

INTISARI

ANDINI, D., 2019. FORMULASI SEDIAAN GEL PENGHARUM RUANGAN BERBASIS KARAGENAN DAN GLUKOMANAN DENGAN MINYAK ATSIRI JERUK NIPIS SEBAGAI PEWANGI SERTA MINYAK ATSIRI NILAM SEBAGAI *FIKSATIF*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Minyak atsiri jeruk nipis (*Citrus aurantifolia* S.) memiliki aroma yang khas menyegarkan, berpotensi sebagai anti nyamuk, anti rayap serta antidepresan sehingga dapat digunakan sebagai bahan pewangi alami pada pembuatan produk pengharum ruangan. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi kombinasi karagenan dan glukomanan terhadap kekuatan dan stabilitas basis gel pengharum ruangan, mengetahui pengaruh variasi konsentrasi minyak atsiri nilam sebagai *fiksatif* terhadap nilai kesukaan sediaan gel pengharum ruangan wangi jeruk nipis dan mengetahui pengaruh variasi konsentrasi minyak nilam sebagai *fiksatif* terhadap ketahanan wangi sediaan gel pengharum ruangan wangi jeruk nipis.

Basis gel dibuat menggunakan karagenan dan glukomanan dengan variasi konsentrasi 1,5%, 2%, 2,5%, 3% dan 3,5%. Konsentrasi minyak atsiri nilam yang digunakan 0,5%, 0,75%, 1% dan 1,25%. Pengujian sifat fisik sediaan meliputi pemilihan tekstur basis gel, kestabilan gel, kesukaan wangi, penguapan zat cair dan ketahanan wangi. Data dianalisis menggunakan metode frekuensi dan interval kepercayaan 95%.

Hasil penelitian menunjukkan variasi konsentrasi karagenan dan glukomanan yaitu 2,5% membentuk gel dengan tekstur yang kuat, elastis dan sineresis rendah. Aroma sediaan gel pengharum ruangan wangi jeruk nipis dengan konsentrasi 0,5% minyak atsiri nilam lebih disukai panelis. Variasi konsentrasi minyak atsiri nilam yaitu 0,75%, 1% dan 1,25% dapat menahan wangi sediaan gel pengharum ruangan.

Kata kunci: Gel pengharum ruangan, karagenan, glukomanan, minyak atsiri jeruk nipis dan nilam.

ABSTRACT

ANDINI, D., 2019. FORMULATION OF AIR FRESHNER GEL BASED ON CARAGENAN AND GLUCOMANNAN WITH LIME OIL AS FRAGRANCE AND PATCHOULI OIL AS FIXATIVE, THESIS, FACULTY OF PHARMACY, UNIVERSITY OF SETIA BUDI, SURAKARTA

Lime essential oil (*Citrus aurantifolia* S.) has a distinctive and refreshing aroma and has the potential to be a mosquito repellent, termite and antidepressant so that it can be used as a natural ingredient for making air freshener product. This study aims to determine the effect of variations in the concentration of the combination of carrageenan and glucomannan on the strength and stability of the air freshener gel preparation, knowing the effect of variations in the concentration of patchouli essential oil as fixative on the favorite value of the air freshener gel preparation and knowing the effect of variations in the concentration of patchouli oil as a fixative against the fragrance resistance of the air freshener gel preparation.

The gel base was made using carrageenan and glucomannan with variations in concentrations of 1.5%, 2%, 2.5%, 3% and 3.5%. the concentration of patchouli essential oil used is 0.5%, 0.75%, 1% and 1.25%. Testing the physical properties of air freshener gel preparations include the selection of base gel texture, gel stability, fragrance preference, liquid evaporation and fragrance resistance. the results of the data are analyzed using the frequency and confidence interval methods.

The results showed that variations in carrageenan and glucomannan concentrations had an effect on the strength and stability of the base gel where the concentration of 2.5% produced the best gel texture. Variations in the concentration of patchouli essential oil have an effect on the value of fragrance gel fragrance preferences in which the formula concentration of 0.5% and K- (without patchouli oil) is preferred by panelists. The variation in the concentration of patchouli essential oil also has an effect on the fragrance resistance of air freshener gel where the concentration of 0.75%, 1% and 1.25% is more able to withstand the fragrance of air freshener gel.

Keyword : Air freshner gel; carrageenan and glucomannan; lime and patchouli oil