DAFTAR PUSTAKA

Abdullah, B., 2017. Peningkatan kadar antosianin beras merah dan beras hitam melalui biofortifikasi. *Jurnal Penelitian dan Pengembangan Pertanian*, 36(2), pp.91-98. https://doi.org/10.21082/jp3.v36n2.2017.p91

Adiari, N.W.L., Yogeswara, I.B.A. and Putra, I.M.W.A., 2017. Pengembangan pangan fungsional berbasis tepung okara dan tepung beras hitam (Oryza sativa L. indica) sebagai makanan selingan bagi remaja obesitas. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 6(1), pp.51-57. https://doi.org/10.14710/jgi.6.1.51-57

Adwas, A.A., Elsayed, A., Azab, A.E. and Quwaydir, F.A., 2019. Oxidative stress and antioxidant mechanisms in human body. *Journal of Applied Biotechnology & Bioengineering*, 6(1), pp.43-47. https://doi.org/10.15406/jabb.2019.06.00173

Ahmad, A.R., Juwita, J. and Ratulangi, S.A.D., 2015. Penetapan kadar fenolik dan flavonoid total ekstrak metanol buah dan daun patikala (*Etlingera elatior* (Jack) RM SM). *Pharmaceutical Sciences and Research*, 2(1), p.1. https://doi.org/10.7454/psr.v2i1.3481

Aida, P., N., 2024. Sitotoksisitas H_2O_2 dan Efek Ekstrak Etanolik Bekatul Beras Hitam (*Oryza sativa* L. 'Sembada Hitam') terhadap Siklus Sel Fibroblas NIH3T3 yang diinduksi H_2O_2. 2024. (Undergraduate Thesis, Universitas Gadjah Mada)

Aprilianti, S.H., Purwestri, Y.A., Saragih, H.T. and Nuriliani, A., 2024. Extract of Black Rice (*Oryza sativa* L.'Sembada Hitam') Bran Protect Cytotoxicity of Hydrogen Peroxide on Vero Cells in a Short Time Incubation: Black rice bran 'Sembada Hitam'protect cytotoxicity of H_2O_2. *Journal of Tropical Life Science*, 14(1), pp.1-12. https://doi.org/10.11594/jtls.14.01.01

Arifa, A.H., Syamsir, E. and Budijanto, S., 2021. Karakterisasi Fisikokimia Beras Hitam (*Oryza sativa* L.) dari Jawa Barat, Indonesia. *Agritech*, 41(1), pp.15-24. https://doi.org/10.22146/agritech.53307

Aschbacher, K. and Mason, A.E., 2020. Eustress, distress, and oxidative stress: Promising pathways for mind-body medicine. *In Oxidative Stress*. pp. 583-617. https://doi.org/10.1016/B978-0-12-818606-0.00029-8

Auley, M.T., Guimera, A.M., Hodgson, D., Mcdonald, N., Mooney, K.M., Morgan, A.E. and Proctor, C.J., 2017. Modelling the molecular mechanisms of aging. *Bioscience reports*, 37(1), p.BSR20160177. https://doi.org/10.1042/bsr20160177

Bae, I.Y., An, J.S., Oh, I.K. and Lee, H.G., 2017. Optimized preparation of anthocyanin-rich extract from black rice and its effects on in vitro digestibility.

Food Science and Biotechnology, 26, pp.1415-1422. https://doi.org/10.1007/s10068-017-0188-x

Buanasari, B., Eden, W.T. and Sholichah, A.I., 2017. Extraction of phenolic compounds from petai leaves (Parkia Speciosa Hassk.) Using microwave and ultrasound assisted methods. *Jurnal Bahan Alam Terbarukan*, *6*(1), pp.25-31. https://doi.org/10.15294/jbat.v6i1.7793

Christanto, D.R., Mose, J.C., Yuniarti, T., Bestari, M.B., Purwestri, Y.A. and Fauziah, P.N., 2020. The role of black rice bran (*Oryza sativa* L."Sembada Hitam") on levels of malondialdehyde in induction human umbilical vein endothelial cell serum preeclampsia. *Open Journal of Obstetrics and Gynecology*, *10*(12), pp.1686-1692. https://doi.org/10.4236/ojog.2020.10120152

