

Rizan Halim Alwadiansyah NPM 220351100029 Hubungan Panjang-Berat Serta Faktor Kondisi Ikan Layang (*Decapterus* sp.) di Perairan Tanjung Bumi, Kabupaten Bangkalan, Jawa Timur di bawah bimbingan **Rizka Rahmana Putri, S.Pi., M.Agr**

ABSTRAK

Ikan Layang (*Decapterus* sp.) merupakan sumber daya perikanan pelagis kecil yang memiliki nilai ekonomis penting di Perairan Tanjung Bumi, Kabupaten Bangkalan. Penelitian ini bertujuan untuk menganalisis hubungan panjang–berat, faktor kondisi, serta Tingkat Kematangan Gonad (TKG) ikan Layang sebagai dasar informasi biologis dalam pengelolaan perikanan. Penelitian dilaksanakan pada bulan September hingga November 2025. Hasil analisis hubungan panjang–berat menunjukkan bahwa ikan Layang jantan dan betina memiliki pola pertumbuhan allometrik negatif ($b < 3$). Nilai eksponen pertumbuhan ikan Layang betina sebesar $b = 2,8618$, dan ikan Layang jantan $b=2,9231$. Hasil analisis hubungan panjang–berat bulan September 3,072, bulan Oktober 2,9683, dan November 3,0345. Pola pertumbuhan ikan Layang bulan September dan November yakni allometrik positif dan bulan Oktober allometrik negatif. Terdapat ikan Layang TKG 1 sebanyak 79 bulan September, 79 bulan Oktober, 82 bulan November. TKG 2 sebanyak 27 bulan September, 48 bulan Oktober, 72 bulan November, dan ikan Layang masuk TKG 3 sebanyak 2 pada bulan September, 23 bulan Oktober, dan 38 bulan November. Nilai faktor kondisi pada ikan Layang berkisar 0,998-1,006 selama penelitian. Perbedaan nilai ini disebabkan karena sebagian besar ikan Layang mengalami pertumbuhan reproduktif

Kata kunci: Biologi perikanan, ikan Layang (*Decapterus* sp.), hubungan panjang–berat, faktor kondisi, Tingkat Kematangan Gonad.

ABSTRACT

Scad Mackerel (*Decapterus* sp.) is a small pelagic fishery resource of significant economic value in the waters of Tanjung Bumi, Bangkalan Regency. This study aims to analyze the length–weight relationship, condition factor, and Gonad Maturity Level (GML) of Scad Mackerel as a biological basis for fisheries management. The research was conducted from September to November 2025. The results of the length–weight relationship analysis showed that both male and female Scad Mackerel exhibited a negative allometric growth pattern ($b < 3$). The growth exponent value for female Scad Mackerel was $b = 2.8618$, while for males it was $b = 2.9231$. The monthly length–weight analysis yielded values of 3.072 in September, 2.9683 in October, and 3.0345 in November. The growth pattern in September and November was positive allometric, while in October it was negative allometric. The distribution of Gonad Maturity Levels (GML) showed that in September there were 79 individuals at GML 1, 27 at GML 2, and 2 at GML 3. In October, 79 individuals were at GML 1, 48 at GML 2, and 23 at GML 3. In November, 82 individuals were at GML 1, 72 at GML 2, and 38 at GML 3. The condition factor values of Scad Mackerel ranged between 0.998–1.006 throughout the study. These differences were attributed to the fact that most Scad Mackerel were undergoing reproductive growth.

Keywords: Fisheries biology, scad fish (*Decapterus* sp.), length–weight relationship, condition factor, gonadal maturity stage.