

DAFTAR PUSTAKA

- Ak, T. & Gülçin, İ., 2008, Antioxidant and radical scavenging properties of curcumin, *Chemico-Biological Interactions*, 174: 27–37.
- Alagumanivasagam, G., Pasupathy, R., Kottaimuthu, A., & Manavalan, R., 2012, A Review on In-vitro Antioxidant Methods, *International Journal of Pharmaceutical and Chemical Sciences*, 1(2):662-674.
- Ames, B.N., Shigenaga, M.K., Hagen, T.M., 1993, Oxidants, antioxidants, and the degenerative diseases of aging, *Proceedings of the National Academy of Sciences of the United States of America*, 90:7915–7922.
- Amic, D., Davidovic-Amic, D., Beslo, D., Trinajstić, N., 2003, Structure-radical Scavenging Activity Relationships of Flavonoid, *Croatia Chemica Acta*, 76, 55-61.
- Ananda, L., 2008, Karakteristik Fisikokimia Serbuk Bit Merah (*Beta vulgaris* L.) yang Diproses dengan Variasi *Drying Agents* dan Maltodekstrin sebagai *Coating Agent*, Thesis, Program Pascasarjana, Universitas Katolik Soegijapranata, Semarang.
- Arief, Sjamsul, 2012, *Radikal Bebas*, Bagian Ilmu Kesehatan Anak Fakultas Kedokteran Universitas Airlangga, Surabaya.
- Asra, R., Yetti, R.D., Ratnasari, D., Nessa, 2020, Studi Fisikokimia Betasianin dan Aktivitas Antioksidan dari Umbi Bit Merah, *Journal of Pharmaceutical and Sciences*.
- Azmir, J., Zaidul, I. S. M., Rahman, M. M., Sharif, K. M., Mohamed, A., Sahena, F., Jahurul, M. H. A., Ghafoor, K., Norulaini, N. A. N., & Omar, A. K. M., 2013, Techniques for extraction of bioactive compounds from plant materials: A review, *Journal of Food Engineering*, 117(4), 426–436.
- Bauzaite, R., Venscutonis, P.R., Gruzdiene, D., Tirzite, D., & Tirzitis, G., 2003, *Radical scavenging and antioxidant activity of various plants grown in Lithuania*, In Food Technology and Quality Evaluation, Dris R, Sharma A, eds. pp 183–193, Science Publishers, In3, United States.
- Bastos, E. L., & Schliemann, W., 2021, Betalains as Antioxidants, Plant Antioxidants and Health, *Springer Reference Chemistry & Mat. Science*.
- Besung, Kerta nengah I., 2009, Pegagan (*Centella asiatica*) Sebagai Alternatif Pencegahan Infeksi Pada Ternak, *Jurnal Penelitian Vol. 2* No 126 Agustus 2009, Universitas Udayana, Bali.