Comino-Sanz, I.M., López-Franco, M.D., Castro, B. and Pancorbo-Hidalgo, P.L., 2021. The role of antioxidants on wound healing: A review of the current evidence. *Journal of clinical medicine*, *10*(16), p.3558. https://doi.org/10.3390/jcm10163558

Falanga, V., 2005. Wound healing and its impairment in the diabetic foot. *The Lancet*, *366*(9498), pp.1736-1743. https://doi.org/10.1016/S0140-6736(05)67700-8

Fitzmaurice, S.D., Sivamani, R.K. and Isseroff, R.R., 2011. Antioxidant therapies for wound healing: a clinical guide to currently commercially available products. *Skin pharmacology and physiology*, *24*(3), pp.113-126. https://doi.org/10.1159/000322643

García-Sánchez, A., Miranda-Díaz, A.G. and Cardona-Muñoz, E.G., 2020. The role of oxidative stress in physiopathology and pharmacological treatment with pro-and antioxidant properties in chronic diseases. *Oxidative Medicine and Cellular Longevity*, *2020*(1), p.2082145. https://doi.org/10.1155/2020/2082145

Gardiner, J., Overall, R. and Marc, J., 2013. The nervous system cytoskeleton under oxidative stress. *Diseases*, 1(1), pp.36-50. https://doi.org/10.3390/diseases1010036

Gasque, K.C.D.S., Al-Ahj, L.P., Oliveira, R.C. and Magalhães, A.C., 2014. Cell density and solvent are critical parameters affecting formazan evaluation in MTT assay. *Brazilian archives of Biology and Technology*, *57*, pp.381-385. https://doi.org/10.1590/S1516-89132014000300011

Gerdes, J.M., Davis, E.E. and Katsanis, N., 2009. The vertebrate primary cilium in development, homeostasis, and disease. *Cell*, 137(1), pp.32-45. https://doi.org/10.1016/j.cell.2009.03.023

Ghasemzadeh, A., Karbalaii, M.T., Jaafar, H.Z. and Rahmat, A., 2018. Phytochemical constituents, antioxidant activity, and antiproliferative properties of black, red, and brown rice bran. *Chemistry Central Journal*, 12, pp.1-13. https://doi.org/10.1186/s13065-018-0382-9

Giordano, M.E., Caricato, R. and Lionetto, M.G., 2020. Concentration dependence of the antioxidant and prooxidant activity of trolox in hela cells: Involvement in the induction of apoptotic volume decrease. *Antioxidants*, 9(11), p.1058. doi:10.3390/antiox9111058

Grada, A., Otero-Vinas, M., Prieto-Castrillo, F., Obagi, Z. and Falanga, V., 2017. Research techniques made simple: analysis of collective cell migration using the wound healing assay. *Journal of Investigative Dermatology*, 137(2), pp.e11-e16. https://doi.org/10.1016/j.jid.2016.11.020

Gülden, M., Jess, A., Kammann, J., Maser, E. and Seibert, H., 2010. Cytotoxic potency of H_2O_2 in cell cultures: impact of cell concentration and exposure time. *Free Radical Biology and Medicine*, 49(8), pp.1298-1305. https://doi.org/10.1016/j.freeradbiomed.2010.07.015

Hahn, H.J., Kim, K.B., An, I.S., Ahn, K.J. and Han, H.J., 2017. Protective effects of rosmarinic acid against hydrogen peroxide-induced cellular senescence and the inflammatory response in normal human dermal fibroblasts. *Molecular Medicine Reports*, 16(6), pp.9763-9769. https://doi.org/10.3892/mmr.2017.7804

Halliwell, B., 2007. Cellular responses to oxidative stress: adaptation, damage, repair, senescence and death. *Free radicals in biology and medicine*, pp.187-267.

Hikmawati, D. and Irasanti, S.N., 2015. Hubungan Merokok dan Perubahan Hiperpigmentasi Daerah Wajah Satpam Unisba pada Tahun 2015. *Prosiding Pendidikan Dokter*, pp.829-835. http://dx.doi.org/10.29313/kedokteran.v0i0.1464

Hisam, E.E.A., Rofiee, M.S., Khalid, A., Jalaluddin, A.F., Yusof, M.I.M., Idris, M.H., Ramli, S., James, R.J., Yoeng, W.J., Kek, T.L. and Salleh, M.Z., 2018. Combined extract of Moringa oleifera and Centella asiatica modulates oxidative stress and senescence in hydrogen peroxide-induced human dermal fibroblasts. *Turkish Journal of Biology*, 42(1), pp.33-44. https://doi.org/10.3906/biy-1708-23

Ibrahim, S. and Sitorus, M., 2013. Teknik laboratorium kimia organik. *Yogyakarta: Graha Ilmu*, p.16.

