

DAFTAR PUSTAKA

- Adamu, A., Aliyu, F., Aminu, A.H. & Mienda, B.S. 2017. Phenotypic and functional features of CD4 + T helper cells subsets. *Life Science Press*, , no. December, pp. 20.
- Ansari, W.A., Ahamad, T., Khan, M.A., Khan, Z.A. & Khan, M.F. 2020. Luteolin : A Dietary Molecule as Potential Anti- COVID-19 Agent. *Research Square*, pp. 2,10.
- Araceli-M, Vera-Guzman, N.Aquino-Bolarios, Heredia-Garcia, E., Carrillo-Rodriguez, J.C., Hernande-Delgado, S. & Chavez-Servia, J.L. 2017. Flavonoid and Capsaicinoid Contents and Consumption of Mexican Chili Pepper (*Capsicum annum L*) Landraces. *Intech*, vol. i, no. tourism, pp. 417.
- Arimboor, R., Natarajan, R.B., Menon, K.R., P, L., Chandrasekhar & Moorkoth, V. 2015. Red pepper (*Capsicum annuum*) carotenoids as a source of natural food colors: analysis and stability—a review. *Journal of Food Science and Technology*, vol. 52, no. 3, pp. 1258.
- Asmal, A. 2018. Analisis Kandungan Vitamin C Dalam Cabai Rawit (*Capsicum Fructuscens L.*) Secara Iodimetri. *Jurnal Farmasi Sandi Kara* vol. IV NO. 7, vol. IV, no. 7, pp. 99.
- Azhar, M. 2016. *Biomolekul sel, Karbohidrat, Protein dan Enzim*. Azhar M: UNP Press Padang. Hal: 56-61.
- Bai, Y., Yao, L., Wei, T., Tian, F., Jin, D.Y., Chen, L. & Wang, M. 2020. Presumed Asymptomatic Carrier Transmission of COVID-19. *Researchlette R*, vol. 323, no. 14, pp. 1407.
- Basiri, A., Pazhouhnia, Z., Beheshtizadeh, N., Hoseinpour, M., Saghazadeh, A. & Rezaei, N. 2020. Regenerative Medicine in COVID-19 Treatment: Real Opportunities and Range of Promises. *Stem Cell Reviews and Reports*, pp. 1, 4.
- Brodowska, K.M. 2017. Natural flavonoids: classification, potential role, and application of flavonoid analogues. *European Journal of Biological Research*, vol. 7, no. 2, pp. 109,110, 114, 115.
- Cao, Y., Deng, Q. & Dai, S. 2020. Remdesivir for severe acute respiratory syndrome coronavirus 2 causing COVID-19: An evaluation of the evidence Yu-chen. *Elsevier*, , no. January, pp. 2.
- Chappell, M.C., Marshall, A.C., M.Alzayadneh, E., Shalput, H.A. & Diz, D.I. 2014. Update on the angiotensin converting enzyme 2-angiotensin (1-7)-Mas receptor axis: Fetal programing, sex differences, and intracellular pathways. *Frontiers in Endocrinology*, vol. 5, no. JAN, pp. 1.

- Chaudhary, N.K., Chaudhary, N., Dahal, M., Guragain, B., Rin, S., Chaudhary, R., Sachin, K., Lamichhane-Khadka, R. & Bhattacharai, A. 2020. Fighting the SARS CoV-2 (COVID-19) pandemic with soap. *Preprints*, vol. 2, no. May, pp. 5,6, 11.
- Darlina & Nurhayati, S. 2015. Respon Sitokin Pada Kultur Sel Limfosit Sebagai Uji Penting Dalam Pengembangan Vaksin Malaria Iradiasi. *Buletin Alara*, vol. 17, no. 1, pp. 2.
- Dbouk, T. & Drikakis, D. 2020. On respiratory droplets and face masks. *Physics of Fluids*, vol. 32, no. 6, pp. 2.
- Dewantari, R., L, M.L. & Nurmiyat 2018. Jenis Tumbuhan yang Digunakan sebagai Obat Tradisional Di Daerah Eks- Karesidenan Surakarta Types. *BIOEDUKASI*, vol. 11, no. 2, pp. 117.
- Dharmayanti, I. & Nurjanah, D. 2020. Ulasan tentang Coronavirus : Sebagai Agen Penyakit pada Hewan dan Manusia. *WARTAZOA*, vol. 30, no. 1, pp. 2.