- BPOM RI, 2019, *Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia Nomor 23 Tahun 2019 Tentang Persyaratan Teknis Bahan Kosmetika*, BPOM RI, Jakarta.
- Burns, T., Breathnach, S., Cox, N., & Griffiths., C., 2013, *Rook's Textbook of Dermatology*, 8 th Ed., Wiley-Blackwell Publishing, United Kingdom.
- Chevion, S., Chevion M., Chock, B., & Beecher, G. R., 1999, Antioxidant Capacity of Edible Plants: Extraction Protocol and Direct Evaluation by Cyclic Voltammetry, *Journal of Medicinal Food*, Volume 2, Mary Ann Liebert. Inc.
- Chu, D.H., 2008, Overview of biology, development, and structure of skin, cit. Wolff, K., Goldsmith, L.A., Katz, S.I., Gilchrest, B.A., Paller, A.S., & Leffell, D.J. (Eds.), *Fitzpatrick's dermatology in general medicine* (7th ed., pp. 57–73). McGraw-Hill, New York.
- Ciptaningsih, E., 2012, Uji Aktivitas Antioksidan dan Karakteristik Fitokimia pada Kopi Luwak Arabika dan Pengaruhnya terhadap Tekanan Darah Tikus, Tesis, Universitas Indonesia, Jakarta.
- Clarkson, P. M., & Thompson, H. S., 2000, Antioxidants: What role do they play in physical activity and health?, *The American Journal of Clinical Nutrition*, 72 (2 Supplement), 637-646.
- Depkes RI, 1995, *Farmakope Indonesia Edisi IV*, Departemen Kesehatan Republik Indonesia, Jakarta.
- Depkes RI, 2000, *Parameter Standar Umum Ekstrak Tumbuhan Obat Edisi I*, Direktorat Jenderal Pengawas Obat dan Makanan, Jakarta.
- Deshmukh, G. P., Sindhav, R., & Jose, N., 2018, Application of Beetroot as Natural Coloring Pigment and Functional Ingredient in Dairy and Food Products, *Int. Journal of Current Microbiology and Applied Sciences*.
- Dewantari, D.R., & Sugihartini, N., 2015, Formulasi dan Uji Aktivitas Gel Ekstrak Daun Petai Cina (*Leucaena glauca*, Benth) sebagai Sediaan Obat Luka Bakar, *Farmasains*.
- Droge, W., 2002, Free radicals in the physiological control of cell function, *Physiol, Rev.*, 82 (1), 47-95.
- Dubery, I., & James, J., 2011, Identification and Quantification of Triterpenoid Centelloids in *Centella asiatica* (L.) Urban by Densitometric TLC, *Journal of Planar Chromatography*, Vol. 24 (1) : 82-87.

- Eroschenko, V. P., 2012, *Atlas Histologi difiore*, Penerbit buku kedokteran (EGC), Jakarta.
- EMA, 2022, *Centellae asiaticae herba*, *Text, European Medicines Agency*. URL : <https://www.ema.europa.eu/en/medicines/herbal/centellae-asiaticae-herba> diakses pada 22 Oktober 2022.
- Fauzi, AR NR., 2012, *Merawat Kulit dan Wajah*, PT Elex Media Komputindo, Jakarta.
- Fessenden, R. J., & Fessenden, J. S., 1986, *Kimia Organik*, Edisi Ketiga, Erlangga, Jakarta.
- Garna, H., 2001, *Patofisiologi Infeksi Bakteri Pada Kulit, Sari Pediatri*, Badan Penerbit Ikatan Dokter Anak Indonesia, Jakarta.
- Gordon, I., 1994, *Functional Food : Food Design, Pharmafood*, Chapman & Hall, New York.
- Grinberg, L.N., Shalev, O., Tønnesen, H.H., & Rachmilewitz, E.A., 1996, Studies on curcumin and curcuminoids: XXVI. Antioxidant effects of curcumin on the red blood cell membrane, *International Journal of Pharmaceutics.*, 132: 251–257.
- Haake, A.R., & Hollbrook, K., 1999, The structure and development of skin. cit I. Freedberg, A. Eisen, K. Wolff, K. Austen, L. Goldsmith, S. Katz, et al. (Eds.), *Fitzpatrick's dermatology in general medicine* (5th ed., pp. 70–111), McGraw-Hill, New York.
- Handayani, V., Ahmad, A.R., & Sudir, M., 2014, Uji Aktivitas Antioksidan Ekstrak Metanol Bunga dan Daun Patikala (*Etlingera elatior* (Jack) R.M.Sm) Menggunakan Metode DPPH, *Pharmaceutical Scinces and Research (PSR)*.
- Harahap, I.A.Br. & Hidayat, W., 2018, Pengaruh Kualitas Produk Dan Harga Terhadap Keputusan Pembelian Masker Wajah Mustika Ratu (Studi Kasus pada Konsumen Kec. Tembalang Kota Semarang), *Jurnal Ilmu Administrasi Bisnis*, Universitas Diponegoro, Semarang.
- Harry, R.G., 2000, *Harry's Cosmeticology*, 8th ed, Chemical Publishing Co. Inc., New York.
- Haryadi, W., 1993, *Ilmu Kimia Analitik Dasar*, PT Gramedia Pustaka, Jakarta.
- Hashim, P., Sidek, H., Helan, M.H.M., Sabery, A., Palanisamy, U.D., dan Ilham, M., 2011, Triterpene composition and bioactivities of *Centella asiatica*. *Molecules (Basel, Switzerland)*, 16: 1310-1322.

