

## INTISARI

Temulawak (*Curcuma zanthorrhiza Roxb*) digunakan sebagai antibakteri yang menghambat pertumbuhan *Staphylococcus aureus*, bakteri penyebab jerawat. Pada penelitian ini, rimpang temulawak diambil sarinya dan dikombinasikan dengan yogurt, diharapkan mampu menghambat pertumbuhan bakteri *Staphylococcus aureus*, sehingga mengurangi timbulnya jerawat. Tujuan penelitian ini untuk mengetahui dosis optimum penghambatan yogurt temulawak yang juga disukai oleh konsumen.

Penelitian dilakukan secara eksperimental dengan Rancangan Acak Lengkap (RAL). Terdapat 5 perlakuan, yaitu kontrol negatif tanpa temulawak, Formula (F) 1, 2, 3 dan 4. Masing-masing formula ditambahkan sari temulawak dosis 1, 2, 3, 4 %. Semua perlakuan, diuji aktivitasnya menggunakan difusi cakram, uji organoleptik dan pH. Data zona hambat bakteri diuji anova *one way*, tingkat kepercayaan 95% dilanjut uji BNT. Data organoleptik hasil kuesioner panelis diuji *kruskal wallis*, tingkat kepercayaan 95% dilanjut *Mann-withney*.

Hasil uji aktivitas antibakteri kontrol negative, F1, F2, F3, dan F4 dapat menghambat pertumbuhan bakteri *Staphylococcus aureus* masing-masing dengan zona hambat 10,6 mm, 13,6 mm, 16,3 mm, 17,6 mm, dan 22,6 mm. Hasil penelitian dari ke empat formula yogurt temulawak (*C. zanthorrhiza*) menghasilkan zona hambat yang kuat dan zona hambat yang paling besar terlihat pada yogurt temulawak F4. Yogurt F1 paling disukai setelah kontrol negatif, dengan rata-rata nilai hedoniknya 2,93 bermakna “agak disukai” panelis.

**Kata kunci:** *Staphylococcus aureus* (*S. aureus*), Jerawat, *Curcuma zanthorrhiza Roxb* (*C. zanthorrhiza Roxb*), Yogurt

## ABSTRACT

Temulawak (*Curcuma zanthorrhiza Roxb*) can be used as antibacterial against the growth of *Staphylococcus aureus*, a caused of pimples. In this study, the rhizome of temulawak was extracted and combined with yoghurt which can inhibit the growth of *Staphylococcus aureus*, so that will alleviate pimple production. The optimum dosage of temulawak juice addition and the more likely formula from consumer were then analyzed.

This study was conducted as experimental study using completely randomized design (CRD). There will be 5 interventional group, such as negative control without temulawak, formula (F)1, 2, 3, and 4, each yoghurt would add 1, 2, 3, 4 % dosage of temulawak juice. All intervention groups were analyzed based on the diffusion disc test, organoleptic test and pH. Results of the inhibition value were tested using one way ANOVA with 95% confidence interval and followed with BNT test. Result of the organoleptic test were tested using kruskal walis with 95% confidence interval and followed by *Mann-withney* test.

Results of antibacterial activity test on negative controls, F1, F2, F3, and F4 showed that all groups could inhibit the growth of *Staphylococcus aureus* with the inhibition zone values were 10.6 mm, 16.3 mm, 17.6 mm, and 22.6 mm. Result of fourth formula were showed that they had powerful inhibitone zone and the largest inhibition zone looks in F4. Yoghurt F1 is teh most liking after negative control, with value of hedonic scoring 2.93 it's meaning "Rather Liking" by panelists.

**Keyword:** *Staphylococcus aureus* (*S. aureus*), acne, *Curcuma zanthorrhiza Roxb* (*C. zanthorrhiza Roxb*), Yoghurt