- Dong, L., Hu, S. & Gao, J. 2020. Discovering drugs to treat coronavirus disease 2019 (COVID-19). *Drug Discoveries & Therapeutics*, vol. 14, no. 1, pp. 59.
- Du, L., He, Y., Zhou, Y., Liu, S., Zheng, B. & Jiang, S. 2009. The spike protein of SARS-CoV - A target for vaccine and therapeutic development. *Nature Reviews Microbiology*, vol. 7, no. 3, pp. 228.
- Escogido, M. de L.R., Mondragon, E.G.G. & Tzompantzi, E.V. 2011. Chemical and pharmacological aspects of capsaicin. *Molecules*, vol. 16, no. 2, pp. 1253-1254.
- Fattori, V., Hohmann, M.S.N., Rossaneis, A.C., Pinho-Ribeiro, F.A. & Verri, W.A. 2016. Capsaicin: Current understanding of its mechanisms and therapy of pain and other pre-clinical and clinical uses. *Molecules*, vol. 21, no. 7, pp. 1-2.
- Feketa, V. V & Marrelli, S.P. 2015. Induction of therapeutic hypothermia by pharmacological modulation of temperature-sensitive TRP channels: theoretical framework and practical considerations. *Temperature*, vol. 2, no. 2, pp .252.
- Fosgerau, K., Webe, U.J., Gotfredsen, J.W., Jayatissa, M., Buus, C., Kristensen, N.B., Vestergaard, M., Teschendorf, P., Schneider, A., Hansen, P., Raunø, J., Købe, L., Torp-Pedersen, C. & Videbaek, C. 2010. Drug-induced mild therapeutic hypothermia obtained by administration of a transient receptor potential vanilloid type 1 agonist. *BMC Cardiovascular Disorders* 2010, pp. 7.
- Gheblawi, M., Wang, K., Viveiros, A., Nguyen, Q., Zhong, J.-C., Turner, A.J., K, M., Raizada, B, M., Grant & Oudit, G.Y. 2020. Angiotensin-Converting Enzyme 2: SARS-CoV-2 Receptor and Regulator of the Renin-Angiotensin

- System: Celebrating the 20th Anniversary of the Discovery of ACE2. *Circulation Research*, pp. 1456, 1459.
- Gorbalenya, A.E., Baker, S.C., Baric, R.S., de Groot, R.J., Drosten, C., Gulyaeva, A.A., Haagmans, B.L., Lauber, C., Leontovich, A.M., Neuman, B.W., Penzar, D., Perlman, S., Poon, L.L.M., Samborskiy, D. V., Sidorov, I.A., Sola, I. & Ziebuhr, J. 2020. The species Severe acute respiratory syndrome-related coronavirus: classifying 2019-nCoV and naming it SARS-CoV-2. *Nature Microbiology*, vol. 5, no. 4, pp. 536.
- Goris, T., Valero, A.P., Martiez, I., Yi, D., Calleja, L.F., Leon, D.S., Bornscheuer, U.T., Corpas, P.M., Lombo, F. & Nogales, J. 2020. Repositioning microbial biotechnology against COVID-19: the case of microbial production of flavonoids. *Microbial Biotechnology*, pp. 3,4,6.
- Gurnani, N., Gupta, M., Mehta, D. & Mehta, B.K. 2016. Chemical composition, total phenolic and flavonoid contents, and in vitro antimicrobial and antioxidant activities of crude extracts from red chilli seeds (Capsicum frutescens L.). *Journal of Taibah University for Science*, vol. 10, no. 4, pp. 468.
- Han, Y. & Yang, H. 2020. The transmission and diagnosis of 2019 novel coronavirus infection disease (COVID-19): A Chinese perspective. *Journal of Medical Virology*, , no. 6, pp. 1-2.
- Hussain, G., Rasul, A., Anwar, H., Aziz, N., Razzaq, A., Wei, W., Ali, M., Li, J. & Li, X. 2018. Role of plant derived alkaloids and their mechanism in neurodegenerative disorders. *International Journal of Biological Sciences*, vol. 14, no. 3, pp. 343.
- Instiaty, Darmayani, I.G.A.A.P.S., Marzuki, J.E., Angelia, F., William, Siane, A., Sary, L.D., Yohanes, L., Widystuti, R., Nova, R., Simorangkir, D.S., Lonah, Safitri, Y., Aliska, G. & Gayatri, A. 2020. Antiviral treatment of covid-19: A clinical pharmacology narrative review. *Medical Journal of Indonesia*, vol. 29, no. 3, pp. 340.
