DAFTAR PUSTAKA

Abubakar, A., & Haque, M. (2020). Preparation of medicinal plants: Basic extraction and fractionation procedures for experimental purposes. *Journal of Pharmacy & Bioallied Sciences*, *12*(1), 1. doi:10.4103/jpbs.jpbs_175_19

Ali, N., Rampazzo, R. de C. P., Costa, A. D. T., & Krieger, M. A. (2017). Current nucleic acid extraction methods and their implications to point-of-care diagnostics. *BioMed Research International*, *2017*, 1–13. doi:10.1155/2017/9306564

Amaro-Ortiz, A,, Yan, B,, & D'Orazio, J. (2014). Ultraviolet radiation, aging and the skin: Prevention of damage by topical cAMP manipulation, Molecules (Basel, Switzerland), 19(5), 6202–6219,

Ashokkumar, M. (2015). Applications of ultrasound in food and bioprocessing. *Ultrasonics Sonochemistry*, *25*, 17–23. doi:10.1016/j.ultsonch.2014.08.012

Aykul, S., & Martinez-Hackert, E. (2016). Determination of half-maximal inhibitory concentration using biosensor-based protein interaction analysis. *Analytical Biochemistry*, *508*, 97–103. doi:10.1016/j.ab.2016.06.025

Ayu, I., Astiti, R., & Bogoriani, N. W. (2018). Asupan glikosida flavonoid terong belanda (Solanum Betaceum Cav.) terhadap aktivitas superoksida dismutase dan kadar malondialdehid tikus wistar yang diberi aktivitas fisik maksimal. 2, 32–36.

Azasi, N. M. (2023). Potensi ekstrak daun beluntas (*Pluchea indica* (L.) Less.) sebagai bahan alami antipenuaan. *Skripsi*. Fakultas Biologi, Yogyakarta, Universitas Gadjah Mada.

Batubara, I., Astuti, R. I., Prastya, M. E., Ilmiawati, A., Maeda, M., Suzuki, M., … Takemori, H. (2020). The antiaging effect of active fractions and ent-11α-hydroxy-15-oxo-Kaur-16-en-19-oic acid isolated from Adenostemma lavenia (L.) O. kuntze at the cellular level. Antioxidants (Basel, Switzerland), 9(8), 719. doi:10.3390/antiox9080719

Bickers, D, R,, & Athar, M, (2006), Oxidative stres in the pathogenesis of skin disease, *The Journal of Investigative Dermatology*, *126*(12), 2565–2575,

Buapool, D., Roytrakul, E., & Srisook, K. (2013). Molecular mechanism of anti-inflammatory activity of Pluchea indica leaves in macrophages RAW 264.7 and its action in animal models of inflammation. J. Ethnopharmacol, 146, 495–504.

Cai, X.-H., Wang, Y.-Y., Zhao, P.-J., Li, Y., & Luo, X.-D. (2010). Dolabellane diterpenoids from Aglaia odorata. Phytochemistry, 71(8–9), 1020–1024. doi:10.1016/j.phytochem.2010.03.005

Cavinato, M., & Jansen-Dürr, P. (2017). Molecular mechanisms of UVB-induced senescence of dermal fibroblasts and its relevance for photoaging of the human skin. Experimental Gerontology, 94, 78–82. doi:10.1016/j.exger.2017.01.009

Chan, E. W. C., Ng, Y. K., Wong, S. K., & Chan, H. T. (2022). Pluchea indica: An updated review of its botany, uses, bioactive compounds and pharmacological properties. *Pharmaceutical Sciences Asia*, *49*(1), 77–85. doi:10.29090/psa.2022.01.21.113

Ciuffetta, A,, Salerno, D,, Camilloni, G,, & Venditti, S, (2015), SIR2 is involved in the transcriptional modulation of NHP6A in Saccharomyces cerevisiae,

Biochemical and Biophysical Research Communications, 461(1), 42–46,

Cordani, M., Sánchez-Álvarez, M., Strippoli, R., Bazhin, A. V., & Donadelli, M. (2019). Sestrins at the interface of ROS control and autophagy regulation in health and disease. Oxidative Medicine and Cellular Longevity, 2019, 1283075. doi:10.1155/2019/1283075

Cvetanović, A., Švarc-Gajić, J., Zeković, Z., Mašković, P., Đurović, S., Zengin, G., … Jakšić, A. (2017). Chemical and biological insights on aronia stems extracts obtained by different extraction techniques: From wastes to functional products. *The Journal of Supercritical Fluids*, *128*, 173–181. doi:10.1016/j.supflu.2017.05.023

Davalli, P., Mitic, T., Caporali, A., Lauriola, A., & D'Arca, D. (2016). ROS, cell senescence, and novel molecular mechanisms in aging and age-related diseases. Oxidative Medicine and Cellular Longevity, 2016, 3565127. doi:10.1155/2016/3565127

Davinelli, S., Bertoglio, J. C., Polimeni, A., & Scapagnini, G. (2018). Cytoprotective polyphenols against chronological skin aging and cutaneous photodamage. Current Pharmaceutical Design, 24(2), 99–105. doi:10.2174/1381612823666171109102426

Delaney, J. R., Sutphin, G. L., Dulken, B., Sim, S., Kim, J. R., Robison, B., … Kaeberlein, M. (2011). Sir2 deletion prevents lifespan extension in 32 long-lived mutants. *Aging Cell*, *10*(6), 1089–1091. doi:10.1111/j.1474-9726.2011.00742.x

Delazar, A., Nahar, L., Hamedeyazdan, S., & Sarker, S. D. (2012). Microwave-Assisted Extraction in Natural Products Isolation Methods Mol. *Methods Mol. Biol*, *864*, 89–115.

