

ISOLASI BAKTERI ANTIBIOSIS TALENAN IKAN LAUT TERHADAP

MDR-Salmonella typhi DAN *Shigella dysenteriae*

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ABSTRAK

Bakteri antibiosis adalah bakteri yang memiliki kemampuan menghambat pertumbuhan bakteri lain. Penelitian mengenai karakterisasi bakteri potensial antibiosis dari talenan pemotong ikan terhadap *Salmonella typhi* dan *Shigella dysenteriae* dilaksanakan pada bulan April 2019 sampai Mei 2020. Penelitian ini menggunakan metode *survey* serta data dianalisis secara deskriptif. Penelitian ini bertujuan untuk menentukan keberadaan bakteri-bakteri antibiosis terhadap mikroba uji pada talenan pemotong ikan, untuk membandingkan potensi antibiosis masing-masing isolat bakteri dari talenan pemotong ikan dalam menghambat mikroba uji dan untuk menentukan karakter bakteri-bakteri dari talenan pemotong ikan yang antibiosis terhadap mikroba uji. Dari 14 isolat BTIL Didapatkan 6 isolat yang antibiosis terhadap mikroba uji. Ditemukan 1 isolat BTIL yang antibiosis terhadap *Salmonella typhi* yaitu BTIL 9 (18,98 mm). Ditemukan 3 isolat yang antibiosis terhadap *Shigella dysenteriae* yaitu isolat BTIL 3 (9,12 mm), BTIL 6 (9,25 mm), BTIL 7 (7,88 mm) dan Ditemukan 2 isolat yang antibiosis terhadap *Salmonella typhi* dan *Shigella dysenteriae* BTIL 5 (7,32 mm dan 7,88 mm) dan isolat BTIL 8 (6,97 mm dan 9,08 mm). Diameter kontrol zona hambat sebesar 27,16 terhadap mm *Salmonella typhi* dan 25,87 mm terhadap *Shigella dysenteriae*. Karakter makroskopis koloni bakteri di dapatkan 2 koloni bakteri berbentuk *irregular*, 4 koloni bakteri berbentuk *Circular*. Bentuk pinggiran bakteri di dapatkan 4 koloni bakteri memiliki pinggiran *entire*, 1 koloni bakteri memiliki pinggiran *lobate* dan 1 koloni bakteri memiliki pinggiran *curled*. Bentuk elevasi koloni bakteri ditemukan 4 koloni bakteri berelevasi *flat*, 1 koloni bakteri berelevasi *umbonate* dan 1 koloni bakteri berelevasi *convex*. 4 isolat BTIL bakteri gram positif dan 2 isolat BTIL bakteri gram negatif. Keseluruhan isolat berbentuk *Coccus* dan 5 isolat BTIL bersifat α -hemolisis dan 1 isolat bersifat β -hemolisis.

Kata Kunci : Antibiosis, Resistensi, *Salmonella typhi*, *Shigella dysenteriae*.

ABSTRACT

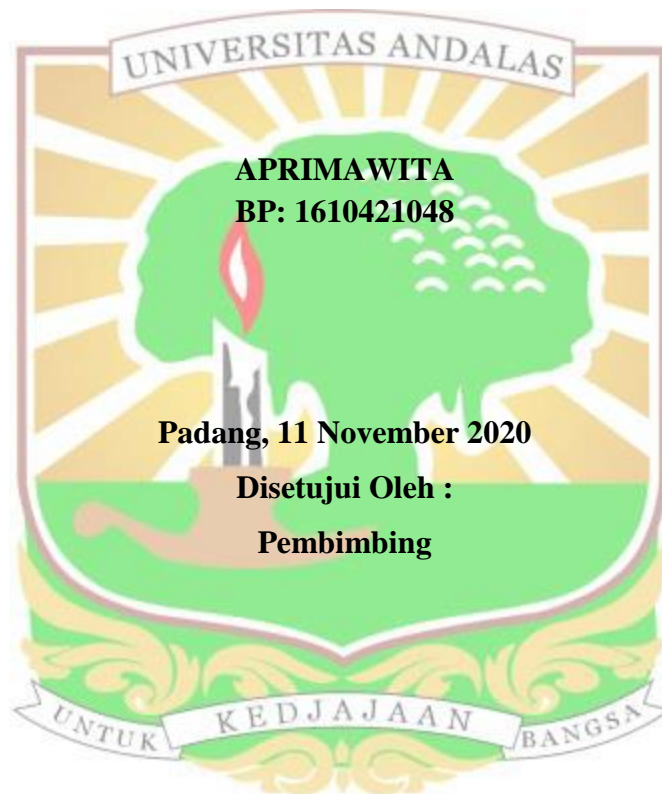
Antibiosis bacteria are bacteria that have the ability to inhibit the growth of other bacteria. Research on the characterization of potential antibiotic bacteria from fish cutting boards against *Salmonella typhi* and *Shigella dysenteriae* was conducted from April 2019 to May 2020. This study used a survey method and the data were analyzed descriptively. This study aims to determine the presence of antibiosis bacteria against test microbes on fish cutting boards, to compare the antibiosis potential of each bacterial isolate from fish cutting boards to inhibit test microbes and to determine the character of bacteria from fish cutting boards with antibiosis against microbes. test. Of the 14 BTIL isolates, 6 isolates were found with antibiosis against the tested microbes. It was found that 1 BTIL isolate had antibiosis against *Salmonella typhi*, namely BTIL 9 (18.98 mm). There were 3 isolates that had antibiosis against *Shigella dysenteriae*, namely BTIL 3 (9.12 mm), BTIL 6 (9.25 mm), BTIL 7 (7.88 mm) isolates and 2 isolates were found that antibiotic against *Salmonella typhi* and *Shigella dysenteriae* BTIL 5 (7.32 mm and 7.88 mm) and BTIL 8 isolates (6.97 mm and 9.08 mm). The diameter of inhibition zone control was 27.16 mm against *Salmonella typhi* and 25.87 mm against *Shigella dysenteriae*. The macroscopic character of bacterial colonies was obtained 2 irregular-shaped bacterial colonies, 4 circular-shaped bacterial colonies. In the form of bacterial margins, 4 bacterial colonies had entire margins, 1 bacterial colony had lobate margins and 1 bacterial colony had curled margins. The form of bacterial colony elevation was found 4 flat-elevated bacterial colonies, 1 umbonate-elevated bacterial colony and 1 convex-elevated bacterial colony. 4 BTIL isolates for gram-positive bacteria and 2 BTIL isolates for gram-negative bacteria. All isolates were in the form of Coccus and 5 BTIL isolates were α -hemolytic and 1 isolate was β -hemolytic.

Keywords: Antibiosis, Resistance, *Salmonella typhi*, *Shigella dysenteriae*.



**Skripsi ini diajukan sebagai salah satu syarat
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