- Islam, M.T., Sarkar, C., El-Kersh, D.M., Jamaddar, S., Uddin, S.J., Shilpi, J.A. & Mubarak, M.S. 2020. Natural products and their derivatives against coronavirus: A review of the non-clinical and pre-clinical data. *Phytotherapy Research*, , no. March, pp.1.
- Kemenkes 2020. Pendoman pencegahan dan pengendalian coronavirus disease (covid-19). *Pedoman kesiapan menghadapi COVID-19*, pp.52.
- Khoirunnisa, I. & Sumiwi, S.A. 2019. Peran Flavonoid Pada Berbagai Aktivitas Farmakologi. *Farmaka*, vol. 17, no. 2, pp. 31.
- Kusnadi, J., Andayani, D.W., Zubaidah, E. & Arumingtyas, E.L. 2019. Ekstraksi Senyawa Bioaktif Cabai Rawit (*Capsicum Frutescens* L.) Menggunakan

- Metode Ekstraksi Gelombang Ultrasonik. *Jurnal Teknologi Pertanian*, vol. 20, no. 2, pp. 80.
- Kusnadi, J., Dedi, Yunianta & Arumingtyas, E.L. 2017. Extraction of Phenolic Compounds and Antioxidant Activity from Cayenne Pepper fruit by Microwave Assisted Extraction. *Jurnal Teknologi Pertanian*, vol. 18, no. 3, pp. 182.
- Lalani, S. & Poh, C.L. 2020. Flavonoids as antiviral agents for enterovirus A71 (EV-A71). *Viruses*, vol. 12, no. 2, pp. 2,7.
- Li X, Geng M, Peng Y, Meng L & Lu S 2020. Molecular immune pathogenesis and diagnosis of COVID-19. *journal of Pharmaceutical Analysis*, , no. January, pp. 1.
- Lukito, J.I. 2020. Tinjauan Antivirus untuk Terapi COVID-19. *340 CDK-286*, vol. 47, no. 5, pp. 342.
- Maitra, A., Sarkar, M.C., Raheja, H., Biswas, N.K., Chakraborti, S., Singh, A.K., Ghosh, S., Sarkar, S., Patra, S., Mondal, R.K., Ghosh, T., Chatterjee, A., Banu, H., Majumdar, A., Chinnaswamy, S., Srinivasan, N., Dutta, S. & Das, S. 2020. Mutations in SARS-CoV-2 viral RNA identified in Eastern India: Possible implications for the ongoing outbreak in India and impact on viral structure and host susceptibility. *Journal of Biosciences*, vol. 45, no. 1, pp. 3.
- Maleta, H.S., Indrawati, R., Limantara, L. & Brotosudarmo, T.H.P. 2018. Ragam Metode Ekstraksi Karotenoid dari Sumber Tumbuhan dalam Dekade Terakhir (Telaah Literatur). *Jurnal Rekayasa Kimia & Lingkungan*, vol. 13, no. 1, pp. 41.
- Mubarokah, N., Setyawan, H.B. & Sholikhah, U. 2015. Kadar Capsaicin Dua Varietas Cabai Rawit (*Capsicum Frutescens L.*) Sebagai Respon Pengaruh Dosis Pupuk Nitrogen. , vol. x, pp. 2.
- Ningrum, R., Purwanti, E. & Sukarsono 2016. Identifikasi Senyawa Alkaloid dari Batang Karamunting (*Rhodomyrtus tomentosa*) Sebagai Bahan Ajar Biologi Untuk SMA Kelas X. *Jurnal Pendidikan Biologi Indonesia*, vol. 2, no. 3, pp. 231.
- Octaviani, T., Guntarti, A. & Susanti, H. 2014. PENETAPAN KADAR β -KAROTEN PADA BEBERAPA JENIS CABE (Genus *Capsicum*) DENGAN METODE SPEKTROFOTOMETRI TAMPAK. *Pharmaciana*, vol. 4, no. 2.
- Purwaniati & Asnawi, A. 2020. TARGET KERJA OBAT ANTIVIRUS COVID-19: REVIEW DRUG. *Jurnal Farmagazine Vol.*, vol. VII, no. 2, pp. 36-37.
- Puspita, D., Tjahjono, J.D., Samalukang, Y., Toy, B.A.I. & Totoda, N.W. 2018. Isolasi dan Uji Termostabilitas Pigmen Cabai Katokon (*Capsicum chinense* Jacq .) Isolation and Test of Pigment Thermostability of Katokon Chili

- (*Capsicum chinense* Jacq.). *JFLS*, vol. 2, no. 1, pp. 10.