- Heki, Y., Hsueh, K. F. and Sakae, N., 2009, *Superior Skin Care Effects of Facial Masks*, P&G Beauty and Grooming, Kobe.
- Hendayana, Sumar, 1994, *Kimia Analitik Instrumen*, IKIP Semarang Press, Semarang.
- Indriastuti, D., Dewi, M. L., & Priani, S. E., 2022, Literature Review Formulasi Sediaan Masker Clay Antioksidan, *Bandung Conference Series : Pharmacy*, Universitas Islam Bandung.
- Ingggrid, M., & Herry, S., 2014, Ekstraksi Antioksidan dan Senyawa Aktif Dari Buah Kiwi (*Actinidia deliciosa*), *Lembaga Penelitian dan Pengabdian Kepada Masyarakat*, Universitas Katolik Parahyangan, Bandung.
- Iskandar, B., Janita, M., & Leny, 2021, Formulasi dan Evaluasi Krim Lidah Buaya (*Aloe vera* Linn) sebagai Pelembab Kulit, *Pharmaceutical Journal of Islamic Pharmacy*, 5(2): 18-23.
- James, W.D., Berger, T.G., & Elston, D.M., 2006, *Andrews' diseases of the skin: Clinical dermatology* (10th ed.), Elsevier Saunders, Philadelphia.
- Jamil, S.S., Nizami, Q., & Salam, M., 2007, *Centella asiatica* (Linn) urban óa review. *Natural Product Radianc*, 6(2):158-70.
- Janaszewska, A. & Bartosz, G., 2002, Assay of total antioxidant capacity: comparison of four methods as applied to human blood plasma, *Scandinavian Journal of Clinical and Laboratory Investigation*, 62: 231–236.
- Jessica, 2016, Optimasi Formula Gel Hand Sanitizer Minyak Atsiri Jeruk Bergamot dengan Kombinasi CMC Na dan Gliserin, Skripsi, Universitas Sanata Dharma, Yogyakarta.
- Juwita, A. P., Yamlean, P.V.Y., & Edy, H. J., 2013, Formulasi Krim Ekstrak Etanol Daun Lamun (*Syringodium isoetifolium*), *Jurnal Ilmiah Farmasi-UNSRAT*, 2(2): 8-12.
- Kanitakis, J., 2002. Anatomy, histology and immunohistochemistry of normal human skin. *European Journal of Dermatology*, 12(4), 390–401.
- Karting, 1988, Protective of *Centella asiatica* on antioxidant tissue defense system against adriamycin induced cardiomyopathy in rats, *Journal of Cancer Search*, Public Ledge Building suit.
- Khairunnisa, Nisa, 2018, Formulasi sediaan masker gel ekstrak etanol biji jagung (*Zea mays L.*), Tesis, Fakultas Farmasi Institut Kesehatan Helvetia, Sumatera Utara.

