

Intisari

BIOLOGI REPRODUKSI LAYUR (*Trichiurus spp.*) DI PERAIRAN SELATAN JAWA TIMUR

Deliana Puspitasari Habibie
11/313358/PN/12302

*Jurusan Perikanan, Fakultas Pertanian,
Universitas Gadjah Mada, Yogyakarta*

Penelitian ini bertujuan untuk mengetahui beberapa aspek biologi reproduksi ikan layur di perairan selatan Jawa Timur. Penelitian dilakukan dengan mengumpulkan sampel hasil tangkapan nelayan yang didaratkan di PPN Prigi dan PPP Muncar, Jawa Timur pada bulan Desember 2014 sampai Juni 2015. Data yang dikumpulkan dalam penelitian ini terdiri dari panjang total, berat individu, berat gonad, jenis kelamin dan ukuran diameter telur. Data rasio kelamin dianalisis menggunakan uji *chi-square* untuk mengetahui keseimbangan populasi jantan dan betina. Total sampel penelitian adalah 325 ekor. Hasil menunjukkan bahwa asio kelamin ikan layur di perairan selatan Jawa Timur 0,4 : 1 atau tidak seimbang ($1 \neq 1$). Ikan layur jantan didominasi oleh ikan dengan TKG I, sedangkan ikan layur betina didominasi fase TKG II. Nilai indeks kematangan gonad ikan layur jantan lebih kecil dibandingkan dengan ikan layur betina. Populasi diameter telur dianalisis menggunakan metode *Bhattacharya* untuk mengetahui ukuran telur siap pijah. Ukuran diameter telur yang siap diovulasikan berkisar antara 0,47-0,86 mm yang memiliki proporsi 73,97% dari total telur. Sedangkan hasil fekunditas telur ikan layur yang ditemukan di perairan selatan Jawa Timur berkisar antara 8.979-23.567 butir. Analisis metode Spearman-karber menunjukkan ukuran pertama kali matang gonad ikan layur betina pada ukuran panjang 79,9 cm. Hasil persebaran diameter telur menunjukkan ikan layur memiliki tipe pemijahan secara bertahap. Semakin meningkat tingkat kematangan gonad maka diameter telur yang ada di ovarium akan semakin besar. Ikan layur yang tertangkap didominasi ikan layur muda, sehingga dibutuhkan penelitian lebih lanjut dan pengaturan penangkapan ikan layur di perairan umum.

Kata kunci : fekunditas, jumlah telur, kematangan gonad, jumlah telur, tipe pemijahan

Abstract

REPRODUCTION BIOLOGY OF HAIRTAILS (*Trichiurus* spp.) IN SOUTHERN SEA OF EAST JAVA

Deliana Puspitasari Habibie
11/313358/PN/12302

*Departement of Fisheries, Faculty of Agriculture
Universitas Gadjah Mada, Yogyakarta*

The purpose of this study was to determine some aspects of reproduction biology hairtail fish *Trichiurus* spp. in the southern sea of East Java. The study was conducted by collecting of fish samples from fisherman catch which be landed in PPN Prigi and PPP Muncar, East Java from December 2014 to June 2015. The data was collected namely total length, individual body weight, gonad weight, sex and size of egg diameters. Sex ratio data were analyzed with the *chi-square* to know the population balance of male and female. The total fish was 325 individual. The sex ratio of male to female was 0,4 : 1 or not balanced ($1 \neq 1$). The population of hairtail fish was dominated by the male fish with a phase TKG I, whereas females fish was dominated by phase TKG II. Gonad maturation index value of male hairtail fish smaller than the female hairtail fish. Egg diameter were analyzed using the *Bhattacharya's* method to know population size and ripening of eggs that ready to spawn. The size of the eggs diameter prepared in ovulation ranged between 0,47 to 0,86 mm which has a proportion of 73.97 % of the total eggs. Total fecundity of hairtail fish ranged between 8.979-23.567 along southern sea of East Java. Analysis method of *Spearman-karber* indicate the mean total length (LT) of female fish at first gonadal maturity was 79,9 cm. Diameter distribution results showed fish eggs of hairtail fish have partial spawning type. Increasing the level of gonad maturity so the diameter of the eggs in the ovary will be even larger. Hairtail fish catches dominated by young fish, thus further research and management of fisheries resources were needed in marine waters.

Keywords : fecundity, total of eggs, gonad maturity, hairtails fish, spawning type