

Intisari

ASPEK REPRODUKSI IKAN LAYUR (*Trichiurus lepturus*, Linnaeus 1758) DI PERAIRAN PANTAI NGRENEHAN KABUPATEN GUNUNGKIDUL

Ikan layur (*Trichiurus lepturus*) termasuk salah satu ikan demersal yang memiliki nilai produksi tinggi di perairan Daerah Istimewa Yogyakarta. Penelitian ini bertujuan untuk mengetahui aspek reproduksi ikan layur di perairan Pantai Ngrenehan, Gunungkidul. Pengambilan sampel dilakukan dari bulan Desember 2022-Februari 2023 dengan total sampel sebanyak 197 ekor. Setiap sampel layur diukur panjang dan beratnya, kemudian dibedah untuk penentuan jenis kelamin serta pengamatan tingkat kematangan gonad. Aspek reproduksi yang dianalisis terdiri dari panjang dan berat ikan, rasio kelamin, tingkat kematangan gonad, indeks kematangan gonad, fekunditas, diameter telur, ukuran pertama kali matang gonad (Lm), serta ukuran pertama kali tertangkap (Lc). Hasil analisis menunjukkan panjang dan berat masing-masing berkisar antara 44,7-74,6 cm dan 63,8-445,3 g dengan rasio kelamin terhadap jantan dan betina sebesar 1:21. Tingkat kematangan gonad ikan layur betina didominasi oleh TKG IV, sedangkan tingkat kematangan gonad jantan didominasi oleh TKG I dan III. Nilai IKG ikan layur berkisar antara 0,4-9,83% pada ikan betina dan 0,19-1,38% pada ikan jantan. Diameter telur ikan layur berkisar antara 0,06-1,21 mm dan rata-rata fekunditas sebesar 13.727 butir (7.135-29.645 butir). Tipe pemijahan ikan layur termasuk dalam *partial spawner*, dengan distribusi diameter telur terdiri dari dua modus. Ikan layur diperkirakan mengalami pertama kali matang gonad pada 49,82 cm, yang berukuran lebih kecil daripada ukuran pertama kali tertangkap yaitu 60,25 cm.

Kata kunci: fekunditas, kematangan gonad, pemijahan, telur

Abstract

**REPRODUCTIVE OF LARGEHEAD HAIRTAIL (*Trichiurus lepturus*,
Linnaeus 1758) IN THE NGRENEHAN COAST GUNUNGKIDUL DISTRICT**

Largehead hairtail (*Trichiurus lepturus*) is one of the demersal fish that has a high production value in the waters of the Special Region of Yogyakarta. This study aimed to determine the reproductive aspects of largehead hairtail at Ngrehan Coast, Gunungkidul. Sampling was carried out from December 2022-February 2023, with a total sample size of 197 individuals. Each sample was measured for length and weight, then dissected to determine sex and observe the level of gonad maturity. Reproductive aspects analyzed consisted of the frequency of length and weight, sex ratio, gonadal maturity level, gonadal maturity index, fecundity, egg diameter, size at first maturity (L_m), and size at first catch (L_c). Results of this showed that the total length and weight of largehead hairtails ranged between 44.7 and 74.6 cm and 63.8 and 445.3 g, respectively, with a sex ratio of 1:21 for males and females. The gonadal maturity stage of female largehead hairtails was dominated by TKG IV, while the gonadal maturity stage of male largehead hairtails was dominated by TKG I and III. The gonadal maturity index ranged from 0.4–9.83% for females and 0.19–1.38% for males. The eggs diameter ranged from 0.06 to 1.21 mm, and the average fecundity was 13,727 (7,135-29,645 eggs). The type of spawning of largehead hairtail is partial spawning, with the distribution of egg diameter consisting of two modes. The largehead hairtail was estimated to experience gonadal maturity for the first time at 49.82 cm, which is smaller than the size when first caught, which is 60.25 cm.

Key words: eggs, fecundity, gonad maturity, spawning