



DAFTAR PUSTAKA

- Akharaiyil F.C., IlorivR.M., Adesida J.A., (2011), Antibacterial effect of Terminalia cattapa on some selected Pathogenic Bacteria. *International Journal of Pharmaceutical and Biomedical Research* 2(2): 54-67
- Bas, D. & Boyaci I.H., 2006, Modeling and Optimization I: Usability of Response Surface Methodology, *Journal of Food Engineering*, 78, 836-845
- Branen, A. L. and Davidson, P. M., 1983, “*Antimicrobials in food*”, Marcel Dekkers, Inc., New York.
- Chen, PS., and Li, JH., 2006. “Chemopreventive effect of punicalagin, a novel tannin component isolated from Terminalia catappa, on H-ras-transformed NIH3T3 cells. *Toxicology Letters.*, 163: 44-53
- Darkuni, N. 2001. “ Mikrobiologi”. Malang: JICA
- Dutta, P. K., Tripathi, S., and Mehrotra, G. K.. 2009. Physicochemical and Bioactivity of Cross-linked Chitosan-PVA Film for Food Packaging Applications. *Journal of Biological Macromolecules.*, 45:72-76.
- Elksibi, I. H. W., Ticha, M. B., Gharbi, R., and Mhenni, M. F., 2014, Development and optimisation of a non conventional extraction process of natural dye from olive solid waste using response surface methodology (RSM), *Food Chemistry* 161, 345-352.
- Hafdani, F.N. and Sadeghinia. N., 2011. “A Review on Application of Chitosan as a Natural Antimicrobial”. World Academy of Science. Engineering and Technology, 50.



- Hagerman, A. E, M. E. R., dan Ritchard, N. T., 1998. "Mechanism of Protein Precipitation for two Tannins, Pentagalloyl Glucose and Epicatechin (4-8) Catechin (Procyanidin), *J Agric Food Chem* 46: 2586,4-2595
- Hagerman, A. E., 2002. "*Tannin Hanbook*", Miami University, USA
- Harborne, J.B., 1987, *Metode Fitokimia*, ITB, Bandung
- International Agency for Research on Cancer (IARC). 1982. Some Industrials Chemicals and Drystuffs. IARC Monograph.
- Lopez, H. E., Alquicira, E.P., Sosa, F.C., and Legaretta, I.G., 2001, "Characterization and Stability of Pigments Extracted from Terminalia Catappa Leaves", *Journal of Food Sciences*, 66(6): 832-836
- Mastuti, E., Nita, P.S., dan Romasta, A.S., 2013, "Ekstraksi Zat Warna Alami Kelopak Bunga Rosella dengan Pelarut Aquadest", *Ekuilibrium Journal of Chemical Engineering*, 12 (2), (43-47)
- Montgomery, D. C., 1991. *Design and Analysis of Experiments*. John Wiley & Sons, New York.
- Nurfitasari, P., 2014, "Studi Pengawetan Zat Warna Alami dari Sabut Kelapa", Laboratorium Operasi Teknik Kimia., Universitas Gadjah Mada., Yogyakarta.
- Parker, S., Encyclopedia of Chemistry, 2nd ed. (New York: MC Graw Hill Book Co, 1993), p. 981
- Paryanto., Hermiyanto., dan Simon, D.S.S., 2013, "Pembuatan Zat Warna Alami dari Biji Kesumba dalam Bentuk Konsentrat Tinggi untuk Pewarna Makanan", *Ekuilibrium Journal of Chemical Engineering*, 13 (2), (55 – 58)