- Qamariah, N., Handayani, R. & Novaryatiin, S. 2019. Peningkatan Pengetahuan Dan Keterampilan Ibu Rumah Tangga Dalam Pengolahan Tanaman Obat Keluarga (Toga) Sebagai Ramuan Obat Tradisional. *Jurnal Ilmiah Pengabdian kepada Masyarakat*, vol. 4, no. 1, pp. 50.
- Rampengan, N.H. 2016. Middle east respiratory syndrome coronavirus. *Workplace Health and Safety*, vol. 8, no. 1, pp. 18.
- Rane, J.S., Chatterjee, A., Kumar, A. & Ray, S. 2020. Targeting SARS-CoV-2 Spike Protein of COVID-19 with Naturally Occurring Phytochemicals: An in Silico Study for Drug Development. *chemRxiv*, , no. April, pp. 6.
- Ren, J., Zhang, A.-H. & Wang, X.-J. 2020. Traditional Chinese medicine for COVID-19 treatment. *Contents lists available at ScienceDirect Pharmacological*, , no. January, pp. 1.
- Ren, L.L., Wang, Y.M., Wu, Z.Q., Xiang, Z.C., Guo, L., Xu, T., Jiang, Y.Z., Xiong, Y., Li, Y.J., Li, H., Fan, G.H., Gu, X.Y., Xiao, Y., Gao, H., Xu, J.Y., Yang, F., Wang, X.M., Wu, C., Chen, L., Liu, Y.W., Liu, B., Yang, J., Wang, X.R., Dong, J., Li, L., Huang, C.L., Zhao, J.P., Hu, Y., Cheng, Z.S., Liu, L.L., Qian, Z.H., Qin, C., Jin, Q., Cao, B. & Wang, J.W. 2020. Identification of a novel coronavirus causing severe pneumonia in human: a descriptive study. *Chinese medical journal*, pp. 2.
- Risnawaty, G. 2016. Faktor Determinan Perilaku Cuci Tangan Pakai Sabun (Ctps) Pada Masyarakat Di Tanah Kalikedinding. *Jurnal PROMKES*, vol. 4, no. 1, pp. 71-72.
- Rizkia, A.W., Indra, F.N., Putra, I.H. & Isrona, L. 2018. Peran Capsaisin Sebagai Kardioterapi Dalam Mengurangi Ukuran Infark Melalui Terapi Hipotermia. *JIMKI Indonesian Medical Student Journal*, vol. 5, no. 2, pp. 27, 30.
- Rothon, H.A. & Byrareddy, S.N. 2020. The epidemiology and pathogenesis of coronavirus (Covid-19) outbreak. *Journal of Autoimmunity*, vol. 109, no. January, pp. 1.
- Sahin, A.R., Erdogan, A., Agaoglu, P.M., Dineri, Y., Cakirci, A.Y., Senel, M.E., Okyay, R.A. & Tasdogan, A.M. 2020. 2019 Novel Coronavirus (COVID-19) Outbreak: A Review of the Current Literature. *Eurasian Journal of Medicine and Oncology*, vol. 4, no. 1, pp. 4.
- Seah, I., Su, X. & G, L. 2020. Revisiting the dangers of the coronavirus in the ophthalmology practice. *Springer Nature*, pp. 1-2.
- Septiana, E. 2020. Prospek Senyawa Bahan Alam Sebagai Antivirus Dalam Menghambat SARS-CoV-2. *Bio Trends*, vol. 11, no. 1, pp. 31.
- Setiawan, F., R, M.R., Ridwan, R.D. & Sunariani, J. 2020. An Increase of TNF- α

- After Capsaisin Administration. *in print*, pp. 2.
- Sithisarn, P., Michaelis, M., Schubert-Zsilavecz, M. & Jr., J.C. 2013. Differential antiviral and anti-inflammatory mechanisms of the flavonoids biochanin A and baicalein in H5N1 influenza A virus-infected cells. *Antiviral Research*, vol. 97, no. 1, pp. 41.
- South, X.A.M., Diz, D.I. & Chappell, X.M.C. 2020. COVID-19 , ACE2 , and the cardiovascular consequences. *Am J Physiol Heart Circ Physiol*, , no. 48, pp. 1084.