Desjardins, P., & Conklin, D. (2010). NanoDrop microvolume quantitation of nucleic acids. *Journal of Visualized Experiments: JoVE*, (1). doi:10.3791/2565

Dewatisari, W. F., Rumiyanti, L., & Rakhmawati, I. (2018). Rendemen dan Skrining Fitokimia pada Ekstrak Daun Sanseviera sp. Jurnal Penelitian Pertanian Terapan, 17(3), 197. doi:10.25181/jppt.v17i3.336

Dhanani, T., Shah, S., Gajbhiye, N. A., & Kumar, S. (2017). Effect of extraction methods on yield, phytochemical constituents and antioxidant activity of Withania somnifera. *Arabian Journal of Chemistry*, *10*, S1193–S1199. doi:10.1016/j.arabjc.2013.02.015

Diaz-Vivancos, P., Faize, M., Barba-Espin, G., Faize, L., Petri, C., Hernández, J. A., & Burgos, L. (2013). Ectopic expression of cytosolic superoxide dismutase and ascorbate peroxidase leads to salt stres tolerance in transgenic plums. Plant Biotechnology Journal, 11(8), 976–985. doi:10.1111/pbi.12090

Djuanda, S. R. S., Novianto, E., Boediardja, S. A., & Dan Jusman, S. W. A. (2012). Peran stres oksidatif pada penuaan kulit secata intrinsik. MDVI, 39, 127–133.

Doke, S. K., & Dhawale, S. C. (2015). Alternatives to animal testing: A review. Saudi Pharmaceutical Journal: SPJ: The Official Publication of the Saudi Pharmaceutical Society, 23(3), 223–229. doi:10.1016/j.jsps.2013.11.002

Elias, P. M., & Wakefield, J. S. (2011). Therapeutic implications of a barrier-based pathogenesis of atopic dermatitis. *Clinical Reviews in Allergy & Immunology*, *41*(3), 282–295. https://doi.org/10.1007/s12016-010-8231-1

Fabrizio, P., Gattazzo, C., Battistella, L., Wei, M., Cheng, C., McGrew, K., &

Longo, V. D. (2005). Sir2 blocks extreme life-span extension. *Cell*, *123*(4), 655–667. doi:10.1016/j.cell.2005.08.042

Farrell, R. E., Jr. (2023). cDNA: a permanent biochemical record of the cell. In *RNA Methodologies* (pp. 201–222). Elsevier.

Fitriansyah, M, I, and R, B, Indradi, 2018, Review: profil fitokimia dan aktivitas farmakologi baluntas (Pluchea indica L,), Farmaka, 16(2): 337-346,

Fitzmaurice, S. D., Sivamani, R. K., & Isseroff, R. R. (2011). Antioxidant therapies for wound healing: a clinical guide to currently commercially available products. Skin Pharmacology and Physiology, 24(3), 113–126. doi:10.1159/000322643

Galanakis, Charis & Goulas, Vlasios & Tsakona, Sofia & Manganaris, George & Gekas, Vassilis. (2011). A Knowledge Base for The Recovery of Natural Phenols with Different Solvents. International Journal of Food Properties. 2011. 10.1080/10942912.2010.522750.

Galdieri, L., Mehrotra, S., Yu, S., & Vancura, A. (2010). Transcriptional regulation in yeast during diauxic shift and stationary phase. *Omics: A Journal of Integrative Biology*, *14*(6), 629–638. doi:10.1089/omi.2010.0069

Ganceviciene, R., Liakou, A. I., Theodoridis, A., Makrantonaki, E., & Zouboulis, C. C. (2012). Skin anti-aging strategies. Dermato-Endocrinology, 4(3), 308–319. doi:10.4161/derm.22804

Ginwala, R., Bhavsar, R., Chigbu, D. I., Jain, P., & Khan, Z. K. (2019). Potential role of flavonoids in treating chronic inflammatory diseases with a special focus on the anti-inflammatory activity of apigenin. Antioxidants (Basel, Switzerland), 8(2), 35. doi:10.3390/antiox8020035

Gopalasatheekumar, S, (2018), Significant role of soxhlet extraction process in phytochemical research, Mintage Journal of Pharmaceutical & Medical Sciences, 7(1): 43-47,

Gouveia, G. R., Ferreira, S. C., Ferreira, J. E., Siqueira, S. A. C., & Pereira, J. (2014). Comparison of two methods of RNA extraction from formalin-fixed paraffin-embedded tissue specimens. *BioMed Research International*, *2014*, 1–5. doi:10.1155/2014/151724

Gray, Joseph V., Petsko, G. A., Johnston, G. C., Ringe, D., Singer, R. A., & Werner-Washburne, M. (2004). “sleeping beauty”: Quiescence in*Saccharomyces cerevisiae*. *Microbiology and Molecular Biology Reviews: MMBR*, *68*(2), 187–206. doi:10.1128/mmbr.68.2.187-206.2004

Gulcin, I. (2020.). Antioxidants and antioxidant methods-An updated overview. *Arch. Toxicol*, *2020*, 651–715.

