Intisari

Prevalensi dan Intensitas Infeksi *Anisakis* sp. pada *Selar crumenophthalmus* (Bloch 1793) di Perairan Teluk Pacitan

Anisakis sp. telah dilaporkan menginfeksi berbagai jenis organisme laut. Penelitian ini bertujuan untuk mengetahui prevalensi, intensitas rata-rata, target organ infeksi, dan identifikasi larva *Anisakis* pada *Selar crumenophthalmus* (Bloch 1793) dari perairan Teluk Pacitan. Sebanyak 203 sampel dikumpulkan pada bulan November 2024 hingga Desember 2024 yang kemudian diukur panjang, berat, dan diperiksa keberadaan larva *Anisakis* di rongga perut, hati, gonad, saluran pencernaan, dan otot/daging. *Anisakis* yang diperoleh dikumpulkan untuk identifikasi morfologi dan molekuler. Identifikasi morfologi dilakukan dengan mengamati warna, bentuk, dan mengukur panjang cacing. *Field Emission Scanning Electron Microscopy* digunakan untuk pengamatan *Anisakis* yang lebih rinci pada fokus anterior dan posterior. Analisis molekuler dilakukan dengan menggunakan *direct sequencing* pada daerah ITS. Hasil penelitian menunjukkan bahwa larva *Anisakis* menginfeksi ikan *S. crumenophthalmus* dengan prevalensi 41,37% dan intensitas rata-rata 3,89 larva/individu. *Anisakis* menginfeksi saluran pencernaan sebesar 37,61%, gonad 29,66%, rongga perut 23,24%, dan hati 9,48%. Identifikasi morfologi menunjukkan bahwa larva yang menginfeksi ikan *S.crumenophthalmus* adalah *Anisakis* tipe I yang dapat dilihat dari adanya mukron pada bagian posterior, dan identifikasi molekuler mengonfirmasi bahwa larva tersebut adalah *A. typica*. Informasi mengenai spesies *Anisakis* dan distribusinya menjadi acuan dalam penanganan dan pengolahan hasil perikanan, kesehatan manusia, dan pengembangan nematoda sebagai penanda biologis.

Kata Kunci: *A. typica*., identifikasi molekuler, ITS rDNA, morfologi

Abstract

Prevalence and Mean Intensity of *Anisakis* sp. in Selar *crumenophthalmus* (Bloch 1793) at Pacitan Bay Waters

Anisakis sp. has been reported to infect various marine organisms. This study aims to determine the prevalence, mean intensity, target organ of infection, and identification of *Anisakis* larvae in *Selar crumenophthalmus* (Bloch 1793) from Pacitan Bay Waters, East Java. A total of 203 samples were collected in November 2024 to December 2024 which were then measured for length, weight, and examined for the presence of *Anisakis* larvae in the abdominal cavity, liver, gonads, digestive tract, and muscles. *Anisakis* obtained were collected for morphological and molecular identification. Morphological identification is carried out by observing color, the shape, and measuring the length of the worm. Field Emission Scanning Electron Microscopy was used for more detailed observation of *Anisakis* in anterior and posterior focus. Molecular analysis was carried out using direct sequencing on the ITS region. The results showed that anisakid larvae infected *S. crumenophthalmus* with a prevalence of 41.37% and a mean intensity of 3.89 larvae/individual. *Anisakis* was found to infect the digestive tract by 37.61%, gonad 29.66%, abdominal cavity 23.24%, and liver 9.48%. Morphological identification shows that the larva infecting *S.crumenophthalmus* was *Anisakis* type I, which can be seen from the presence of mucron in the posterior part, and the molecular identification confirms those larva as *A. typica.* Information on *Anisakis* species and their distribution is a reference in handling and processing fishery product, human health, and development of nematodes as biological markers.

Keyword: *A. typica*., ITS rDNA, molecular identification, mophology