Indrasari, S.D., Widyayanti, S. and Andriyanto, R., 2021, June. Molecular, morphological, and biochemical identification of sembada merah and sembada hitam rice (*Oryza sativa* L). In *Journal of Physics: Conference Series* 1918(5), p. 052017. https://doi.org/10.1088/1742-6596/1918/5/052017

Jiao, Y., Wang, Y., Guo, S. and Wang, G., 2017. Glutathione peroxidases as oncotargets. *Oncotarget*, *8*(45),p.80093.https://doi.org/10.18632/oncotarget.20278

Jittorntrum, B., Chunhabundit, R., Kongkachuichai, R., Srisala, S. and Visetpanit, Y., 2009. Cytoprotective and cytotoxic effects of rice bran extracts on H_2O_2-induced oxidative damage in human intestinal Caco-2 cells. *Thai Journal of Toxicology*, *24*(2), pp.92-92.

Kaleci, B. and Koyuturk, M., 2020. Efficacy of resveratrol in the wound healing process by reducing oxidative stress and promoting fibroblast cell proliferation and migration. *Dermatologic Therapy*, *33*(6), p.e14357. https://doi.org/10.1111/dth.14357

Kalluri, R., 2016. The biology and function of fibroblasts in cancer. *Nature Reviews Cancer*, *16*(9), pp.582-598. https://doi.org/10.1038/nrc.2016.73

Kocyigit, A. and Selek, S. 2016. Exogenous antioxidants are double-edged swords.

Kong, X., Zhu, P., Sui, Z., and Bao, J. 2015. Physicochemical properties of starches from diverse rice cultivars varying in apparent amylose content and gelatinisation temperature combinations. *Food Chemistry*, 172, 433–440. https:// doi.org/10.1016/j.foodchem.2014.09.085

Kowald, A. and Kirkwood, T.B., 1996. A network theory of ageing: the interactions of defective mitochondria, aberrant proteins, free radicals and scavengers in the ageing process. *Mutation Research/DNAging*, *316*(5-6), pp.209-236. https://doi.org/10.1016/S0921-8734(96)90005-3

Kristamtini, K., Wiranti, E.W. and Sutarno, S., 2018. Variation of Pigment and Anthocyanin Content of Local Black Rice from Yogyakarta on Two Altitude. *Buletin Plasma Nutfah*, *24*(2), pp.97-106. https://doi.org/10.21082/blpn.v24n2.2018.p97-102.

Kristamtini, S. Widyayanti, Sutarno, and Sudarmaji, 2015. Keragaman genetik lima kultivar lokal padi beras hitam asal Yogyakarta berdasarkan sifat morfologi [Genetic diversity of five local black rice cultivars from Yogyakarta based on morphological characteristics]." *In Prosiding Seminar Nasional Sumber Daya Genetik Pertanian Pengelolaan Sumber Daya Genetik Lokal sebagai Sumber Pertumbuhan Ekonomi Daerah*, pp. 90-99.

Kushwaha, U.K.S, 2016. Black, Brown, and Red Rices. *Black Rice: Research, History and Development*, pp.85-100.

Leibiger, C., Kosyakova, N., Mkrtchyan, H., Glei, M., Trifonov, V. and Liehr, T., 2013. First molecular cytogenetic high resolution characterization of the NIH 3T3 cell line by murine multicolor banding. *Journal of Histochemistry & Cytochemistry*, *61*(4),pp.306-312. https://doi.org/10.1369/0022155413476868

Lephart, E.D., 2018. Equol's anti-aging effects protect against environmental assaults by increasing skin antioxidant defense and ECM proteins while decreasing oxidative stress and inflammation. *Cosmetics*, *5*(1), p.16. https://doi.org/10.3390/cosmetics5010016