Gulcin, İ., & Alwasel, S. H. (2023). DPPH radical scavenging assay. *Processes (Basel, Switzerland)*, *11*(8), 2248. doi:10.3390/pr11082248

Ha, C. W., & Huh, W.-K. (2011). The implication of Sir2 in replicative aging and senescence in Saccharomyces cerevisiae. Aging, 3(3), 319–324. doi:10.18632/aging.100299

Haigis, M. C., & Sinclair, D. A. (2010). Mammalian sirtuins: biological insights and disease relevance. Annual Review of Pathology, 5(1), 253–295. doi:10.1146/annurev.pathol.4.110807.092250

Hanson, K. M., & Clegg, R. M. (2002). Observation and quantification of ultraviolet-induced reactive oxygen species in ex vivo human skin. Photochemistry and Photobiology, 76(1), 57–63. doi:10.1562/0031-

8655(2002)0760057oaqoui2.0.co2

Hao, R., Li, M., Li, F., Sun-Waterhouse, D., & Li, D. (2022). Protective effects of the phenolic compounds from mung bean hull against H2O2-induced skin aging through alleviating oxidative injury and autophagy in HaCaT cells and HSF cells. The Science of the Total Environment, 841(156669), 156669. doi:10.1016/j.scitotenv.2022.156669

Hazra, J. (2013). Concept of beauty and Ayurveda medicine. Journal of Clinical & Experimental Dermatology Research, 04(03). doi:10.4172/2155-9554.1000178

Hellemans, J., Mortier, G., De Paepe, A., Speleman, F., & Vandesompele, J. (2007). qBase relative quantification framework and software for management and automated analysis of real-time quantitative PCR data. *Genome biology*, *8*, 1-14.

Hosseinzadeh, S., Jafarikukhdan, A., Hosseini, A., & Armand, R. (2015). The application of medicinal plants in traditional and modern medicine: A review of thymus vulgaris. International Journal of Clinical Medicine, 06(09), 635–642. doi:10.4236/ijcm.2015.69084

Ibrahim, S. R. M., Omar, A. M., Bagalagel, A. A., Diri, R. M., Noor, A. O., Almasri, D. M., … Mohamed, G. A. (2022). Thiophenes—naturally occurring plant metabolites: Biological activities and in silico evaluation of their potential as Cathepsin D inhibitors. *Plants*, *11*(4), 539. doi:10.3390/plants11040539

Ighodaro, O. M., & Akinloye, O. A. (2018). First line defence antioxidantssuperoxide dismutase (SOD), catalase (CAT), and glutathione peroxidase (GPX): Their fundamental role in the entire antioxidant defence grid. Alexandria Journal of Medical, 54, 287–293.

ITIS - report: Aglaia. (n.d.). Retrieved March 19, 2023, from Itis.gov website: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=564939

ITIS - report: Pluchea indica. (n.d.). Retrieved March 19, 2023, from Itis.gov website: https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=36072

Kaeberlein, M., Kirkland, K. T., Fields, S., & Kennedy, B. K. (2004). Sir2-independent life span extension by calorie restriction in yeast. *PLoS Biology*, *2*(9), e296. doi:10.1371/journal.pbio.0020296

Kammeyer, A., & Luiten, R. M. (2015). Oxidation events and skin aging. Ageing Research Reviews, 21, 16–29. doi:10.1016/j.arr.2015.01.001

Kang, W. K., Kim, Y. H., Kim, B.-S., & Kim, J.-Y. (2014). Growth phase-dependent roles of Sir2 in oxidative stres resistance and chronological lifespan in yeast. *The Journal of Microbiology*, *52*(8), 652–658. doi:10.1007/s12275-014-4173-2

Karim, A. A., Azlan, A., Ismail, A., Hashim, P., Abd Gani, S. S., Zainudin, B. H., & Abdullah, N. A. (2014). Phenolic composition, antioxidant, anti-wrinkles and tyrosinase inhibitory activities of cocoa pod extract. BMC Complementary and Alternative Medicine, 14(1), 381. doi:10.1186/1472-6882-14-381

Kato, S., Suzuki, K., Kenjo, T., Kato, J., Aoi, Y., & Nakashimada, Y. (2021). Single-cell time-lapse observation reveals cell shrinkage upon cell death in

batch culture of Saccharomyces cerevisiae. *mBio*, *12*(6). doi:10.1128/mbio.03094-21

Khawaja, A., Belak, Z. R., Eskiw, C. H., & Harkness, T. A. A. (2021). HighThroughput Rapid Yeast chronological lifespan assay. Yeast Protocols. Methods in Molecular Biology, 2196, 229–233.