- Kendriastuti, D., 2018, Optimasi Formula dan Uji Aktivitas Krim M/A Senyawa Kalkon Sebagai Tabir Surya Secara In Vitro, Skripsi, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Lachman, L., Lieberman, H. A., & Joseph, L.K., 1994, *Teori dan Praktek Farmasi Industri 2*, Edisi III, Penerbit Universitas Indonesia, Jakarta.
- Langenbucher & Lange, 2007, *Teori dan Praktek Farmasi Industri II*. Edisi III, Universitas Indonesia Press, Jakarta.
- Li, H., Guoying, Z., Huaiyun, Z., & Yuanhao, H., 2010, Chemical constituents and biological activities of saponin from the seed of *Camellia oleifera*, *Scientific Research and Essay*, 5(25): 4088-4092.
- Liang, N. & Kitts, David, D., 2014, Antioxidant Property of Coffee Components : Assessment of Methods that Define Mechanism of Action, *Multidisciplinary Digital Publishing Institute*.
- Lingga, L., 2012, *The Healing Power of Antioxidant*, Elex Media Komputindo, Jakarta.
- Litescu, S. C., Eremia, S., & Radu, G. L., 2010, Methods for the Determination of Antioxidant Capacity in Food and Raw Materials, *Bio-Farm for Nutraceuticals* 241-249.
- Marchaban, Fudholi, A., Sulaiman, T.N.S., Mufrod, Martin, R., & Bestari, A.N., 2016, *Buku Petunjuk Praktikum Teknologi Farmasi: Teknologi Formulasi Sediaan Cair Semi Padat*, Laboratorium Teknologi Farmasi Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Mastuti, Cai, Y., & Harold Corke, 2010, Identifikasi Pigmen Betasianin Pada Beberapa Jenis Inflorescence Celosia, *Jurnal Biologi UGM*, 669:667.
- Mitsui, T., 1998, *New Cosmetic Science*, Elsevier Science, Amsterdam.
- Molyneux, P., 2004, The Use of the Stable Free Radical Diphenylpicryl- Hydrazyl (DPPH) for Estimating Antioxidant Activity, *Songklanakarin Journal of Science and Technology*.
- Moon, J.K. & Shinamoto, T., 2009, Antioxidant assays for plant and food components, *Journal Agric Food Chem*, 57: 1655–1666.
- Moreno, D.A., Garcia-Viguera, C., Gil, J., Gil-Izquierdo, A., 2008, Betalains in the era of global agri-food science, technology and nutritional health, *Phytochemistry Reviews*, 7(2):261-280.

- Muchtadi, Deddy, 1946, *Antioksidan & Kiat Sehat di Usia Produktif*, Alfabeta, Bandung.
- Murphy, G.F., 1997. Histology of the skin. In D. Elder, R. Elenitsas, C. Jaworsky, & B. Johnson, Jr. (Eds.), *Lever's histopathology of the skin* (8th ed., pp. 5–45), Lippincott Williams & Wilkins, Philadelphia.
- Mustanti, L.F., 2018, Formulasi Sediaan Masker Clay Ekstrak Ubi Jalar Ungu (*Ipomoea batatas* (L.) Lam) dan Uji Efek Anti-Aging, Skripsi, Fakultas Farmasi Universitas Sumatera Utara.
- Nurhayati I. R Polumulo, 2015, Formulasi dan Evaluasi Sediaan Masker Ketimun (*Cucumis sativus* L.) dengan menggunakan Basis Kaolin dan Bentonit, Skripsi, Fakultas Farmasi Universitas Negeri Gorontalo.
- Oresajo, C., Pillai, S., Manco, M., Yatskayer, M., & McDaniel, D., 2012, Antioxidants and the Skin: Understanding Formulation and Efficacy: Antioxidant Formulations and Efficacy Tests, *Dermatologic Therapy Journal*.
- Orhan, I.E., 2012, *Centella asiatica* (L.) Urban: From Traditional Medicine to Modern Medicine with Neuroprotective Potential, *Evidence-based complementary and alternative medicine : eCAM*.
- Pangkahila, Wimpie, 2011, *Anti-Aging, Tetap Muda dan Sehat*, Kompas Media Nusantara.
- Paye, M., Andre, O.B., & Howard, I.M., 2014, *Handbook of Cosmetic Science and Technology Fourth Edition*, 220-226, Marcell Dekker Inc., New York.
- Pham-Huy, L.A.P, He H, & Pham-Huy, C., 2008, Free Radicals, Antioxidants in Disease and Health, *International Journal of Biomedical Science*.
- Porter, N. A., Caldwell, S. E., & Mills, K. A., 1995, Mechanisms of free radical oxidation of unsaturated lipids, *Lipids*, 30 (4), 277-290.
- Prakash, A., 2001, Antioxidant Activity, *Analytical Progress*, 19 (2), 1-4.
- Pratiwi, A.S., 2010, Respon Tikus Putih (*Rattus norvegicus*) yang Dikontaminasi Radikal Bebas terhadap Pemberian Tepung Delima (*Punica granatum* L.) sebagai Sumber Antioksidan, Skripsi, Institut Pertanian Bogor, Bogor.
- Preedy, V.R. (Ed.), 2012, *Handbook of Diet, Nutrition and the Skin, Human Health Handbooks*, Wageningen Academic Publishers, The Netherlands.
- Rachmatiah, T., Putri, F.E., & Dewi, R.T., 2015, Aktivitas Ekstrak Etanol dan Metanol Daun Pegagan Merah (*Centella asiatica* (L.) Urban. Var. Manoko)

