

Intisari

Penelitian ini bertujuan untuk mengevaluasi beberapa metode deteksi parasit *Enterocytozoon hepatopenaei* pada udang vaname (*Litopenaeus vannamei* Boone, 1931). Penelitian ini menggunakan sampel sebanyak 30 sampel udang vaname. Sampel udang vaname berasal dari tambak di Pantai Pandansari, Goa Cemara, Kuwaru, dan Glagah. Penelitian ini dilakukan menggunakan 4 metode yaitu gross patologi, apus, histopatologi, dan *Polymerase Chain Reaction* (PCR) dengan metode PCR sebagai standar. Hasil analisis dengan PCR menunjukkan bahwa 24 sampel positif terinfeksi *Enterocytozoon hepatopenaei* dan 6 sampel adalah negatif. Metode gross patologi memiliki nilai sensitivitas sebesar 71% dan nilai spesifisitasnya 50%. Metode apus nilai sensitivitas sebesar 79% dan nilai spesifisitas sebesar 50%. Sedangkan metode histopatologi memiliki sensitivitas sebesar 88% dan spesifisitasnya 33%. Penentuan metode yang efektif ditentukan berdasarkan teknis pelaksanaan, nilai sensitivitas, dan spesifisitas. Metode apus memiliki nilai sensitivitas dan spesifisitas yang cukup tinggi, serta lebih mudah dan murah diterapkan bagi para petambak di lapangan dibandingkan dengan menggunakan metode histopatologi. Berdasarkan penelitian didapatkan kesimpulan bahwa metode deteksi yang efektif digunakan oleh para petambak udang di lapangan adalah metode apus.

Kata kunci: udang vaname, *Enterocytozoon hepatopenaei*, metode deteksi, sensitivitas, spesifisitas

Abstract

The purpose of this study was to evaluate several detection methods of *Enterocytozoon hepatopenaei* in Pacific white shrimp. The sample observed were 30 samples of shrimp from several shrimp ponds in Pandansari Beach, Goa Cemara Beach, Kuwaru Beach, and Glagah Beach. This study was conducted using four methods, which were gross pathology, smear method, histopathology, and *Polymerase Chain Reaction* (PCR) with PCR method as standard. Results of analysis with PCR showed that 24 samples were positive infected by *E. hepatopenaei* and 6 samples were negative. The gross pathology method had a sensitivity value of 71% and a specificity value of 50%. The smear method of sensitivity value was 79% and the specificity value was 50%. The histopathological method had a sensitivity of 88% and a specificity of 33%. An effective determination method was determined by technical implementation, sensitivity value, and specificity value. Besides having high sensitivity and specificity value, smear method was easier and cheaper to be applied for farmers in the field rather than using histopathology method. Based on the results of this study conducted by shrimp farmers in the field was the smear method.

Keyword: whiteleg shrimp, *Enterocytozoon hepatopenaei*, detection method, sensitivity, specificity