Kim, H. H., Kim, J. K., Kim, J., Jung, S.-H., & Lee, K. (2020). Characterization of caffeoylquinic acids from *Lepisorus thunbergianus* and their melanogenesis inhibitory activity. *ACS Omega*, *5*(48), 30946–30955. doi:10.1021/acsomega.0c03752

Kim, Y. H., Ryu, J.-I., Devare, M. N., Jung, J., & Kim, J.-Y. (2023). The intricate role of Sir2 in oxidative stres response during the post-diauxic phase in Saccharomyces cerevisiae. *Frontiers in Microbiology*, *14*. doi:10.3389/fmicb.2023.1285559

Ko, S.-C., Cha, S.-H., Heo, S.-J., Lee, S.-H., Kang, S.-M., & Jeon, Y.-J. (2011). Protective effect of Ecklonia cava on UVB-induced oxidative stres: in vitro and in vivo zebrafish model. Journal of Applied Phycology, 23(4), 697–708. doi:10.1007/s10811-010-9565-z

Kuang, J., Yan, X., Genders, A. J., Granata, C., & Bishop, D. J. (2018). An overview of technical considerations when using quantitative real-time PCR analysis of gene expression in human exercise research. *PloS One*, *13*(5), e0196438. https://doi.org/10.1371/journal.pone.0196438

Kubista, M., Andrade, J. M., Bengtsson, M., Forootan, A., Jonák, J., Lind, K., … Zoric, N. (2006). The real-time polymerase chain reaction. *Molecular Aspects of Medicine*, *27*(2–3), 95–125. doi:10.1016/j.mam.2005.12.007

Lamming, D. W., Latorre-Esteves, M., Medvedik, O., Wong, S. N., Tsang, F. A., Wang, C., … Sinclair, D. A. (2005). *HST2* mediates *SIR2* -independent life-span extension by calorie restriction. *Science (New York, N.Y.)*, *309*(5742), 1861–1864. doi:10.1126/science.1113611

Lavová, B., & Urminská, D. (2014). Activity of superoxide dismutase enzyme in yeast Saccharomyces cerevisiae. J Microbiol Biotech Food Sci, 3(1), 250–252.

Lephart, E. D. (2016). Skin aging and oxidative stres: Equol's anti-aging effects via biochemical and molecular mechanisms. Ageing Research Reviews, 31, 36–54. doi:10.1016/j.arr.2016.08.001

Li, J.-M., & Shah, A. M. (2003). ROS generation by nonphagocytic NADPH oxidase: potential relevance in diabetic nephropathy. Journal of the American Society of Nephrology: JASN, 14(8 Suppl 3), S221-6. doi:10.1097/01.asn.0000077406.67663.e7

Lin, T, K,, Zhong, L, and Santiago, J, L, (2017) "Anti-inflammatory and skin barrier repair effects of topical application of some plant oils," International journal of molecular sciences, 19(1)

Lin, Y., Sun, Y., Weng, Y., Matsuura, A., & Xiang, L. (2016). Parishin from Gastropodia elata extends the lifespan of yeast via regulation of sir2/uth1/TOR signaling pathway. Oxidative Med. Cellular Longevity, 4074690–4074690.

Livak, K, J, and Schmittgen, T, D, (2001) "Analysis of relative gene expression data using real-time quantitative PCR and the 2−ΔΔCT method," Methods (San Diego, Calif,), 25(4), pp, 402–408, doi: 10,1006/meth,2001,1262,

Longo, V. D., Shadel, G. S., Kaeberlein, M., & Kennedy, B. (2012). Replicative and Chronological Aging in Saccharomyces cerevisiae. *Cell Metabolism*, *16*(1), 18–31. doi:10.1016/j.cmet.2012.06.002

Lorenz, T. C. (2012). Polymerase chain reaction: Basic protocol plus troubleshooting and optimization strategies. *Journal of Visualized Experiments: JoVE*, (63). doi:10.3791/3998

Maharramova, G., Taslimi, P., Sujayev, A., Farzaliyev, V., Durmaz, L., & Gulçin, İ. (2018). Synthesis, characterization, antioxidant, antidiabetic, anticholinergic, and antiepileptic properties of novel N-substituted tetrahydropyrimidines based on phenylthiourea. *Journal of Biochemical and Molecular Toxicology*, *32*(12). doi:10.1002/jbt.22221

Marrot, L. (2019). Pollution and sun exposure: A deleterious synergy. Mechanisms and opportunities for skin protection. *Current Medicinal Chemistry*, *25*(40), 5469–5486. https://doi.org/10.2174/0929867324666170918123907

Masaki, H. (2010). Role of antioxidants in the skin: anti-aging effects. Journal of Dermatological Science, 58(2), 85–90. doi:10.1016/j.jdermsci.2010.03.003

Matvieieva, N., Drobot, K., Duplij, V., Ratushniak, Y., Shakhovsky, A., Kyrpa-Nesmiian, T., … Brindza, J. (2019). Flavonoid content and antioxidant activity of Artemisia vulgaris L. “hairy” roots. Preparative Biochemistry & Biotechnology, 49(1), 82–87. doi:10.1080/10826068.2018.1536994

Molyneux, P. (2004). The use of the stable free radical diphenylpicrylhydrazyl (DPPH) for estimating antioxidant activity. *Journal of Science Technology*, *26*(2), 211–219.