Li, R., Jia, Z. and Trush, M.A., 2016. Defining ROS in biology and medicine. *Reactive oxygen species (Apex, NC), 1*(1), p.9.-21. https://doi.org/ 10.20455/ros.2016.803

Li, S., Xiang, X., Qing, Y., Wang, Y., Wang, M. and Ren, J., 2024. The protective effect of antioxidant from the perspective of cell morphology and motility. Food Bioscience, 58, p.103673. https://doi.org/10.1016/j.fbio.2024

Liguori, I., Russo, G., Curcio, F., Bulli, G., Aran, L., Della-Morte, D., Gargiulo, G., Testa, G., Cacciatore, F., Bonaduce, D. and Abete, P., 2018. Oxidative stress, aging, and diseases. *Clinical interventions in aging*, pp.757-772. https://doi.org/10.2147/CIA.S158513

Loo, A.E.K., Ho, R. and Halliwell, B., 2011. Mechanism of hydrogen peroxide-induced keratinocyte migration in a scratch-wound model. *Free Radical Biology and Medicine*, *51*(4), pp.884-892. https://doi.org/10.1016/j.freerad

Mamalis, A., Koo, E., Isseroff, R.R., Murphy, W. and Jagdeo, J., 2015. Resveratrol prevents high fluence red light-emitting diode reactive oxygen species-mediated photoinhibition of human skin fibroblast migration. *PLoS One*, *10*(10), p.e0140628. https://doi.org/10.1371/journal.pone.0140628

Margaritelis, N.V., Paschalis, V., Theodorou, A.A., Kyparos, A. and Nikolaidis, M.G., 2020. Redox basis of exercise physiology. *Redox biology*, *35*, p.101499. https://doi.org/10.1016/j.redox.2020.101499

Mescher, A. 2010. *Junqueira's Basic Histology*, Twelfth Edition,The McGraw-Hill Companies, Inc.Murray

Miere, F., Teușdea, A.C., Laslo, V., Cavalu, S., Fritea, L., Dobjanschi, L., Zdrinca, M., Zdrinca, M., Ganea, M., Pașc, P. and Memete, A.R., 2021. Evaluation of in vitro wound-healing potential, antioxidant capacity, and antimicrobial activity of *Stellaria media* (L.) Vill. *Applied Sciences*, *11*(23), p.11526. https://doi.org/10.3390/app112311526

Mill, P., Christensen, S.T. and Pedersen, L.B., 2023. Primary cilia as dynamic and diverse signalling hubs in development and disease. *Nature Reviews Genetics*, *24*(7), pp.421-441. https://doi.org/10.1038/s41576-023-00587-9

Monikasari, M., Widyastiti, N.S., Mahati, E., Syauqy, A. and Al-Baarri, A.N.M., 2023. Pengaruh pemberian ekstrak bekatul beras hitam (Oryza sativa L. indica) terhadap kadar MDA, SOD dan trigliserida pada tikus diabetes mellitus tipe 2. *AcTion: Aceh Nutrition Journal*, *8*(1), pp.129-138. https://doi.org/10.30867/action.v8i1.731

Nohl, H., 1993. Involvement of free radicals in ageing: a consequence or cause of senescence. *British Medical Bulletin*, *49*(3), pp.653-667. https://doi.org/10.1093/oxfordjournals.bmb.a072638

Nurdyansyah, F., 2017. Stres Oksidatif Dan Status Antioksidan. *Jendela Olahraga*, *2*(1), pp.105-9.

Nurhidayah, S., Nasrudin, N., Hamdah, H. and Rahayu, Y., 2022. Adopsi Teknologi Jajar Legowo Pada Pertanaman Padi Hitam Di Kelompok Taruna Tani Muarahurip Kota Tasikmalaya. *IKRA-ITH ABDIMAS*, *5*(1), pp.206-213.