- Putra, A. A. B., Bogoriani, N.W., Diantariani, N.P., dan Ni, L.U.S., 2014,
“Ekstraksi Zat Warna Alam Dari Bonggol Tanaman Pisang (*Musa paradiasciaca* L.) dengan Metode Maserasi, Refluks, dan Sokletasi”,
Jurnal Kimia., 8 (1), 113-119.,
- Rahayuningsih, E., Wijayanto, A., dan Nurfitasari, P., 2016., Preservation of Natural Colorant Extract of Jelawe Fruit Peel (Terminalia Bellirica) in Water-Bassed Solution., Indones. J. Chem., 16 (3) 315-321
- Ramakrishnan, K., Selve, S.R., Shubha, R., 2006. *Tannin and its analytical techniques. Indian Chemical Engineering*, Section A 48 (2), India
- Rizal, I. R., dan Rahayuningsih, E. 2017. “ Laju Degradasi Pengawetan Zat Warna Alami dari Gmabir (Unicaria Gambir). Laboratorium Operasi Teknik Kimia., Universitas Gadjah Mada., Yogyakarta.
- Robinson, T, 1995, “Kandungan Organik Tumbuhan Tinggi”. Edisi keenam, Terjemahan Kosasih Padmawinata, ITB, Bandung
- Roe, F.J.C. and Wood, D., 1992. *Acetadehyde and formaldehyde: Is there a cancer risk for man? Indor Environ.*
- Setyaningsih, W., Duros, E., & Barroso C.G., 2015, Optimization of the Ultrasound-assisted Extraction of Melantonim from Red Rice (*Oriza sativa*) Grains throught a Response Surface Methodolog, *Applied Acoustics*, 103, 129-135
- Sehng, Z.L., Wan, P.F., Dong, C.L., & Li, Y.H., 2013, Optimization of total flavonoids content extracted from Flos Populi using response surface methodology, *Journal of Food Engineering*, 74(3), 352-358.



- Shuler, M.L., and Kargi, F., 2002, *Bioprocess Engineering Basic Concepts*, 2nd ed., Prentice-Hall, Inc. New Jersey, 161.
- Suhardi. 1993. Kitin dan Kitosan. Pusat Antar Universitas Pangan dan Gizi. Yogjakarta : UGM.
- Susanto, S., (1973), *Seni Kerajinan Batik Indonesia*, BPKB, Yogayakarta
- Swarna, V.K.., Venba. R., Madhan, B., Chandrababu, N.K., Sadulla, S., 2009. “*Cleaner tanning practices for tannery pollution abatement: role of enzymes in eco-friendly vegetable tanning*”. Journal of Cleaner Production.
- Tanaka, T.; Nonaka, G. I.; and Nishioka, I. 1986. “Tannins and related compounds. XLI. Isolation and characterization of novel ellagitannins, punicacortins A, B, C and D and punigluconin from the bark of *Punica granatum* L”. *Chem. Pharm. Bull.* 34, 656-663.
- Tarigan, J. 1998. “ Pengantar Mikrobiologi”. Jakarta: Departemen Pendidikan dan Kebudayaan Direktorat Jendral Pendidikan Tinggi Proyek Pengembangan Lembaga Pendidikan Tenaga Kependidikan
- Thomson, L.A.J. and Evans, B., 2006, “*Terminalia catappa (tropical almond)*”. Species Profiles for Pacific Island
- Treybal, R.E., 1968, “*Mass Transfer Operation*”, 2nd ed., p.88, Mc Graw-Hills Book Company, singapore
- Windholz., 1989, *The Merck Index an Encyclopedia of Chemicals. Drug and Biologicals*. Eleventh Edition. Usc. Merc an Co.
- World Health Organization (WHO)., 2002, “*Formaldehyde*”, Concise International Chemical Assessment Document 40. Geneva.



UNIVERSITAS
GADJAH MADA

PENENTUAN KONDISI OPERASI OPTIMUM EKSTRAKSI MENGGUNAKAN RESPONSE SURFACE
METHOD DAN STUDI
PENGAWETAN ZAT WARNA ALAMI PADA EKSTRAK DAUN KETEPENG (TEMINALIA CATAPPA)
ZAKIAH AWALIA JS D, Dr. Ir. Edia Rahayuningsih., M.S. ; Ahmad T Yuliansyah., S.T., M.T., D.Eng.

Universitas Gadjah Mada, 2018 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Yogesh, V., and Namrita, ., 2017., “Natural Dyes Extracted From Waste Leaves of Terminalia Catappa Locally Known as Tropical Almond and its Application on Silk Fabrics Pretreated with Eco Friendly and Noneco-Friendly Mordants”, *International Journal of Home Science.*, 3(2): 175-181

<https://www.bps.go.id/linkTabelStatis/view/id/1901>., diakses pada 20 agustus 2017 pukul 10.00