ABSTRAK

Methicillin-Resistant Staphylococcus aureus (MRSA) merupakan *Staphylococcus aureus* yang resisten terhadap antibiotik jenis metisilin. Infeksi MRSA pada luka Diabetes Mellitus disebabkan *Staphylococcus aureus* yang mengalami resistensi dan merupakan flora normal pada kulit. Ekstrak kopi robusta dengan pelarut air dan pelarut etanol mengandung bahan antibakteri senyawa fenolik dan flavonoid. Tujuan penelitian ini yaitu mengetahui perbedaan daya hambat ekstrak kopi robusta dengan pelarut etanol dan pelarut air terhadap bakteri MRSA yang diisolasi dari pus luka pasien Diabetes mellitus. Metode penelitian ini adalah eksperimental laboratorium yang bersifat kuantitatif. Penelitian dilakukan pada bulan April – Mei 2023 di laboratorium Bakteriologi Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Surabaya. Terdapat lima variasi konsentrasi yaitu konsentrasi 60%, 70%, 80%, 90%, 100%. Uji daya hambat dilakukan dengan metode difusi sumuran. Rerata diameter zona hambat untuk ekstrak dengan pelarut air yaitu 15,53 mm (60%), 15,56 mm (70%), 16,76 mm (80%), 16,26 mm (90%), 14,93 mm (100%). Untuk ekstrak dengan pelarut etanol yaitu 16,06 mm (60%), 16,53 mm (70%), 17,63 mm (80%), 18,9 mm (90%), 17,1 mm (100%). Semua data yang diperoleh dianalisa dengan uji Two Way ANOVA untuk melihat perbedaan setiap perlakuan. Dari uji statistika didapatkan kesimpulan bahwa tidak ada perbedaan signifikan diameter zona hambat antara ekstrak kopi robusta dengan pelarut air dan pelarut etanol terhadap *Methicillin-Resistant Staphylococcus aureus* (MRSA).

Kata Kunci : Daya Hambat, Kopi Robusta, MRSA

ABSTRACT

Methicillin-Resistant Staphylococcus aureus (MRSA) is S. aureus that is resistant towards methicillin-type antibiotics. MRSA infection in Diabetes Mellitus wounds is caused by S. aureus which is resistant and is a normal flora on the skin. Robusta coffee extract with water and ethanol solvents contains antibacterial ingredients, phenolic and flavonoid compounds. The goal of this research was to examine on how well robusta coffee extract with ethanol and water solvents could obstruct the growth of MRSA that isolated from the wound pus of patients with Diabetes Mellitus. This research method is a quantitative laboratory experimental. The research was performed between April until May 2023 at the Bacteriology Laboratory, Department of Medical Laboratory Technology, Ministry of Health, Surabaya. There are five variations of concentration, namely the concentration of 60%, 70%, 80%, 90%, 100%. The well diffusion method utilized for this inhibition test. The average diameter of the inhibition zone for extracts with aqueous solvents is 15.53 mm (60%), 15.56 mm (70%), 16.76 mm (80%), 16.26 mm (90%), 14.93 mm (100%). For extracts with ethanol solvent, namely 16.06 mm (60%), 16.53 mm (70%), 17.63 mm (80%), 18.9 mm (90%), 17.1 mm (100%). All data obtained were analyzed by Two Way ANOVA test to see the differences in each treatment. The statistical analysis revealed that the diameter of inhibition zone for robusta coffee extract with water and ethanol solvents against MRSA showed no significance difference.

Keywords : *Inhibitory Power, Robusta Coffee, MRSA*