Sebagai Aktivitas Antioksidan dan Antidiabetes Secara In Vitro, *Sainstech Farma Jurnal Ilmu Kefarmasian* 8(2) : 14-17.

Rahmawati, I., Rejeki, E.S., dan Sardjiman, S., 2010. Antioxidant Activity Test of 2,6-bis-(2'-furilidyn)- Cyclohexanone; 2,5-bis- (2'-furilidyn) Cyclopentanone; 1,5-Difuryl-1,4-pentadien-3-one, *Indonesian Journal of Cancer Chemoprevention*, 1:38.

Rieger, M.M., 2000, *Harry's Cosmetology 8th ed.*, Chemical Publishing Co. Inc. New York.

Robert, M.S., & Walters, K.A., 2008, *Dermatologic, Cosmeceutic, and Cosmetic Development – Therapeutic and Novel Approaches*, Informa Healthcare, USA.

Rohmawati, M., 2015, Karakterisasi morfologi dan anatomi pegagan (*Centella asiatica* (L.) Urban.) di Kabupaten Batang sebagai sumber belajar pada mata kuliah praktikum morfologi dan anatomi tumbuhan, Tesis, Universitas Islam Negeri Walisongo, Semarang.

Rosaini, H., Makmur, I., Putri, R. D., & Sidoretno, W. M., 2019, Formulasi , Pengujian Aktivitas Antioksidan dan Antibakteri Sediaan Masker Gel Peel Off Ekstrak Etanol Herba Seledri (*Apium graveolens* L.), *Jurnal Farmasi Higea*, 11(2).

Rosilia, R., 2014, Aktivitas Antioksidan Zat Ekstraktif Daun Mamgium (*Acacia mangium* Willd) Berdasarkan Uji Secara In Vivo dan In Vitro, Skripsi, Universitas Negeri Semarang, Semarang.

Rowe, R. C., Sheskey, P. J., & Quinn, M. E., 2009, *Bentonite in Handbook of Pharmaceutical Excipient*. 6th Ed. Pharmaceutical Press, London.

Sabaragamuwa, R., Perera, C.O., & Fedrizzi, B., 2018, *Centella asiatica* (Gotu kola) as a neuroprotectant and its potential role in healthy aging. *Trends in Food Science & Technology*, 79: 88-97.

Sandhiutami & Dwi, N.M., 2010, Uji Aktivitas Antioksidan Minyak Buah Merah (*Pandanus conoideus* Lam.) Secara In Vitro dan In Vivo pada Tikus yang diberi Beban Aktivitas Fisik Maksimal, *Jurnal Sains dan Teknologi Farmasi*, 15 (1), 1-5.

Santiago, E.C., & Yahlia, E.M., 2008, Identification and quantification of betalains from the fruits of 10 Mexian Prickly Pear Cultivars by High Performance Liquid Chromatography and Electrospray Ionization Mass Spectrometry, *Journal of Agriculture and Food Chemistry*.

