus* sp.) in the northern coastal waters of Semarang City. (Suradi Wijaya Saputra and Wiwiet Teguh Taufani).

*Anchovy (*Stolephorus* sp.) is the primary fishery commodity caught by fishers at the Tambak Lorok Fish Landing Site (PPI) in Semarang City. Anchovy production in 2025 landed at PPI Tambak Lorok ranked second at 21,545 tons, or 24% of total fish production. High utilization has led to a decline in production and may threaten the sustainability of fish resources. This study aims to determine the population dynamic parameters of anchovy in the northern coastal waters of Semarang City. The research was conducted from August to December 2025. Sampling was carried out twice per month at PPI Tambak Lorok, Semarang City, with a total of 722 fish collected. The sampling method used was systematic random sampling. Data collected included fish length and weight. Data analyses performed included size structure, length-weight relationship, condition factor, size at first capture ($L_{c50\%}$), growth parameters, mortality, exploitation, and recruitment pattern. Data analysis was conducted using RStudio software with the TropFishR package. The results showed that fish length ranged from 29 to 64 mm. The length-weight relationship was expressed by the equation $W = 0,00000548 L^{3,0467}$. The value of $b = 3,0467$ indicates isometric growth. A condition factor of 1.0016 indicates that anchovy has a fusiform body shape. Growth parameters obtained were $L_{\infty} = 72,90$ mm, $K = 1,02 \text{ year}^{-1}$ and $t_0 = -0,12$ year, with $L_{c50\%} = 42,11$ mm, indicating that the anchovy being caught have already reached harvestable size, as $L_{c50\%} > \frac{1}{2} L_{\infty}$. Total mortality (Z) = 3,15/year, natural mortality (M) = 1,01/year, fishing mortality (F) = 2,14/year, and exploitation rate (E) = 0,68/year. The highest recruitment peak occurs in January-February. These findings indicate overexploitation and dominance of small-sized individuals, suggesting potential pressure on the sustainability of the anchovy population in the area.*

Keywords: *Anchovy, Isometrik growth, Population dynamics, Semarang City, Tambak Lorok Fish Landing Base (PPI)*