

BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

1. Penambahan *cream of tartar* pada *sugar glass* memberikan pengaruh terhadap sifat fisikokimia yaitu kadar air, warna, tekstur (*hardness* dan *brittleness*), dan daya larut.
2. Penambahan *cream of tartar* pada *sugar glass* memberikan pengaruh terhadap sifat organoleptik yaitu warna dan kelengketan.
3. Peningkatan konsentrasi *cream of tartar* yang ditambahkan akan meningkatkan *hardness*, (31,724-56,594 kg) dan daya larut (21,7-31,3 menit), serta menurunkan kadar air (0,45-0,96%), dan nilai *lightness* (79,5-54,1).
4. Peningkatan konsentrasi *cream of tartar* yang ditambahkan akan menurunkan nilai organoleptik *sugar glass* terhadap parameter warna (4,26-6,85) dan kelengketan (4,41-6,64).

5.2. Saran

Pemanasan sebaiknya menggunakan kompor listrik sehingga panas yang dihasilkan lebih merata saat proses pemasakan. Selain itu perlu dilakukan penelitian lebih lanjut mengenai kesukaan panelis terhadap parameter rasa untuk mengetahui apakah *sugar glass* dengan penambahan *cream of tartar* dapat diterima atau tidak.

DAFTAR PUSTAKA

- [AOAC] Association of Official Analytical Chemist. 1995. *Official Methods of Analysis of The Association of Analytical Chemists*. USA: The Association of Official Analytical. Chemist, Inc. 979. 12.
- Brown, A. 2008. *Understanding Food: Principles and Preparation*. United States of America: Thomson Learning, Inc.
- Barbosa-Canovas, G. V. 2009. *Food Engineering: Volume III*. Singapore: EOLSS.
- Calorie Control Council. 2016. Isomalt. <http://www.caloriecontrol.org/sweeteners-and-life/polyols/isomalt> (diakses pada 14 Agustus 2016).
- Edwards, W. P. 2000. *The Science of Sugar Confectionery*. London: The Royal Society of Chemistry.
- Food and Agriculture Organization of The United Nations (FAO). 2001. FAO Additive Specification. <http://www.fao.org/ag/agn/jecfa-additives/specs/Monograph1/Additive-241.pdf> (diakses pada 10 Agustus 2016)
- Faridah, A., dkk. 2008. *Patiseri Jilid 3*. Jakarta: Departemen Pendidikan Nasional
- Farkas, J. 1988. *Technology and Biochemistry of Wine, Volume 2*. Czechoslovakia: Gordon and Breach Science Publishers S. A.
- Fritzsching, B. 1995. *Isomalt in Hard Candy Applications*. Presented at The National American Association of Candy Technologists Technical Session, November 1995.
- Gadiyaram, K.M. dan G. Kannan. 2004. Comparion of Textural Properties of Low-Fat Chevon, Beef, Pork, and Mixed-Meat Sausage. *South African Journal of Animal Science* 34(1):168-170.