Nuriliani, A., Conara, F.C., Oktavya, G., Hidayah, L.T.N. and Purwestri, Y.A., Ethanolic Extract of Black Rice 'Sembada Hitam' Bran Did not Show Cytotoxic Effect on HeLa Cell (Cervical Cancer Cell Line). *Bioma: Berkala Ilmiah Biologi*, *25*(1), pp.49-59. https://doi.org/10.14710/bioma.25.1.49-59

Nuriliani, A., Nakahata, Y., Ahmed, R., Khaidizar, F.D., Matsui, T. and Bessho, Y., 2020. Over-expression of Nicotinamide phosphoribosyltransferase in mouse cells confers protective effect against oxidative and ER stress-induced premature senescence. *Genes to Cells*, *25*(8), pp.593-602. https://doi.org/10.1111/gtc.12794

Oktavya, G., Purwestri, Y.A., Saragih, H.T. and Nuriliani, A., 2023. Ethanolic Extract of Black Rice 'Sembada Hitam'Bran Protects the Cytotoxic Effect of H_2O_2 on NIH3T3 Cells. *Current Research in Nutrition and Food Science Journal*, *11*(1), pp.389-400. https://dx.doi.org/10.12944/CRNFSJ.11.1.29.

Ortiz-Espín, A., Morel, E., Juarranz, Á., Guerrero, A., González, S., Jiménez, A. and Sevilla, F., 2017. An extract from the plant Deschampsia antarctica protects fibroblasts from senescence induced by hydrogen peroxide. *Oxidative Medicine and Cellular Longevity*, *2017*(1), p.2694945. https://doi.org/10.1155/2017/2694945

Pan, Q., Qiu, W.Y., Huo, Y.N., Yao, Y.F. and Lou, M.F., 2011. Low levels of hydrogen peroxide stimulate corneal epithelial cell adhesion, migration, and wound healing. *Investigative ophthalmology & visual science*, *52*(3), pp.1723-1734. https://doi.org/10.1167/iovs.10-5866

Pang, Y., Ahmed, S., Xu, Y., Beta, T., Zhu, Z., Shao, Y. and Bao, J., 2018. Bound phenolic compounds and antioxidant properties of whole grain and bran of white, red and black rice. *Food Chemistry*, *240*, pp.212-221. https://doi.org/10.1016/j.foodchem.2017.07.095

Park, Y.S., Kim, S.J. and Chang, H.I., 2008. Isolation of anthocyanin from black rice (Heugjinjubyeo) and screening of its antioxidant activities. *Korean Journal of Microbiology and Biotechnology*, *36*(1), pp.55-60.

Pengkumsri, N., Chaiyasut, C., Saenjum, C., Sirilun, S., Peerajan, S., Suwannalert, P., Sirisattha, S. and Sivamaruthi, B.S., 2015. Physicochemical and

antioxidative properties of black, brown and red rice varieties of northern Thailand. *Food Science and Technology*, *35*, pp.331-338. https://doi.org/10.1590/1678- 457X.6573

Phetpornpaisan, P., Tippayawat, P., Jay, M. and Sutthanut, K., 2014. A local Thai cultivar glutinous black rice bran: A source of functional compounds in immunomodulation, cell viability and collagen synthesis, and matrix metalloproteinase-2 and-9 inhibition. *Journal of functional foods*, *7*, pp.650-661. https://doi.org/10.1016/j.jff.2013.12.020

Pieńkowska, N., Bartosz, G., Pichla, M., Grzesik-Pietrasiewicz, M., Gruchala, M. and Sadowska-Bartosz, I., 2020. Effect of antioxidants on the H_2O_2-induced premature senescence of human fibroblasts. *Aging (Albany NY)*, *12*(2), p.1910. https://doi.org/10.18632/aging.102730

Pijuan, J., Barceló, C., Moreno, D.F., Maiques, O., Sisó, P., Marti, R.M., Macià, A. and Panosa, A., 2019. In vitro cell migration, invasion, and adhesion assays: from cell imaging to data analysis. *Frontiers in cell and developmental biology*, *7*, p.107. https://doi.org/10.3389/fcell.2019.00107

Pizzino, G., Irrera, N., Cucinotta, M., Pallio, G., Mannino, F., Arcoraci, V., Squadrito, F., Altavilla, D. and Bitto, A., 2017. Oxidative stress: harms and benefits for human health. *Oxidative medicine and cellular longevity*, *2017*(1), p.8416763. https://doi.org/10.1155/2017/8416763

Pole, A., Dimri, M. and Dimri, G.P., 2016. Oxidative stress, cellular senescence and ageing. *AIMS molecular science*, *3*(3), p.300–324. https://doi.org/10.3934/molsci.2016.3.300

Pongsathi, M., 2022. *Development of topical formulation for skin wound healing from ethanolic riceberry rice extract* (Doctoral dissertation, Rangsit University).

