RINGKASAN

Selama beberapa tahun terakhir terdapat beberapa penelitian mengenai pembuatan keju oles analog berbasis susu jagung, namun pada umumnya keju oles analog berbasis susu jagung yang dihasilkan tidak dapat bertahan lama. Dibutuhkan kemasan yang dapat melindungi dari pengaruh lingkungan luar serta suhu penyimpanan yang dapat menghambat reaksi-reaksi kimia penyebab penurunan mutu keju oles analog berbasis susu jagung. Sehingga perlu dilakukan penelitian terkait penyimpanan keju oles analog berbasis susu jagung. Penelitian ini bertujuan untuk: 1) mengetahui pengaruh jenis kemasan dan suhu penyimpanan terhadap karakteristik kimia dan sensoris keju oles analog berbasis susu jagung; 2) mengetahui jenis kemasan yang paling efektif untuk diterapkan pada produk keju oles analog berbasis susu jagung; 3) mengetahui suhu penyimpanan optimum untuk diterapkan pada produk keju oles analog berbasis susu jagung. Rancangan percobaan didalam penelitian ini ditetapkan menggunakan metode *Split Plot Design* dengan rancangan dasarnya Rancangan Acak Lengkap (RAL). Faktor yang dicoba meliputi: 1) waktu penyimpanan sebagai *mainplot* (1 minggu, 2 minggu, 3 minggu, dan 4 minggu); 2) jenis kemasan sebagai *subplot* (kemasan PP, kemasan PET, kemasan kaca); 3) suhu penyimpanan sebagai *subplot* (-5^{o}C, 5^{o}C, dan 10^{o}C). Dari perlakuan tersebut diperoleh 36 kombinasi perlakuan dan tiap perlakuan diulang 2 kali sehingga diperoleh 72 unit percobaan.

Hasil penelitian menunjukkan bahwa jenis kemasan dan suhu penyimpanan memberikan pengaruh yang signifikan selama penyimpanan keju oles analog berbasis susu jagung. Jenis yang paling efektif untuk diterapkan pada penyimpanan keju oles analog berbasis susu jagung selama 4 minggu adalah kemasan kaca dengan kadar air 69,60%, kadar protein terlarut 6,91%, kadar lemak 5,4%, kadar FFA 3,65%, dan pH 4,6, serta memiliki tekstur halus, dengan sedikit gumpalan dan mudah untuk dioles, penampakan hampir tidak berjamur, cukup menarik dan agak mengkilap, berwarna kuning pucat, cukup menarik dan agak cerah, serta beraroma asam, sedikit tengik dan tidak tercium aroma khas keju. Suhu penyimpanan optimum untuk diterapkan pada penyimpanan keju oles analog berbasis susu jagung selama 4 minggu adalah 5^{o}C dengan kadar air 69,26%, kadar protein terlarut 7,23%, kadar lemak 5,68%, kadar FFA 3,54%, dan pH 4,6, serta memiliki tekstur halus, dengan sedikit gumpalan dan mudah untuk dioles, penampakan hampir tidak berjamur, cukup menarik dan agak mengkilap, berwarna kuning pucat, cukup menarik dan agak cerah, serta beraroma sedikit asam dan hanya sedikit tercium aroma keju.

SUMMARY

Over the past few years there have been several research on the manufacture of spreadable cheese analogue based on corn milk, but in general the spreadable cheese analogue based on corn milk can not last long. It need a package that can protect from the influence of the external environment and the storage temperature that can inhibit chemical reactions that cause the quality degradation of spreadable cheese analogue based on corn milk. So it is necessary to do research about the storage of spreadable cheese analogue based on corn milk. The purpose of this research are: 1) to know the effect of the type of packaging and storage temperature on chemical and sensory characteristics of spreadable cheese analogue based on corn milk; 2) to know the most effective type of packaging to be applied to spreadable cheese analogue based on corn milk; 3) to know the optimum storage temperature to be applied to spreadable cheese analogue base on corn milk. The experimental design in this research was determined using Split Plot Design method with the basic design of Complete Random Design (CRD). The factors tested included: 1) storage time as a mainplot (1 week, 2 weeks, 3 weeks, and 4 weeks); 2) types of packaging as subplots (PP packaging, PET packaging, glass packaging); 3) storage temperature as subplots (-5^{o}C, 5^{o}C, and 10^{o}C). From the treatment 36 combinations of treatments were obtained and each treatment was repeated twice so that 72 units were obtained.

The results showed that the type of packaging and storage temperature had a significant influence during the storage of analog milk based corn milk cheese. The most effective type to be applied to the storage of corn milk based analog topical cheese for 4 weeks is glass packaging with a moisture content of 69.60%, dissolved protein content of 6.91%, fat content of 5.4%, FFA content of 3.65%, and pH 4.6, and has a smooth texture, with a few lumps and is easy to smear, the appearance is almost moldy, quite attractive and rather shiny, pale yellow, quite attractive and rather bright, and sour-scented, slightly rancid and does not smell typical cheese. The optimum storage temperature to be applied to the storage of corn milk based analog cheese for 4 weeks is 5oC with a moisture content of 69.26%, dissolved protein content of 7.23%, fat content of 5.68%, FFA level of 3.54%, and pH 4,6, and has a smooth texture, with a few lumps and is easy to polish, the appearance is barely moldy, quite attractive and rather shiny, pale yellow, quite attractive and rather bright, and smells slightly sour and smells only slightly of cheese.