More, B. H., Sakharwade, S. N., Tembhurne, S. V., & Sakarkar, D. M. (2015). Antioxidant and anti-inflammatory mediated mechanism in thermal wound healing by gel containing flower extract of Butea monosperma. Proceedings of the National Academy of Sciences, India. Section B, 85(2), 591–600. doi:10.1007/s40011-014-0363-2

Munna, M. S., Humayun, S., & Noor, R. (2015). Influence of heat shock and osmotic stresses on the growth and viability of Saccharomyces cerevisiae SUBSC01. *BMC Research Notes*, *8*(1). https://doi.org/10.1186/s13104-015-1355-x

Mustarichie R,, Runadi D,, Ramdhani D, (2017) The antioxidant activity and phytochemical screening of ethanol extract, fractions of water, ethyl acetate and n-hexane from mistletoe tea, Asian Journal of Pharmaceutical and Clinical Research, 10(2):343–347, doi: 10,22159/ajpcr,2017,v10i2,15724,

Nawaz, H., Shad, M. A., Rehman, N., Andaleeb, H., & Ullah, N. (2020). Effect of solvent polarity on extraction yield and antioxidant properties of phytochemicals from bean (Phaseolus vulgaris) seeds. *Brazilian Journal of Pharmaceutical Sciences*, *56*. doi:10.1590/s2175-97902019000417129

Nogueira, V., & Hay, N. (2013). Molecular pathways: reactive oxygen species homeostasis in cancer cells and implications for cancer therapy. Clinical Cancer Research: An Official Journal of the American Association for Cancer Research, 19(16), 4309–4314. doi:10.1158/1078-0432.CCR-12-1424

Nopparat, J., Nualla-Ong, A., & Phongdara, A. (2019). Ethanolic extracts of Pluchea indica (L.) leaf pretreatment attenuates cytokine-induced β-cell apoptosis in multiple low-dose streptozotocin-induced diabetic mice. PloS One, 14(2), e0212133. doi:10.1371/journal.pone.0212133

Noridayu, A. R., Hii, Y. F., Faridah, A., Khozirah, S., & Lajis, N. (2011). Antioxidant and antiacetylcholinesterase activities of Pluchea indica Less. International Food Research Journal, 18(3), 925–929.

NParks. (2022). Retrieved June 1, 2024, from Gov.sg website: https://www.nparks.gov.sg/florafaunaweb/flora/1/6/1609

Nussbaum, I., Weindling, E., Jubran, R., Cohen, A., & Bar-Nun, S. (2014). Deteriorated stres response in stationary-phase yeast: Sir2 and Yap1 are essential for Hsf1 activation by heat shock and oxidative stres, respectively. *PloS One*, *9*(10), e111505. doi:10.1371/journal.pone.0111505

Nwidu, L. L., Alikwe, P. C. N., Elmorsy, E., & Carter, W. G. (2019). An investigation of potential sources of nutraceuticals from the Niger Delta areas, Nigeria for attenuating oxidative stres. Medicines (Basel, Switzerland), 6(1), 15. doi:10.3390/medicines6010015

Nyström, T,, & Liu, B, (2014), The mystery of aging and rejuvenation - a budding topic, Current Opinion in https://doi,org/10,1016/j,mib,2014,02,003

Okayama, Y. (2005). Oxidative stres in allergic and inflammatory skin diseases. Current Drug Targets. Inflammation and Allergy, 4(4), 517–519. doi:10.2174/1568010054526386

Onyebuchi, C., & Kavaz, D. (2020). Effect of extraction temperature and solvent type on the bioactive potential of Ocimum gratissimum L. extracts. *Scientific Reports*, *10*(1). doi:10.1038/s41598-020-78847-5

Orlandi, I,, Stamerra, G,, Strippoli, M,, & Vai, M, (2017), During yeast chronological aging resveratrol supplementation results in a short-lived phenotype SIR2 dependent, Redox Biology, 12, https://doi,org/10,1016/j,redox,2017,04,015

Orlandi, I., Pellegrino Coppola, D., Strippoli, M., Ronzulli, R., & Vai, M. (2016). Nicotinamide supplementation phenocopies SIR2 inactivation by modulating carbon metabolism and respiration during yeast chronological aging. *Mechanisms of Ageing and Development*, *161*, 277–287. doi:10.1016/j.mad.2016.06.006

Pabinger, S., Rödiger, S., Kriegner, A., Vierlinger, K., & Weinhäusel, A. (2014). A survey of tools for the analysis of quantitative PCR (qPCR) data. *Biomolecular Detection and Quantification*, *1*(1), 23–33. doi:10.1016/j.bdq.2014.08.002

Pallauf, K., & Rimbach, G. (2013). Autophagy, polyphenols and healthy ageing. Ageing Research Reviews, 12(1), 237–252. doi:10.1016/j.arr.2012.03.008

Pandey, V. P., Awasthi, M., Singh, S., Tiwari, S., & Dwivedi, U. N. (2017). A comprehensive review on function and application of plant peroxidases. Biochemistry and Analytical Biochemistry: Current Research, 06(01). doi:10.4172/2161-1009.1000308

Park, H. M., Moon, E., Kim, A.-J., Kim, M. H., Lee, S., Lee, J. B., … Kim, S. Y. (2010). Extract of Punica granatum inhibits skin photoaging induced by UVB irradiation. International Journal of Dermatology, 49(3), 276–282. doi:10.1111/j.1365-4632.2009.04269.x

Perdani, L. (2023). Evaluasi potensi ekstrak etanolik daun pacar cina (*Aglaia odorata* Lour.) sebagai agen anti penuaan alami menggunakan *Saccharomyces cerevisiae*. *Thesis.* Fakultas Biologi, Yogyakarta, Universitas Gadjah Mada.

