

INTISARI

Lengkuas (*Languas galanga* (L.) Stuntz) mengandung minyak atsiri yang berkhasiat sebagai antifungus. Penelitian ini bertujuan mengetahui efek yang lebih dominan di antara efek PEG 1000, efek *Adeps Lanae*, dan efek interaksinya dalam mempengaruhi sifat fisis salep (daya sebar, daya lekat, viskositas) dan potensi pelepasan minyak atsiri lengkuas dari basis salep terhadap *C. albicans* menggunakan aplikasi *factorial design*; dan mengetahui area komposisi optimal dari basis salep yang menghasilkan formula salep optimum, meliputi sifat fisis salep dan potensi pelepasan minyak atsiri lengkuas dari basis salep. Uji homogenitas salep sebagai parameter sifat fisis yang mempengaruhi kualitas salep.

Penelitian ini termasuk penelitian eksperimental murni menggunakan *factorial design*, dengan 4 formula, yaitu (1) : PEG 1000 dan *Adeps Lanae* level rendah; *a* : PEG 1000 level tinggi dan *Adeps Lanae* level rendah; *b* : PEG 1000 level rendah dan *Adeps Lanae* level tinggi; *ab* : PEG 1000 dan *Adeps Lanae* level tinggi.

Dari hasil yang diperoleh dapat diketahui bahwa efek *Adeps Lanae* lebih dominan menentukan sifat fisis salep sedangkan efek PEG 1000 lebih dominan menentukan potensi pelepasan minyak atsiri lengkuas dari basis salep. Dari *contour plot* masing-masing uji sifat fisis salep dan potensi pelepasan minyak atsiri lengkuas dari basis salep kemudian disatukan menjadi *contour plot super imposed* dan tidak diperoleh area optimum berdasar pada level dan faktor yang diteliti.

Kata kunci : lengkuas (*Languas galanga* (L.) Stuntz), PEG 1000, *Adeps Lanae*, salep, *factorial design*, *C. albicans*, daya sebar, daya lekat, viskositas, homogenitas, potensi pelepasan minyak atsiri lengkuas dari basis salep

ABSTRACT

Galangale (*Languas Galanga* (L.) Stuntz) contains essential oil which have potency as antifungus. This research aimed to know the effect more dominant among PEG 1000 effect, *Adeps Lanae* effect, and their interaction effect in influencing physical characteristic (spreadability, adhesive, viscosity), and also potential release from the galangale essential oil from ointment bases of *Candida albicans* with the application of *factorial design*; and to know optimal composition area ointment including physical characteristic and potential release of galangale essential oil from the ointment bases. The homogeneity test as the physical characteristic which influence quality of ointment.

This research was a pure research experimental by using factorial design, with 4 formula, were (1) low level of PEG 1000 and *Adeps Lanae*; *a* : high level PEG 1000 and low level *Adeps Lanae*; *b* : low level PEG 1000 and high level *Adeps Lanae*; *ab* : high level PEG 1000 and *Adeps Lanae*.

From result obtained that *Adeps Lanae* more dominant determining physical characteristic and while PEG 1000 more dominant determine potential release of galangale essential oil from the ointment bases. From *contour plot* each physical characteristic test and potential release of galangale essential oil from the ointment bases then united become *contour plot super imposed* and not obtained optimum area at the level and factor observed.

Key word : Galangale (*Languas galanga* (L.) Stuntz), PEG 1000, *Adeps Lanae*, ointment, factorial design, *C. albicans*, spreadability, adhesive, viscosity, homogeneity, potential release of galangale essential oil from the ointment bases.