- Santoso, C.C., Farsono, F. L., & Hermanu, L.S., 2018, Formulasi Sediaan Masker Wajah Ekstrak Labu Kuning (*Cucurbita moschata*) Bentuk Clay Menggunakan Bentonit dan Kaolin Sebagai Clay Mineral, *Journal of Pharmacy Science and Practice*.
- Sarwono, Jonathan, 2009, *Statistik itu Mudah : Panduan Lengkap untuk Belajar Komputerisasi Statistik Menggunakan SPSS 16*, Andi, Yogyakarta.
- Sembiring, B.S., F. Manoi., M. Sukmasari, & M. Wijayanti, 2010, *Pengembangan Pangan Fungsional Antioksidan*, Badan Litbang Pertanian, Jakarta.
- Shai, A., Maibach, H.I., & Baran, R., 2009, *Handbook of Cosmetic Skin Care*, 2nd edition, CRC Press, Florida.
- Shekhar, Tailor Chandra & Anju, Goyal, 2014, Antioxidant Activity by DPPH Radical Scavenging Method of *Ageratum conyzoides* Linn. Leaves, *American Journal of Athnomedicine*, 244-249.
- Sianipar, K.M., 2018, Formulasi dan Efektivitas Masker Clay yang Mengandung Minyak Zaitun Murni Sebagai Anti-Aging, Skripsi, Universitas Sumatera Utara.
- Silalahi J., 2006, *Makanan Fungsional*, Kanisius, Yogyakarta.
- Simbara, A., 2009, Sintesis dan Uji Aktivitas Antioksidan Senyawa Tetrahidropentagama Vunon-0, Tesis, Program Pascasarjana Fakultas Farmasi. Universitas Gadjah Mada, Yogyakarta.
- Simo, A., Kawal, N., Paliyath, G., & Bakovic, M., 2014, Botanical Antioxidants Cosmeceuticals for Skin Health in the World of Cosmeceutical, *International Journal of Advanced Nutritional and Health Science*, 2(1), 67–88.
- Skoog, D. A., M. Donald., F. West., & H. James, 1998, *Principles of Analysis*, 5th ed. Saunders College Publishing, United States.
- Smyth, W. F., 1992, *Voltammetric Determination of Molecules of Biological Significance*, John Wiley and Sons. Chichester. 20-22.
- Sukmawati, N.M.A., Arisanti, C.I.S., & Wijayanti, N., 2013, Pengaruh Variasi Konsentrasi PVA, HPMC, dan Gliserin terhadap Sifat Fisika Masker Wajah Gel Peel Off Ekstrak Etanol 96% Kulit Buah Manggis (*Garcinia mangostana* L.), *Journal Farm Udayana*.
- Syifaiyah, B., 2008, Pengaruh Pemberian Ekstrak Daun Pegagan (*Centella Asiatica*). Terhadap Kadar Sgpt dan Sgot Hati Mencit (*Mus Musculus*) yang

Diinduksi dengan Parasetamol, Skripsi, Fakultas Sains dan Teknologi Universitas Islam Negeri Malang, Malang.

Tadesse, T., & Sirgawie, A., 2017, A Comparative Study on Electrochemical Determination of Vitamin C in Liver and Tomato Using Platinum and Glassy Carbon Electrodes, *Biochemistry and Molecular Biology* 2 (3), 25-36.

Tennesen, H.H. & Greenhill, J.V., 1992, Studies on Curcumin and Curcuminoids. XXII: Curcumin as a Reducing Agent and as a Radical Scavenger, *International Journal of Pharmaceutics*, 87: 79–87.

Tortora, G. J., & Derrickson, B., 2009, *Principles of Anatomy & Physiology*, John Wiley & Sons. Inc., USA.

Tranggono, R. I., & Latifah, F., 2007, *Buku Pegangan Ilmu Pengetahuan Kosmetik*, 6-8, PT. Gramedia Pustaka Utama, Jakarta.

Triyem, 2010, Aktivitas Antioksidan dari Kulit Batang Manggis Hutan (*Garcinia cf. bancana Miq*), Tesis, Universitas Indonesia, Jakarta.

Umayah, E., & Amrun, M., 2007, Uji Aktivitas Antioksidan Ekstrak Buah Naga, *Jurnal Ilmu Dasar*, Program Studi Farmasi Universitas Jember, Jember.

Venkataraman, S., Schafer, F.Q., & Buettner, G.R., 2004, Detection of Lipid Radicals Using EPR, dalam Sen, Chandan, K., (Ed.) *Antioxid & Redox Signaling*, Mary Ann Liebert, New York.