Pouillot, A., Polla, L. L., Tacchini, P., Neequaye, A., Polla, A., & Polla, B. (2011). Natural Antioxidants and their Effects on the Skin. In Formulating, Packaging, and Marketing of Natural Cosmetic Products (pp. 239–257). Hoboken, NJ, USA: John Wiley & Sons, Inc.

Prastya, M. E., Astuti, R. I., Batubara, I., & Wahyudi, A. T. (2018). Bacillus sp. SAB E-41- derived extract shows antiaging properties via ctt1-mediated oxidative stres tolerance response in yeast Schizosaccharomyces pombe. Asian Pacific Journal of Tropical Biomedicine, 8(11), 533–539.

Rajput, V. D., Harish, Singh, R. K., Verma, K. K., Sharma, L., Quiroz-Figueroa, F. R., … Mandzhieva, S. (2021). Recent developments in enzymatic antioxidant defence mechanism in plants with special reference to abiotic stres. Biology, 10(4), 267. doi:10.3390/biology10040267

Ramaswamy, N., Mahitha, B., Archana, P., Ebrahimzadeh, M. H., Srikanth, K., & Rajinikanth, M. (2015). In vitro antioxidant and pharmacognostic studies of leaf extracts of cajanus cajan (l.) millsp. *Indian Journal of Pharmaceutical Sciences*, *77*(2), 170. doi:10.4103/0250-474x.156555

Rao, X., Huang, X., Zhou, Z., & Lin, X. (2013). An improvement of the 2ˆ(–delta delta CT) method for quantitative real-time polymerase chain reaction data analysis. *Biostatistics, Bioinformatics and Biomathematics*, *3*(3), 71.

Riesen, M., & Morgan, A. (2009). Calorie restriction reduces rDNA recombination independently of rDNA silencing. *Aging Cell*, *8*(6), 624–632. doi:10.1111/j.1474-9726.2009.00514.x

Rios, M., Tinitana, F., Jarrín-V, P., Donoso, N., & Romero-Benavides, J. C. (2017). "Horchata" drink in Southern Ecuador: medicinal plants and people's wellbeing. Journal of Ethnobiology and Ethnomedicine, 13(1). doi:10.1186/s13002-017-0145-z

Roca-Agujetas, V., de Dios, C., Lestón, L., Marí, M., Morales, A., & Colell, A. (2019). Recent insights into the mitochondrial role in autophagy and its regulation by oxidative stres. Oxidative Medicine and Cellular Longevity, 2019, 3809308. doi:10.1155/2019/3809308

Rochmah, W., & Awin, S. (2001). Tua dan proses menua. Berkala Ilmu Kedokteran, 33(4), 221–227.

Rödiger, S., Liebsch, C., Schmidt, C., Lehmann, W., Resch-Genger, U., Schedler, U., & Schierack, P. (2014). Nucleic acid detection based on the use of microbeads: a review. *Mikrochimica Acta*, *181*(11–12), 1151–1168. doi:10.1007/s00604-014-1243-4

Rodríguez De Luna, S. L., Ramírez-Garza, R. E., & Serna Saldívar, S. O. (2020). Environmentally friendly methods for flavonoid extraction from plant material: Impact of their operating conditions on yield and antioxidant properties. *TheScientificWorldJournal*, *2020*, 1–38. doi:10.1155/2020/6792069

Roska, T. P., Sahati, S., Fitrah, A. D., Juniarti, N., & Djide, N. (2018). Efek Sinergitas Ekstrak Kulit Jeruk (Citrus sinensis L) Pada Patch Bioselulosa Dalam Meningkatkan Penyembuhan Luka Bakar: Synergetic Effect of Orange Peel Extract in Biocellulose Patch Toward Burn Wound Healing. Jurnal Farmasi Galenika (Galenika Journal of Pharmacy), 4(2), 87–92. doi:10.22487/j24428744.2018.v4.i2.10472

Rovero, P., Malgapo, D. M. H., Sparavigna, A., Beilin, G., Wong, V., & Lao, M.

P. (2022). The clinical evidence-based paradigm of topical anti-aging skincare formulations enriched with bio-active peptide SA1-III (KP1) as collagen modulator: From bench to bedside. *Clinical, Cosmetic and Investigational Dermatology*, *15*, 2693–2703. https://doi.org/10.2147/ccid.s374295

Sabharwal, S. S., & Schumacker, P. T. (2014). Mitochondrial ROS in cancer: initiators, amplifiers or an Achilles' heel? *Nature Reviews. Cancer*, *14*(11), 709–721. doi:10.1038/nrc3803

Sam, S., Malik, A., & Handayani, S. (2016). Penetapan Kadar Fenolik Total Dari Ekstrak Etanol Bunga Rosella Berwarna Merah (*Hibiscus sabdariffa* L.) Dengan Menggunakan Spektrofotometri Uv-Vis. *Jurnal Fitofarmaka Indonesia*, *3*(2), 182–187. doi:10.33096/jffi.v3i2.220

Sarima, Astuti, R. I., & Meryandini, A. (2019). Modulation of Aging in Yeast Saccharomyces cerevisiae by Roselle Petal Extract (Hibiscus sabdariffa L.). American Journal of Biochemistry & Biotechnology, 15(1), 23–32. doi:10.3844/ajbbsp.2019.23.32

Schmittgen, T. D., & Livak, K. J. (2008). Analyzing real-time PCR data by the comparative CT method. *Nature Protocols*, *3*(6), 1101–1108. doi:10.1038/nprot.2008.73

Schroeder, A., Mueller, O., Stocker, S., Salowsky, R., Leiber, M., Gassmann, M., … Ragg, T. (2006). The RIN: an RNA integrity number for assigning integrity values to RNA measurements. *BMC Molecular Biology*, *7*(1). doi:10.1186/1471-2199-7-3

Scull, J. C. (2014). Nucleic acid extraction techniques. In *Pathobiology of Human Disease* (pp. 4059–4063). Elsevier.