- Suprobawati, O.D. & Kurniati, I. 2018. Bahan Ajar Teknologi Laboratorium Medik (TLM) VIROLOGI. *Kementerian Kesehatan Republik Indonesia*, pp. 3-5.
- Taolin, C. 2019. Efek Antimikroba Capsaicin. *Ilmiah Kesehatan Sandi Husada*, vol. 10, no. 2, pp. 212.
- Theoharides, T.C. 2020. COVID-19, pulmonary mast cells, cytokine storms, and beneficial actions of luteolin. *BioFactors*, pp. 1.
- Theoharis, C. & Theoharides 2020. COVID-10 , Mast Cells and Luteolin. , vol. 26, pp. 1.
- Wang, M., Cao, R., Zhang, L., Yang, X., Liu, J., Xu, M., Shi, Z., Hu, Z., Zhong, W. & Xiao, G. 2020. Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. *Cell Research* (2020), , no. January, pp. 1.
- Wibowo, B., Widjastoeti, T.H., Satari, H.I., Manullang, S.H., Saptawati, L., Sitohang, G., Pandjaitan, C., Widodo, N.H., Suryadiputra, I.B.A., Nasution, W.N., Suridaty, N.A. & Anjelia, L.O. 2020. Petunjuk Teknis Alat Pelindung Diri (APD) Dalam Menghadapi Wabah Covid-19. *Kementerian Kesehatan Republik Indonesia*, , no. April, pp. 5-6, 9.
- Wu, Z. & McGoogan, J.M. 2020. Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention. *JAMA - Journal of the American Medical Association*, vol. 323, no. 13, pp. 1240-1241.
- Yan, H., Ma, L., Wang, H., Wu, S., Huang, H., Gu, Z., Jiang, J. & Li, Y. 2019. Luteolin decreases the yield of influenza A virus in vitro by interfering with the coat protein I complex expression. *Journal of Natural Medicines*, vol. 73, no. 3, pp. 492-494.
- Yang, R.Y., Lin, S. & Kuo, G. 2008. Content and distribution of flavonoids among 91 edible plant species. *Asia Pacific Journal of Clinical Nutrition*, vol. 17, no. SUPPL. 1, pp. 276–278.

- Yu, R., Chen, L., Lan, R., Shen, R. & Li, P. 2020. Computational screening of antagonists against the SARS-CoV-2 (COVID-19) coronavirus by molecular docking. *International Journal of Antimicrobial Agents*, vol. 56, no. 2, pp. 1-2.
- Zakaryan, H., Arabyan, E., Oo, A. & Zandi, K. 2017. Flavonoids: promising natural compounds against viral infections. *Archives of Virology*, vol. 162, no. 9, pp. 2539.
- Zhang, H., Penninger, J.M., Li, Y., Zhong, N. & Slutsky, A.S. 2020. Angiotensin-converting enzyme 2 (ACE2) as a SARS-CoV-2 receptor: molecular mechanisms and potential therapeutic target. *Intensive Care Medicine*, vol. 46, no. 4, pp. 1.
- Zhavoronkov, A., A., V., Aladinskiy, Zhebrak, A., Zagribelnyy, B., Terentiev, V., Bezrukov, D.S., Polykovskiy, D., Shayakhmetov, R., Filimonov, A., Orekhov, P., Yan, Y., Popova, O., Vanhaelen, Q., Aliper, A. & Ivanenkov, Y.A. 2020. Potential 2019-nCoV 3C-like protease inhibitors designed using generative deep learning approaches. *ChemRxiv*, , no. 2, pp. 20.
- Zhou, P., Yang, X. Lou, Wang, X.G., Hu, B., Zhang, L., Zhang, W., Si, H.R., Zhu, Y., Li, B., Huang, C.L., Chen, H.D., Chen, J., Luo, Y., Guo, H., Jiang, R. Di, Liu, M.Q., Chen, Y., Shen, X.R., Wang, X., Zheng, X.S., Zhao, K., Chen, Q.J., Deng, F., Liu, L.L., Yan, B., Zhan, F.X., Wang, Y.Y., Xiao, G.F. & Shi, Z.L. 2020. A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature*, vol. 579, no. 7798, pp. 271.
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., Zhao, X., Huang, B., Shi, W., Lu, R., Niu, P., Zhan, F., Ma, X., Wang, D., Xu, W., Wu, G., Gao, G.F. & Tan, W. 2020. A novel coronavirus from patients with pneumonia in China, 2019. *New England Journal of Medicine*, vol. 382, no. 8, pp. 727.