

Intisari

Penelitian ini bertujuan untuk mengetahui infeksi larva *Anisakis* (nematoda) pada ikan selar bentong (*Selar crumenophthalmus*) di Samudera Hindia Pantai Selatan Jawa. Total 498 sampel ikan diambil dari Pantai Selatan Jawa Timur, Daerah Istimewa Yogyakarta, Jawa Tengah, dan Jawa Barat. Setiap sampel diukur panjang total dan beratnya, kemudian diamati infeksi *Anisakis* pada bagian rongga tubuh, hati, gonad, saluran pencernaan, dan daging. Karakterisasi morfologi dilakukan menggunakan SEM (*Scanning Electron Microscopy*). Daerah ITS rDNA dan mtDNA *cox2* diamplifikasi menggunakan PCR dan disekuensing untuk membentuk pohon filogenetik. PCR-RFLP dilakukan pula dari hasil amplifikasi ITS rDNA. Hasil menunjukkan bahwa ikan selar bentong (*S. crumenophthalmus*) rentan terhadap infeksi *Anisakis* dengan nilai prevalensi dan intensitas rata-rata infeksi yang berbeda antar lokasi. Nilai prevalensi tertinggi terdapat pada ikan selar bentong dari Pantai Selatan Jawa Timur (P=75,44%; MI=10,38 larva/inang), sedangkan ikan selar bentong dari Pantai Selatan Jawa Barat memiliki nilai terendah (P=1,45%; MI= 3,33 larva/inang). Sebagian besar *Anisakis* ditemukan pada bagian rongga tubuh (70%-100%), sedikit ditemukan pada bagian tubuh lain. Identifikasi molekuler (PCR-RFLP dan sekuensing) menunjukkan *Anisakis* yang menginfeksi ikan selar bentong merupakan *A. typica*, yang diindikasikan sebagai *A. typica* var. *indonesiensis*. Infeksi *Anisakis* lebih lanjut dapat digunakan sebagai penanda biologis seperti diskriminasi stok dan pola migrasi ikan.

Kata kunci: *Anisakis*, identifikasi, infeksi, Samudera Hindia, *Selar crumenophthalmus*

Abstract

This study aim to determine the presence of *Anisakis* larvae (nematodes) in bigeye scad (*Selar crumenophthalmus*) from the Indian Ocean Southern Coast of Java. A total of 498 fish samples were collected from the Southern Coast of East Java, Yogyakarta Special Territory, Central Java, and West Java. Each sample was measured in its length and weight and then observed for the presence of *Anisakis* larval in the abdominal cavity, liver, gonad, gastrointestinal tract, and muscle. Morphological characterization was carried out using SEM (Scanning Electron Microscopy). The ITS rDNA and mtDNA cox2 regions were amplified using PCR and sequenced to construct a phylogenetic tree. PCR-RFLP was also carried out from the amplification of ITS rDNA. The results showed that bigeye scad was susceptible to being infected by *Anisakis* nematodes with different prevalences and intensity levels at each location. The highest prevalence occurred in bigeye scad from the Southern Coast of East Java (P = 75,44%; MI = 10,38 larvae/host), whereas bigeye scad from the Southern Coast of West Java has the lowest prevalence (P = 1,45%; MI = 3,33 larvae/host). Most of the larvae were found in the abdominal cavity (70% -100%), whereas in other organs were found in relatively low prevalence. The results of molecular identification showed that the bigeye scad was infected by *A. typica*, whereas indicated as *A. typica* var. *indonesiensis*. The infection of *Anisakis* can be used as a biological indicator such as stock discrimination and fish migration pattern. Keywords: *Anisakis*, infection, Indian Ocean, prevalence, *Selar crumenophthalmus*