

Intisari

Tujuan penelitian ini adalah untuk mengetahui bakteri penyebab penyakit pada gurami (*Osphronemus goramy* Lac.) di Kabupaten Bantul melalui uji postulat Koch. Penelitian ini dilakukan secara eksperimental dan eksploratif melalui tahapan pemeriksaan sampel, isolasi bakteri, identifikasi dengan uji biokimia serta molekuler PCR 16S rDNA, reinfeksi, dan reisolasi. Hasil isolasi diperoleh 42 isolat murni, sedangkan berdasarkan hasil uji biokimia terdapat 14 isolat dengan karakter berbeda. Isolat PT3.G.T, PT7.G.Tc, PT9.G.Tc, PT11.G1.Tc, dan PT11.G2.Tc teridentifikasi sebagai *Aeromonas veronii*, isolat PT5.L3.T teridentifikasi sebagai *Aeromonas sharmana*, isolat PT1.L.T dan PT5.G2.Tc teridentifikasi sebagai *Klebsiella pneumoniae*, isolat PT5.G1.T teridentifikasi sebagai *Klebsiella oxytoca*, isolat PT4.L.T teridentifikasi sebagai *Enterobacter aerogenes*, isolat PT4.G.Tc teridentifikasi sebagai *Plesiomonas shigelloides*, isolat PT7.O.K teridentifikasi sebagai *Enterococcus gallinarum*, isolat PT11.O.K teridentifikasi sebagai *Weissella cibaria*, dan isolat PT11.G.T teridentifikasi sebagai *Enterococcus faecium*. Hasil reinfeksi menunjukkan bahwa 9 isolat terpilih merupakan bakteri penyebab penyakit ikan gurami karena memenuhi seluruh kriteria postulat Koch. Bakteri patogen penyebab penyakit ikan gurami yaitu *Klebsiella pneumoniae*, *Klebsiella oxytoca*, *Aeromonas veronii*, dan *Aeromonas sharmana*.

Kata kunci : bakteri, gurami, identifikasi, isolasi, Postulat Koch

Abstract

The aims of this research was to know the bacteria that cause disease in gouramy (*Osphronemus goramy* Lac.) from Bantul. This research was done experimentally and mainly conducted by sample examination, bacterial isolation, identification with biochemical and molecular test of PCR 16S rDNA, reinfection, and reisolation of the bacteria. The isolation obtained 41 pure isolates while biochemical test resulting 14 isolates with different characters. PT3.G.T, PT7.G.Tc, PT9.G.Tc, PT11.G1.Tc, and PT11.G2.Tc isolates were identified as *Aeromonas veronii*, PT5.L3.T isolate was identified as *Aeromonas sharmana*, PT1.L.T and PT5.G2.Tc isolates were identified as *Klebsiella pneumoniae*, PT5.G1.T isolate was identified as *Klebsiella oxytoca*, PT4.L.T isolate was identified as *Enterobacter aerogenes*, PT4.G.Tc isolate was identified was *Plesiomonas shigelloides*, PT7.O.K isolate was identified as *Enterococcus gallinarum*, PT11.O.K isolate was identified as *Weissella cibaria*, and PT11.G.T isolate was identified as *Enterococcus faecium*. These results revealed that the 9 isolates were the causative agent of disease in gouramy because these fulfilled all criteria of Koch Postulate. The pathogenic bacteria that cause disease in gouramy were *Klebsiella pneumoniae*, *Klebsiella oxytoca*, *Aeromonas veronii*, and *Aeromonas sharmana*.

Key words: bacterium, gouramy, identification, isolation, Koch Postulate