Qing, Y., Xiang, X., Li, S., Wang, M., Liang, Z. and Ren, J., 2023. Integrated evaluation the antioxidant activity of epicatechin from cell dynamics. *Biotechnology Progress*, *39*(3), p.e3328. https://doi.org/10.1002/btpr.3328

Qu, J., Chen, W., Hu, R. and Feng, H., 2016. The injury and therapy of reactive oxygen species in intracerebral hemorrhage looking at mitochondria. *Oxidative medicine and cellular longevity*, *2016*(1), p.2592935. https://doi.org/10.1155/2016/2592935

Rahimi, A.M., Cai, M. and Hoyer-Fender, S., 2022. Heterogeneity of the NIH3T3 fibroblast cell line. *Cells*, *11*(17), p.2677. https://doi.org/10.3390/cells11172677

Ransy, C., Vaz, C., Lombès, A. and Bouillaud, F., 2020. Use of H_2O_2 to cause oxidative stress, the catalase issue. *International journal of molecular sciences*, *21*(23), p.9149. https://doi.org/10.3390/ijms21239149

Reiter, J.F. and Leroux, M.R., 2017. Genes and molecular pathways underpinning ciliopathies. *Nature reviews Molecular cell biology*, *18*(9), pp.533-547. https://doi.org/10.1038/nrm.2017.60

Rhee, S.G., 2006. H_2O_2, a necessary evil for cell signaling. *Science*, *312*(5782), pp.1882-1883. doi:10.1126/science.1130481

Rozycki, M., Lodyga, M., Lam, J., Miranda, M.Z., Fátyol, K., Speight, P. and Kapus, A., 2014. The fate of the primary cilium during myofibroblast transition. *Molecular biology of the cell*, *25*(5), pp.643-657. https://doi.org/10.1091/mbc.E13-07-0429

Šamec, D., Maretić, M., Lugarić, I., Mešić, A., Salopek-Sondi, B. and Duralija, B., 2016. Assessment of the differences in the physical, chemical and phytochemical properties of four strawberry cultivars using principal component analysis. *Food chemistry*, *194*, pp.828-834. https://doi.org/10.1016/j.foodchem.2015.08.095

Sari, A.N., 2015. Antioksidan alternatif untuk menangkal bahaya radikal bebas pada kulit. *Elkawnie: Journal of Islamic Science and Technology*, *1*(1), pp.63-68. http://dx.doi.org/10.22373/ekw.v1i1.518

Sies, H., 2017. Hydrogen peroxide as a central redox signaling molecule in physiological oxidative stress: Oxidative eustress. *Redox biology*, *11*, pp.613-619. https://doi.org/10.1016/j.redox.2016.12.035

Sofyantoro, F., Syam, A.M., Adania, B.A., Almunawar, M.F., Nasution, N.P.B., Hidayat, R.F.A., Mataram, M.B.A., Maharesi, C.E., Nurhidayah, S., Purwestri, Y.A. and Nuriliani, A., 2024. Therapeutic Effects of BRC Functional Food from Indonesian Black Rice on Body Weight and Haematological Parameters in Obese Rats. *Journal of Tropical Biodiversity and Biotechnology*, *9*(1), p.85847. https://doi.org/10.22146/jtbb.85847

Sompong, R., Siebenhandl-Ehn, S., Linsberger-Martin, G. and Berghofer, E., 2011. Physicochemical and antioxidative properties of red and black rice varieties from Thailand, China and Sri Lanka. *Food chemistry*, *124*(1), pp.132-140. https://doi. org/10.1016/j.foodchem.2010.05.115

Stefani, E., Nurmalina, R. and Rifin, A., 2017. Strategi Pegembangan Usaha Beras Hitam pada Asosiasi Tani Organik Sawangan di Kabupaten Magelang. *AGRARIS: Journal of Agribusiness and Rural Development Research*, *3*(1), pp.57-66. https://doi.org/10.18196/agr.3145

Sukweenadhi, J., Yunita, O., Setiawan, S., Kartini, Siagian, M.T., Danduru, A.P. and Avanti, C. 2021. Antioxidant activity screening of seven Indonesian herbal extract. *Biodiversitas*, 21(5): 2062-2067.

