

**ANALISIS KUALITAS AIR SECARA MIKROBIOLOGIS AKIBAT
AKTIVITAS KERAMBA JARING APUNG DI HARANGGAOL**

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ABSTRAK

Aktivitas Keramba Jaring Apung di perairan Danau Toba Kecamatan Haranggaol berpengaruh terhadap kualitas perairan. Penelitian ini bertujuan untuk mengetahui kualitas air ditinjau secara mikrobiologis. Penelitian dilakukan pada bulan Februari 2015, pengambilan sampel air dilakukan di bagian dasar perairan di 7 stasiun pengamatan. Parameter Fisika-Kimia meliputi: Suhu, Kecerahan, Intensitas Cahaya, Kedalaman, Kekeruhan, pH, DO, BOD, Fosfat, dan Amonia. Parameter bakteriologis adalah kepadatan Total Bakteri *Coliform* dan keberadaan *Salmonella*. Analisis Total Bakteri *Coliform* menggunakan analisis MPN (Most Probable Number) dan bakteri *Salmonella* menggunakan uji biokimia. Hasil penelitian menunjukkan kualitas Fisik dan kimia: Suhu 24°C- 27°C, Kecerahan 1,2m – 5,5m, Intensitas Cahaya 325 lux -1837 lux, kedalaman 10m – 130m, Kekeruhan 12 NTU – 13 NTU, pH 7,2 – 8, DO 6,81 mg/l – 8,2 mg/l, BOD 1 mg/l – 3 mg/l, Fosfat 0,015 mg/l – 0,039 mg/l, Amonia 0,025 mg/l – 0,86 mg/l. Jumlah koloni Total Bakteri *Coliform* 30 -1600 koloni/100ml dan ditemukan positif adanya bakteri *Salmonella* di stasiun 1 dan 2. Secara umum perairan Danau Toba berdasarkan kualitas Fisik-Kimia masih memenuhi standar baku mutu untuk budidaya perikanan kecuali kandungan Amonia (0,025 mg/l – 0,86 mg/l). namun secara bakteriologis kondisi perairannya tidak sesuai baku mutu.

Kata kunci: Keramba Jaring Apung, Kualitas air, *Coliform*, *Salmonella*.

Analysis Quality of Water According Mikrobiologis Calese The Activity of Nets Buoyancy in Haranggaol

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ABSTRACT

The activity of nets buoyancy have effect to water quality in Lake Toba district Haranggaol. This aim research to know the water quality wits indicator microbiologis. This research has been made in Februari 2015, the water sample take does in water base in 7 stasion. Physical-chemical parameters consists: Temperature, Brightness, Light intensity, Deepky, Fadeness, pH, DO, BOD, Phosphat, and Amonia. Bacteriologis parameters is the Total of Bactery *Coliform* and *Salmonella* location. The analyse and *Salmonella* bectery by using biochemical. The result showing physical quality: The temperature 24°C -27°C, Brightness 1.2m – 5.5m, light intensity 325 lux -1837 lux, Deeply 10m -130 m, fadeness 12 NTU – 13 NTU, pH 7.2 -8, DO 6.81 mg/l – 8.2 mg/l, BOD 1 mg/l – 3 mg/l, Phosphat 0.015 mg/l – 0.039 mg/l, Amonia 0.025 mg/l – 0.86 mg/l. Total *Colifrom* is 30 – 1600 koloni/100ml and is founded positive that there are *Salmonella* bectery in stasion 1 and stasion 2. In generally Lake Toba water by according to the quality, physical-chemical is still normaly of the quality for improment fishing except the Amonia amount (0,025 mg/l – 0,86 mg/l) but by bacteribiologys the water condition is not sultable with the quality.

Keywords: The nets buoyancy, The water quality, *Coliform*, *Salmonella*.