

Intisari

PREVALENSI, INTENSITAS, DAN IDENTIFIKASI MOLEKULER ANISAKID NEMATODA PADA IKAN LAYUR (*Trichiurus lepturus* Linnaeus, 1758) DI PANTAI UTARA KABUPATEN DEMAK

Penelitian ini memiliki tujuan untuk mengetahui infeksi dan identifikasi larva anisakid nematoda yang ditemukan pada ikan layur (*Trichiurus lepturus* Linnaeus, 1758) yang ditangkap di Pantai Utara Kabupaten Demak. Sebanyak 178 ekor sampel ikan layur hasil tangkapan nelayan dari Pantai Utara Kabupaten Demak telah dikumpulkan. Setiap sampel ikan yang diperoleh diukur panjang dan ditimbang beratnya, kemudian sampel dibedah untuk pengamatan larva anisakid pada rongga perut, organ internal dan daging. Analisis data meliputi prevalensi, intensitas rata-rata dan distribusi larva pada organ yang terinfeksi. Sampel terpilih dari larva anisakid yang terkumpul diidentifikasi secara molekuler menggunakan metode PCR *Direct sequencing*. Hasil penelitian menunjukkan bahwa ikan layur di Pantai Utara Kabupaten Demak rentan terinfeksi larva anisakid kategori infeksi sangat sering dengan prevalensi (56%) dan intensitas rata-rata yang rendah sebanyak 2,43 larva/individu. Larva anisakid paling banyak ditemukan pada rongga perut (67%), organ lain yang terinfeksi adalah saluran pencernaan (19%), hati (13%), dan gonad (1%), dan tidak ditemukan infeksi pada daging. Identifikasi secara molekuler menunjukkan bahwa anisakid yang menginfeksi *Trichiurus lepturus* diduga adalah *Hysterothylacium amoyense*.

Kata Kunci: anisakid, *Hysterothylacium*, intensitas, nematoda, prevalensi

Abstract

PREVALENCE, INTENSITY, AND MOLECULAR IDENTIFICATION OF ANISAKID NEMATODE ON HAIRTAIL (*Trichiurus lepturus* Linnaeus, 1758) AT THE NORTHERN COAST OF DEMAK REGENCY

This study aimed to determine the infection and identification of anisakid nematode larvae found on hairtail (*Trichiurus lepturus* Linnaeus, 1758) caught in Northern Coast of Demak Regency. A total of 178 fish samples caught by fishermen from the Northern Coast of Demak Regency have been collected. Each fish sample obtained was measured its length and weighed, then dissected for anisakid larvae observation on the abdominal cavity, internal organ, and muscle. Data analysis included prevalence, mean intensity, and distribution of anisakid larvae on target organs. Selected samples of collected anisakid larvae were identified molecularly using PCR Direct sequencing method. The results showed that the hairtail in Northern Coast of Demak Regency was susceptible to anisakid larvae infection on the category frequently infected with a prevalence (56%) and a low mean intensity of infection was 2.43 larvae/individu. Anisakid larvae were mainly found in the abdominal cavity (67%); other infected organs were the digestive tract (19%), liver (13%), and gonads (1%). There were no anisakid larvae found in the muscle. Molecular identification shows that the anisakid infecting *Trichiurus lepturus* is thought to be *Hysterothylacium amoyense*.

Keyword: anisakid, *Hysterothylacium*, intensity, nematode, prevalence