

PENGARUH PENAMBAHAN BUBUK *Ulva lactuca* SEBAGAI *EMULSIFIER* DAN *STABILIZER* ES KRIM VANILLA

Intisari

Penelitian ini bertujuan untuk menguji efek penambahan bubuk *Ulva lactuca* sebagai *emulsifier* dan *stabilizer* dengan mengamati sifat fisik dan sensoris es krim *Ulva lactuca*. Sampel es krim dibuat dengan 6 perlakuan meliputi A (es krim dengan tambahan *emulsifier* dan *stabilizer*) B (es krim dengan tambahan *emulsifier*, *stabilizer* dan bubuk *Ulva*) C (es krim dengan tambahan *stabilizer* dan bubuk *Ulva*) D (es krim dengan tambahan *emulsifier* dan bubuk *Ulva*) E (es krim dengan tambahan bubuk *Ulva*) dan F (es krim tanpa tambahan *emulsifier*, *stabilizer*, dan bubuk *Ulva*). Hasil penelitian menunjukkan bahwa nilai *overrun* tertinggi (88,00%) didapatkan pada es krim *Ulva lactuca* pada perlakuan penambahan *emulsifier*, *stabilizer*, dan bubuk *Ulva lactuca*. Penambahan *emulsifier*, *stabilizer* dan bubuk *Ulva lactuca* meningkatkan nilai viskositas, terutama setelah *aging*. Es krim *Ulva lactuca* dengan kombinasi bubuk *Ulva lactuca* memiliki nilai viskositas lebih tinggi dibandingkan tanpa atau dengan *emulsifier* dan *stabilizer* saja. Penambahan *Ulva lactuca* juga terbukti meningkatkan nilai antioksidan pada produk es krim hingga 42,00%-66,33%. Hasil penelitian menunjukkan perlakuan terbaik secara berurutan berdasarkan karakteristik fisik yaitu B>A>D>C>E>F, dengan hasil ini maka dapat disimpulkan bahwa bubuk *Ulva* berpotensi sebagai *emulsifier* dan atau *stabilizer* pada adonan es krim.

Keywords : bubuk *Ulva lactuca*, *emulsifier*, *overrun*, *stabilizer*, tekstur es krim *Ulva*

IMPACT OF ADDING POWDER *Ulva lactuca* AS AN EMULSIFIER AND A STABILIZER ON THE VANILLA ICE CREAM

Abstract

This study aims to examine the effect of adding *Ulva lactuca* powder as *emulsifier* and *stabilizer* by observing the physical and sensory properties of *Ulva lactuca* ice cream. Ice cream samples were made with 6 treatments including A (ice cream with added *emulsifier* and *stabilizer*) B (ice cream with added *emulsifier*, *stabilizer* and *Ulva* powder) C (ice cream with added *stabilizer* and *Ulva* powder) D (ice cream with added *emulsifier* and *Ulva* powder) E (ice cream with added *Ulva* powder) and F (ice cream without added *emulsifier*, *stabilizer*, and *Ulva* powder). The results showed that the highest overrun value (88.00%) was obtained in ice cream with of adding *emulsifier*, *stabilizer*, and *Ulva lactuca* powder. The addition of *emulsifier*, *stabilizer* and *Ulva lactuca* powder increased the viscosity value, especially after aging. *Ulva lactuca* ice cream with a combination of *Ulva lactuca* powder had higher viscosity values than without or with *emulsifier* and *stabilizer* alone. The addition of *Ulva lactuca* was also shown to increase the antioxidant value of ice cream products up to 42.00%-66.33%. The results showed the best treatment in order based on physical characteristics, namely B>A>D>C>E>F, with these results it can be concluded that *Ulva* powder has the potential as an *emulsifier* and or *stabilizer* in ice cream dough.

Keywords: *emulsifier*, *overrun*, *stabilizer*, *Ulva* ice cream texture, *Ulva lactuca* powder