Vieira, R.P, 2009, Physical and Physicochemical Stability Evaluation of Cosmetic Formulations Containing Soybean Extract Fermented by *Bifidobacterium animalis*, *Brazilian Journal of Pharmaceutical Sciences*.

Viseras, C., Aguzzi, C., Cerezo, P., & Lopez-Galindo A., 2007, Uses of Clay Minerals in Semisolid Health Care and Therapeutic Products. *Applied Clay Science*.

Viswanad, V., Aleykutty, N.A., Zacharia, S.M., & Thomas, L., 2011, Evaluation of Antioxidant and Free Radical Scavenging Activity of Samadera Indica Using In vitro Models, *Pharmacognosy Journal*.

Voight, R., 1995, *Buku Pelajaran Teknologi Farmasi*, Edisi V, 382, 442, diterjemahkan oleh Soendari Noerno Soewandhi, Gadjah Mada University Press, Yogyakarta.

Wang, Hsiuying, 2021, *A review of the Effects of Collagen Treatment in Clinical Studies*, Institute of Statistics, National Yang Ming Chiao Tung University, Taiwan.

- Wang, J., 1989, *Voltammetry Following Nonelectrolytic Preconcentration*, cit: Brad, A. J. (ed.) *Electroanalytical Chemistry*, Marcel Dekker, New York.
- Wang, J., 2001, *Analytical Electrochemistry*, 2nd Ed., VCH Publisher, New York.
- Wangensteen, H., Samuelsen, A.B., & Malterud, K.E., 2004, Antioxidant activity in extracts from coriander, *Food Chemistry*.
- Warsi, W., Sardjiman, S., & Riyanto, S., 2018, Synthesis and Antioxidant Activity of Curcumin Analogues, *Journal of Chemical and Pharmaceutical Research*.
- Wibawanto, N.R., Ananginsih, V.K., & Pratiwi, R., 2014, *Produksi Serbuk Pewarna Alami Bit Merah (*Beta vulgaris* L.) dengan Metode Oven Drying*, Fakultas Teknologi Pangan Universitas Wahid Hasyim, Semarang.
- Winarsi, H., 2007, *Antioksidan Alami dan Radikal Bebas*, Kanisius, Yogyakarta.
- Winarto, W.R., & Surbakti, M., 2003, *Khasiat dan Manfaat Pegagan*, Agromedia Pustaka, Jakarta.
- Windono, T., 2004, Studi Hubungan Struktur-Aktivitas Kapasitas Peredaman Radikal Bebas Senyawa Flavonoid terhadap 1,1-Difenil-2-Pikrilhidrazil (DPPH), *Artocarpus* 4 (1) : 42-52.
- WHO, 2005, *Bentonite, Kaolin, and Selected Clay Minerals, Environmental Health Criteria 231*, World Health Organization, Geneva.
- Yaar, M., & Gilchrest, BA., 2012, Photoaging : Mechanism, Prevention and Therapy, *British Journal of Dermatology*, 157, 874-877.
- Yahya, M. A., & Nurrosyidah, I. H., 2020, Antioxidant activity ethanol extract of gotu kola (*Centella asiatica* (L.) Urban) with DPPH method (2,2-Diphenyl-1-Pikrilhidrazil), *Journal of Halal Product and Research (JPHR)*, 3(2), 106–112.
- Yumas, M., 2016, Formulasi Sediaan Krim Wajah Berbahan Aktif Ekstrak Metanol Biji Kakao Non Fermentasi (*Theobroma Cacao* L) Kombinasi Madu Lebah, *Jurnal Industri Hasil Perkebunan*, 11 (2), 75-87.
- Zhang, L., Li, H., Gong, X., Luo, F., Wang, B., Hu, N., Wang, C., Zhang, Z., & Wan, J., 2010, Protective effects of Asiaticoside on acute liver injury induced by lipopolysaccharide/D-galactosamine in mice, *Phytomedicine*, 17(10): 811-819.
- Zheng, C.J., & Qin, L.P., 2007, Chemical components of *Centella asiatica* and their bioactivities, *Zhong Xi Yi Jie He Xue Bao*; 5(3): 348-351.s