Sen, K. K., Chouhan, K., & Tandey, R. (2017). Impact of microwaves on the extraction yield of phenolics, flavonoids, and triterpenoids fom centella leaves: an approach toward digitzed robust botanical extraction. *Pharmacogn Mag*, *13*, 179–188.

Setiawati, W., Murtiningsih, R., Gunaeni, N., & Rubiati, T. (2008). Tumbuhan Bahan Pestisida Nabati dan Cara Pembuatannya untuk Pengendalian Organisme Pengganggu Tumbuhan (OPT). Balai Penelitian Tanaman Sayuran.

Seyidoglu, N., & Aydin, C. (2021). Saccharomyces: Is a necessary organism or a biological warrior? In Saccharomyces. IntechOpen.

Silva, S., Ferreira, M., Oliveira, A. S., Magalhães, C., Sousa, M. E., Pinto, M., … Almeida, I. F. (2019). Evolution of the use of antioxidants in anti-ageing cosmetics: Antioxidants in anti-ageing cosmetics. International Journal of Cosmetic Science, 41(4), 378–386. doi:10.1111/ics.12551

Sirichaiwetchakoon, K., Lowe, G. M., Thumanu, K., & Eumkeb, G. (2018). The effect of Pluchea indica(L.) Less. tea on adipogenesis in 3T3-L1 adipocytes and lipase activity. Evid. Based Complement Altern. Med.

Sridhar, A., Ponnuchamy, M., Kumar, P. S., Kapoor, A., Vo, D.-V. N., & Prabhakar, S. (2021). Techniques and modeling of polyphenol extraction from food: a review. *Environmental Chemistry Letters*, *19*(4), 3409–3443. doi:10.1007/s10311-021-01217-8

Srisook, K., Boonbai, P., Simmasut, Y., & Charoensuk, E. (2012). Antioxidant and anti-inflammatory activities of hot water extract from Pluchea indicaLess

herbal tea. J. Med. Plant Res, 6, 4077–4081.

Steinkraus, K, A,, Kaeberlein, M,, & Kennedy, B, K, (2008), Replicative aging in yeast: the means to the end, *Annual Review of Cell and Developmental Biology*, *24*(1), 29–54, https://doi,org/10,1146/annurev,cellbio,23,090506,123509

Stumpferl, S, W,, Brand, S, E,, Jiang, J, C,, Korona, B,, Tiwari, A,, Dai, J,, Seo, J,-G,, & Jazwinski, S, M, (2012), Natural genetic variation in yeast longevity, Genome Research, 22(10), 1963–1973, https://doi,org/10,1101/gr,136549,111

Sudiyani, Y., Eka Prastya, M., Maryana, R., Triwahyuni, E., & Muryanto. (2021). The budding yeast Saccharomyces cerevisiae as a valuable model organism for investigating anti-aging compounds. In Saccharomyces. IntechOpen.

Sugiaman, V., Sari, R., & Pranata, N. (2019). Viability test of ethanol extract of beluntas (pluchea indica) leaves on In vitro fibroblast cells. Scientific Dental Journal, 3(3), 90. doi:10.4103/sdj.sdj_18_19

Svobodova, A., Walterova, D., & Vostalova, J. (2006). Ultraviolet light induced alteration to the skin. Biomedical Papers of the Medical Faculty of the University Palacky, Olomouc, Czechoslovakia, 150(1), 25–38. doi:10.5507/bp.2006.003

Szumiel, I. (2011). Autophagy, reactive oxygen species and the fate of mammalian cells. Free Radical Research, 45(3), 253–265. doi:10.3109/10715762.2010.525233

Teblick, A., Jansens, H., Dams, K., Somville, F. J., & Jorens, P. G. (2017). Boerhaave's syndrome complicated by a*Saccharomyces cerevisiae*pleural empyema. Case report and review of the literature. *Acta Clinica Belgica*, 1–5. doi:10.1080/17843286.2017.1398439

Teerarak, M., Charoenying, P., & Laosinwattana, C. (2012). Physiological and cellular mechanisms of natural herbicide resource from Aglaia odorata Lour. on bioassay plants. Acta Physiologiae Plantarum, 34(4), 1277–1285. doi:10.1007/s11738-011-0923-5

Toripah, S., Abidjulu, J., & Dan Wehantouw, F. (2016). Aktivitas antioksidan dan kandungan total fenolik ekstrak daun kelor (Moringa oleifera L.). Jurnal Ilmiah Farmasi. 3, 2303–2249.

Tsuchida, K., & Kobayashi, M. (2020). Oxidative stres in human facial skin observed by ultraweak photon emission imaging and its correlation with biophysical properties of skin. Scientific Reports, 10(1), 9626. doi:10.1038/s41598-020-66723-1

Vargas, R. A., Malacara, C. F. P., & Petricevichet, V. L. (2016). Characterization of chemical compounds with antioxidant and cytotoxic activities in Bougainvillea x buttiana Holttum and Standl, (var. Rose) extracts. *Antioxidants*, *5*(45), 1–11.

