Pengaruh Material Botol Kemasan dan Suhu Penyimpanan terhadap Total Kandungan Fenolik, pH, dan Angka Kapang Khamir Jamu Turun Tegang Saraf = The Effect of Bottle Packaging Material and Storage Temperature on Total Phenolic Compound, pH, Mold and Yeast Number of Neurophatic Pain Reducer Herbal Drink.

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Abstrak

Jamu yang terbuat dari cengkih, jahe, dan pala telah terbukti memiliki khasiat dalam meredakan rasa nyeri tegang saraf. Produk jamu ini perlu disimpan dalam suatu kemasan untuk memberikan perlindungan, seperti botol kemasan. Material botol dan suhu penyimpanan ialah suatu hal yang perlu dipertimbangkan karena permeabilitas dari kemasan dapat mempengaruhi terjadinya peristiwa oksidasi produk, lalu suhu penyimpanan merupakan faktor penting seperti dalam pertumbuhan mikroba. Jamu yang telah diekstraksi, disimpan dalam material botol kemasan Polyethylene Terephthalate (PET) dan botol kaca yang keduanya berwarna coklat, pada suhu ruang dan pada suhu lemari pendingin. Selanjutnya, setiap hari selama penyimpanan 7 hari, setiap sampel jamu dilakukan pengujian total kandungan fenolik, pengukuran nilai pH, dan pengujian Angka Kapang Khamir (AKK) untuk memperoleh material botol kemasan dan suhu penyimpanan yang terbaik. Berdasarkan penelitian, hasil penyimpanan di botol kaca pada suhu lemari pendingin, pada akhir periode penyimpanan, mengalami penurunan total kandungan fenolik yang paling sedikit (berkurang sebesar 213 ppm), penurunan nilai pH yang paling sedikit (berkurang sebesar 0,17), dan kenaikan nilai AKK yang paling rendah (0 koloni/mL) dibandingkan dengan hasil penyimpanan di dalam botol PET suhu lemari pendingin, botol kaca suhu ruangan, serta botol PET suhu ruangan. Kesimpulan dari penelitian ini ialah bahwa penyimpanan jamu di botol kaca di dalam lemari pendingin merupakan hasil yang terbaik.

..... Herbal drink made from cloves, ginger, and nutmeg, has been shown to have efficacy in relieving the pain of nervous tension. This herbal product needs to be stored in a package to provide protection, such as bottle. Bottle material needs to be considered because the higher permeability of the packaging then the higher risk of product oxidation occurs. Other than that, storage temperature also needs to be considered because it can affect the quality of food products, one of which is an important factor in microbial growth. The extracted herbs are stored in Polyethylene Terephthalate (PET) bottles and glass bottles, both of which are brown in color. Then, stored at room and refrigerator temperature. Furthermore, during each day of 7 days of storage, the herbal drink sample is tested for total phenolic content, measuring pH values, and the Yeast Mold Number (AKK) in order to obtain best packaging bottle material and storage. Based on the research, the results of storage in glass bottles at refrigerator temperature, at the end of storage period, experienced the least decrease in total phenolic content (reduced by 213 ppm), less decrease in pH value (reduced by 0,17), and the lowest increase in AKK values (0 CFU/mL), than those stored in PET bottles at refrigerator temperature, glass bottles at room temperature room, as well as room temperature PET bottles. The conclusion of this study is that storing herbs in glass bottles in the refrigerator is the best result.