- Gondosari, A. H. 2009. Energi 5 Elemen:Gula Pasir, Gula Batu, dan Gula Merah : Efek Gula Pasir, Gula Batu, dan Gula Merah pada Gula Darah, Kesehatan Pankreas dan Kesehatan Tubuh. <http://www.5elemen.com/energi-5-elemen-gula-pasir-gula-batu-dan-gula-merah> (diakses pada 14 Agustus 2014)
- Hutchings, J. B. 1999. Food Colour and Appearance 2nd edition (dalam Lutfika, Efrin. 2006. Evaluasi Mutu Gizi dan Indeks Glikemik Produk Olahan Panggang Berbahan Dasar Tepung Ubi Jalar (*Ipomoea batatas L.*) Klon Unggul BB00105.10. *Skripsi*, Institut Pertanian Bogor). Maryland: Aspen Pub.
- Kartika, H. dan Supartono. 1988. *Pedoman Uji Inderawi Bahan Pangan*. Yogyakarta: PAU Pangan dan Gizi UGM.
- Lees, R. and E. B. Jackson. 2012. *Sugar Confectionary and Chocolate Manufacture*. London: Blackie Academic and Professional
- Mardis, A. L. 2001. Current Knowledge of the Health Effects of Sugar Intake. *Family Economics and Nutrition Review* 13(1): 87-91.
- Minifie, B. W. 2012. *Chocolate, Cocoa, and Confectionary: Science and Technology Third Edition*. New York: Van Nostrand Reinhold.
- Mitchell, H. 2008. *Sweeteners and Sugar Alternatives in Food Technology*. UK: Blackwell Publishing Ltd.
- Mohos, F. A. 2010. *Confectionary and Chocolate Engineering Principles and Applications*. UK: Blackwell Publishing Ltd.
- Myerson, A. S. 2002. *Handbook of Industrial Crystallization :Second Edition*. USA: Butterworth-Heinemann
- Nordic Sugar. 2014. The Functional Properties of Sugar. http://www.nordicsugar.com/fileadmin/Nordic_Sugar/Brochures_facsheet_policies_news/Download_center/Functional_properties_of_sugar_on_a_technical_level/Functional_prop_on_tech_level_uk.pdf (diakses pada 29 Desember 2016)
- Pennington, N. L. and C. W. Baker. *Sugar: User's Guide to Sucrose*. New York: Van Nostrand Reinhold.

- Quintas, M. A. C., T. R. S. Brandao, and C. L. M. Silva. 2007. Modelling Colour Changes During the Caramelisation Reaction. *Jurnal of Food Engineering* 83(4):483-491
- Quintas, M. A. C., T. R. S. Brandao, and C. L. M. Silva. 2010. Sucrose in the Concentrated Solution or the Supercooled "State": A Review of Caramelisation Reactions and Physical Behaviour. *Food Engineering Review* 2:204-215
- Razavi, S. M. A. and H. Karazhiyan. 2012. Rheological and Textural Characteristics of Date Paste. *International Journal of Food Properties* 13:281-291.
- Rudolph, P. 2015. *Handbook of Crystal Growth; Bulk Crystal Growth: Basic Techniques, and Growth Mechanisms and Dynamics*. Amsterdam: Elsevier B. V.
- Roos, Y. H. 1995. *Phase Transitions in Foods*. USA: Academic Press, Inc.
- TA-XT Plus. 2010. Texture Analyzer for Food Testing Application. <http://www.njcforce.com/Materials%20testing/TA%20plus%20with%20grips.pdf> (diakses pada 20 Agustus 2016).
- The Sugar Association. 2005. Sugar's Functional Roles in Cooking and Food Preparation. <http://www.sugar.org> (diakses pada tanggal 14 Agustus 2016)
- Tejosaputro, P. A. 2015. Pengaruh Proporsi Isomalt dan Gula Batu Terhadap Sifat Fisikokimia dan Organoleptik *Sugar Glass*. *Skripsi S-1*. Universitas Katolik Widya Mandala Surabaya.
- Trisyulianti, E., J. Jacjha dan Jayusmar. 2001. Pengaruh suhu dan tekanan pengempaan terhadap sifat fisik wafer ransum dari limbah pertanian sumber serat dan leguminose untuk ternak ruminansia. *Media Peternakan* 24(3): 76 – 81.
- Shin, K., S. Lim, and H. Son. 1998. Effect of Organic Acids on the Hygroscopicity and Browning Sucrose Candies. *Food Science and Biotechnology* 7 (2): 107-111

- Szczesniak, A. S. 1962. *Classification of Textural Characteristics*. New York: General Food Corporation
- Vaclavik, V. A. and E. W. Christian. 2008. *Essentials of Food Science*. New York: Springer Science+Business Media, LLC.
- Xrite. 2015. A Guide to Understanding Color Communication. https://www.xrite.com/documents/literature/en/L10-001_Understand_Color_en.pdf (20 Augustus 2016).