

INTISARI

Sarita Diah Kusuma Arum. Nim 3181028. Pemanfaatan Ubi Jalar Putih dan Ubi Jalar Kuning sebagai Media Alternatif Pertumbuhan *Staphylococcus aureus*.

Staphylococcus aureus merupakan bakteri patogen yang menyebabkan penyakit pada manusia. Kultur *Staphylococcus aureus* umumnya menggunakan media *Nutrient Agar*, perlu mencari alternatif media dari bahan alami salah satunya ubi jalar putih dan ubi jalar kuning. Penelitian ini bertujuan untuk mengetahui perbedaan kemampuan pertumbuhan *Staphylococcus aureus* pada media alternatif ubi jalar putih dan ubi jalar kuning dengan media NA. Jenis penelitian ini merupakan penelitian eksperimental *post test-only control group design* menggunakan metode *spread plate*. Suspensi *Staphylococcus aureus* diinokulasikan ke masing-masing media pertumbuhan kemudian diinkubasi pada suhu 37°C selama 72 jam. Pengamatan jumlah koloni dan karakteristik koloni diamati setiap inkubasi 24 jam. Jumlah koloni pada inkubasi 48 jam pada media NA $15,8 \times 10^6$ CFU/ml, pada media ubi jalar putih 125×10^6 CFU/ml, dan pada media ubi jalar kuning $17,1 \times 10^6$ CFU/ml. Uji *One-Way ANNOVA* diasumsikan terdapat perbedaan bermakna ($p < 0,05$). Uji *post-hoc* digunakan sebagai uji lanjutan. Didapatkan hasil bahwa terdapat perbedaan kemampuan media pertumbuhan dalam menumbuhkan *Staphylococcus aureus*. Media ubi jalar kuning dan media NA memiliki kemampuan yang sama, namun media ubi jalar putih lebih baik dalam menumbuhkan *Staphylococcus aureus* dibandingkan media ubi jalar kuning.

Kata Kunci : *Staphylococcus aureus*, Ubi Jalar Kuning, Ubi Jalar Putih, *Nutrient Agar*

ABSTRACT

Sarita Diah Kusuma Arum. Nim 3181028. *Utilization of White-Fleshed Sweet Potato and Yellow-Fleshed Sweet Potato as Alternative Media for Staphylococcus aureus Growth.*

Staphylococcus aureus is one of the pathogens that cause severe infection in humans. *Staphylococcus aureus* culture is commonly using Nutrient Agar medium, the researcher needs to find alternative mediums from nature such as white-fleshed sweet potato and yellow-fleshed sweet potato. This research aims to find the difference in *Staphylococcus aureus* growth ability in white-fleshed sweet potato medium, yellow-fleshed sweet potato medium, and Nutrient Agar. This type of research is an experimental post-test-only control group design using spread plate method. that. *Staphylococcus aureus* suspense was inoculated into each growth medium and then incubated at 37°C for 72 hours. The determination of characteristics and number of colonies of *Staphylococcus aureus* are made every 24 hours of incubation. The number of colonies of *Staphylococcus aureus* at 48 hours of incubation was $15,8 \times 10^6$ CFU/ml on NA medium, 125×10^6 CFU/ml on white-fleshed sweet potato medium, and $17,1 \times 10^6$ CFU/ml on yellow-fleshed sweet potato medium. The One-Way ANNOVA test is assumed that there is a significant difference ($p < 0,005$). The post-hoc test is used as an advanced test. The results showed that there are differences in the ability of the growth media to grow *Staphylococcus aureus*. Yellow-fleshed sweet potato media and NA medium had the same ability, but white-fleshed sweet potato media was better at growing *Staphylococcus aureus* than yellow-fleshed sweet potato media.

Keyword : *Staphylococcus aureus*, Yellow-Fleshed Sweet Potato, White-Fleshed Sweet Potato, Nutrient Agar