Takashi, I., Bing, X., Yoichi, Y., Masaharu, N. and Tetsuya, K. 2001. Antioxidant activity of anthocyanin extract from purple black rice. *Journal of Medicinal Food*, 4, pp.211–218. https://doi.org/10.1089/10966200-152744481

Teplicki, E., Ma, Q., Castillo, D.E., Zarei, M., Hustad, A.P., Chen, J. and Li, J., 2018. The Effects of Aloe vera on Wound Healing in Cell Proliferation, Migration, and Viability. *Wounds: a compendium of clinical research and practice*, *30*(9), pp.263-268.

Trepat, X., Chen, Z. and Jacobson, K., 2012. Cell migration. *Comprehensive Physiology*, *2*(4), p.2369. https://doi.org/10.1002/cphy.c110012

Venkova, L.S., Chernoivanenko, I.S. and Minin, A.A., 2014. Hydrogen peroxide stimulating migration of fibroblasts is formed in mitochondria. *Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology*, *8*, pp.309-313. https://doi.org/10.1134/S1990747814050080

Ware, M.F., Wells, A. and Lauffenburger, D.A., 1998. Epidermal growth factor alters fibroblast migration speed and directional persistence reciprocally and in a matrix-dependent manner. *Journal of cell science*, *111*(16), pp.2423-2432. https://doi.org/10.1242/jcs.111.16.2423

Werdhasari, A., 2014. Peran antioksidan bagi kesehatan. *Jurnal Biotek Medisiana Indonesia*, *3*(2), pp.59-68.

Widyaningtias, L.A.M., Yudono, P. and Supriyanta, S., 2020. Identifikasi karakter morfologi dan agronomi penentu kehampaan malai padi (Oryza sativa L.). *Vegetalika*, *9*(2), pp.399-413. https://doi.org/10.22146/veg.50721

Widyayanti, S. Kristamtini and Hidayatun, N., 2018. The Four Yogyakarta's Local Rice Superiority Registered By Digital Object Identifier. *Boosting The Big Data Of Plant With Digital Identifiers*, p.343.

Yamada, K.M. and Sixt, M., 2019. Mechanisms of 3D cell migration. *Nature Reviews molecular cell biology*, *20*(12), pp.738-752. https://doi.org/10.1038/s41580-019-0172-9

Yulianingtyas, A. and Kusmartono, B., 2016. Optimasi volume pelarut dan waktu maserasi pengambilan flavonoid daun belimbing wuluh (Averrhoa bilimbi L.). *Jurnal Teknik Kimia*, *10*(2), pp.61-67.

Yusharyahya, S.N., 2021. Mekanisme Penuaan Kulit sebagai Dasar Pencegahan dan Pengobatan Kulit Menua: Mechanism of Skin Aging. *eJournal Kedokteran Indonesia*, pp.150-150. https://doi.org/10.23886/ejki.9.49.150

Yuvita, A., 2024. Efek Protektif Ekstrak Etanolik Bekatul Beras Hitam (Oryza sativa L. 'Sembada Hitam') terhadap Sitotoksisitas dan Aktivitas SA-β-Gal Fibroblas NIH3T3 yang diinduksi H_2O_2 (Undergraduate Thesis, Universitas Gadjah Mada).

Zhang, Q.W., Lin, L.G. and Ye, W.C., 2018. Techniques for extraction and isolation of natural products: A comprehensive review. *Chinese medicine*, *13*, pp.1-26. https://doi.org/10.1186/s13020-018-0177-x

Zhu, X., Chen, Z., Shen, W., Huang, G., Sedivy, J.M., Wang, H. and Ju, Z., 2021. Inflammation, epigenetics, and metabolism converge to cell senescence and ageing: the regulation and intervention. *Signal transduction and targeted therapy*, *6*(1), p.245. https://doi.org/10.1038/s41392-021-00646-9.

Zulfafamy, K.E. and Budijanto, S., 2018. Antioxidative properties and cytotoxic activity against colon cancer cell WiDr of Rhizopus oryzae and Rhizopus oligosporus-fermented black rice bran extract. *Current Research in Nutrition and Food Science Journal*, *6*(1), pp.23-34. https://dx.doi.org/10.12944/CRNFSJ.6.1.03