Vongsak, B., Kongkiatpaiboon, S., & Jaisamut, K. (2018). Comparison of active constituents, antioxidant capacity, and alpha-glucosidase inhibition in Pluchea indicaleaf extracts at different maturity stages. Food Biosci, 25, 68–73.

Walch, B., Breinig, T., Schmitt, M. J., & Breinig, F. (2012). Delivery of functional DNA and messenger RNA to mammalian phagocytic cells by recombinant yeast. Gene Therapy, 19(3), 237–245. doi:10.1038/gt.2011.121

Wang, M., Lei, M., Chang, L., Xing, Y., Guo, Y., Pourzand, C., … Zhong, J. L. (2021). Bach2 regulates autophagy to modulate UVA-induced photoaging in skin fibroblasts. Free Radical Biology & Medicine, 169, 304–316. doi:10.1016/j.freeradbiomed.2021.04.003

Warraich, U,, Hussain, F,, Kayani, H,R, 2020, Aging-Oxidative stres, antioxidants and computational modeling, Heliyon, 6(5): e04107

Watroba, M, and Szukiewicz, D, (2021) "Sirtuins at the service of healthy longevity," Frontiers in 10,3389/fphys,2021,724506, p

Wickner, R. B., Fujimura, T., & Esteban, R. (2013). Viruses and prions of Saccharomyces cerevisiae. Advances in Virus Research, 86, 1–36. doi:10.1016/B978-0-12-394315-6.00001-5

Widyawati, P. S., Budianta, T. D. W., Kusuma, F. A., & Wijaya, E. L. (2014). Difference of solvent polarity to phytochemical content and antioxidant activity of Pluchea indica Less leaves extract. International Journal of Pharmacognosy and Phytochemical Research, 6(4), 850–855.

Wierman, M. B., & Smith, J. S. (2014). Yeast sirtuins and the regulation of aging. *FEMS* Yeast *Research*, *14*(1), 73–88. doi:10.1111/1567-1364.12115

Wilfinger, W. W., Mackey, K., & Chomczynski, P. (1997). Effect of pH and ionic strength on the spectrophotometric assessment of nucleic acid purity. *BioTechniques*, *22*(3), 474–476, 478–481. doi:10.2144/97223st01

Wong, M. L., & Medrano, J. F. (2005). Real-time PCR for mRNA quantitation. *BioTechniques*, *39*(1), 75–85. doi:10.2144/05391rv01

Xiao, F., Xu, T., Lu, B., & Liu, R. (2020). Guidelines for antioxidant assays for food components. *Food Frontiers*, *1*(1), 60–69. doi:10.1002/fft2.10

Xie, X., He, Z., Chen, N., Tang, Z., Wang, Q., & Cai, Y. (2019). The roles of environmental factors in regulation of oxidative stres in plant. BioMed Research International, 2019, 9732325. doi:10.1155/2019/9732325

Yi, Y., Zhang, Q.-W., Li, S.-L., Wang, Y., Ye, W.-C., Zhao, J., & Wang, Y.-T. (2012). Simultaneous quantification of major flavonoids in "Bawanghua", the edible flower of Hylocereus undatus using pressurised liquid extraction and high performance liquid chromatography. *Food Chemistry*, *135*(2), 528–533. doi:10.1016/j.foodchem.2012.05.010

Yodsaoue, O., Sonprasit, J., Karalai, C., Ponglimanont, C., Tewtrakul, S., & Chantrapromma, S. (2012). Diterpenoids and triterpenoids with potential anti-inflammatory activity from the leaves of Aglaia odorata. Phytochemistry, 76, 83–91. doi:10.1016/j.phytochem.2012.01.015

Yun, H. R., Jo, Y. H., Kim, J., Shin, Y., Kim, S. S., & Choi, T. G. (2020). Roles of autophagy in oxidative stres. *International Journal of Molecular Sciences*, *21*(9), 3289. doi:10.3390/ijms21093289

Zhang J., Yao E., Wang J., & Xu R. (2007). Extraction and identification of volatile constituents in the flowers of Aglaia odorata Lour. Se pu [Chinese journal of chromatography], 25(3), 422–424.

Zhang, Q.-W., Lin, L.-G., & Ye, W.-C. (2018). Techniques for extraction and isolation of natural products: a comprehensive review. Chinese Medicine, 13(1). doi:10.1186/s13020-018-0177-x

Zhang, S., & Duan, E. (2018). Fighting against skin aging: The way from bench to bedside: The way from bench to bedside. Cell Transplantation, 27(5), 729–738. doi:10.1177/0963689717725755

Zimmermann, A., Hofer, S., Pendl, T., Kainz, K., Madeo, F., & Carmona-Gutierrez, D. (2018). Yeast as a tool to identify anti-aging compounds. FEMS Yeast Research, 18(6). doi:10.1093/femsyr/foy020

Zuo, L., Zhou, T., Pannell, B. K., Ziegler, A. C., & Best, T. M. (2015). Biological and physiological role of reactive oxygen species - the good, the bad and the ugly. Acta Physiologica, 214(3), 329–348.