

DAFTAR PUSTAKA

- Afifurrahman, Samadin, K.H. & Aziz, S., 2014. Pola Kepakaan Bakteri *Staphylococcus aureus* terhadap Antibiotik Vancomycin di RSUP Dr . Mohammad Hoesin Palembang. Fakultas Kedokteran Universitas Sriwijaya, (4), pp.266–270
- Ahmed, E. F. , El-Baky, R. M. A. , Ahmed, A. B. F. , Waly, N. G. , & Gad, G. F. M. (2017). Antibacterial Activity of Some Non-steroidal Anti-inflammatory Drugs against Bacteria Causing Urinary Tract Infection. *American Journal of Infectious Diseases and Microbiology*, 5(1), 66-73.
- Akiyama, H. K. Fujii. O. Yamasaki., T. Oono. K. Iwatsuki. Antibacterial Action of Several Tannin against *Staphylococcus aureus*. *Journal of Antimicrobial Chemotherapy*. 2001;48: 487 – 491
- Aksara, R., Musa, W. J. A., & Alio, L. (2013). Identifikasi Senyawa Alkaloid Dari Ekstrak Metanol Kulit Batang Mangga (*Mangifera indica L*). *Jurnal Entropi*, 8(1), 514– 519.
- Almas, K., Skaug, N., & Ahmad, I. (2005). An in vitro antimicrobial comparison of miswak extract with commercially available non-alcohol mouthrinses. *International Journal of Dental Hygiene*, 3(1), 18–24. <https://doi.org/10.1111/j.1601-5037.2004.00111.x>
- Apolonio, J.; Faleiro, M.L.; Miguel, M.G.; Neto, L. No induction of antimicrobial resistance in *Staphylococcus aureus* and *Listeria monocytogenes* during continuous exposure to eugenol and citral. *FEMS Microbiol. Lett.* 2014, 354, 92–101
- Andrews JM (2001). Determination of minimum inhibitory concentrations. *Antimicrob. Chemother.* 48(6):5-16.
- Andries, J. R., Gunawan, P. N., & Supit, A. (2014). UJI EFEK ANTI BAKTERI EKSTRAK BUNGA CENGKEH TERHADAP BAKTERI *Streptococcus mutans* SECARA IN VITRO. *E-GIGI*, 2(2). <https://doi.org/10.35790/eg.2.2.2014.5763>
- Anonim. Farmakope Indonesia Edisi V 2014. Jakarta :Kementerian Kesehatan Republik Indonesia. 2014.
- Apolónio, J., Faleiro, M. L., Miguel, M. G., & Neto, L. (2014). No induction of antimicrobial resistance in *Staphylococcus aureus* and *Listeria monocytogenes* during continuous exposure to eugenol and citral. *FEMS Microbiology Letters*, 354(2), 92–101. <https://doi.org/10.1111/1574-6968.12440>
- Arlofa, N. (2015). Uji kandungan senyawa fitokimia kulit durian sebagai bahan aktif pembuatan sabun. *Jurnal Chemtech*, 1(1), 18–22.
- Asngad, A., R, A. B., & Nopitasari, N. (2018). Kualitas Gel Pembersih Tangan (Handsantizer) dari Ekstrak Batang Pisang dengan Penambahan Alkohol, Triklosan dan Gliserin yang Berbeda Dosisnya. *Bioeksperimen: Jurnal Penelitian Biologi*, 4(2), 61–70. <https://doi.org/10.23917/bioeksperimen.v4i2.6888>
- Bintari, Y. R., Haryadi, W., & Rahardjo, T. J. (2018). Ekstraksi Lipida Dengan Metode Microwave Assisted Extraction DARI. *Jurnal Ketahanan Pangan*, 2(2), 180–189.
- Brooks, G. F., Jawetz, E., Melnick, J. L., & Adelberg, E. A. (2010). Jawetz, Melnick, & Adelberg's Medical Microbiology 25th ed. New York: McGraw Hill
- Buldani, A., Yulianti, R., & Soedomo, P. (2017). Uji efektivitas ekstrak Rimpang Bangle (*Zingiber Cassumunar Roxb* .). *2nd Seminar Nasional IPTEK Terapan (SENIT) 2017*, 15–17.

- Ceylan, E., Fung, D.Y., 2004. Antimicrobial activity of spices. *J. Rapid Methods Autom.Microbiol.* 12, 1–55
- Chaiyb, K., Hajlaoui, H., Zmantar, T., Kahla-Nakbi, A. B., Rouabchia, M., Mahdouani, K., & Bakhrouf, A. (2007). The chemical composition and biological activity of clove essential oil, *Eugenia caryophyllata* (Syzygium aromaticum L. Myrtaceae): a short review. *Phytotherapy research : PTR*, 21(6), 501–506. <https://doi.org/10.1002/ptr.2124>
- Chew, Y. L., Mahadi, A. M., Wong, K. M., & Goh, J. K. (2018). Anti-methicillin-resistance *Staphylococcus aureus* (MRSA) compounds from *Bauhinia kockiana* Korth. And their mechanism of antibacterial activity. *BMC Complementary and Alternative Medicine*, 18(1), 1–9. <https://doi.org/10.1186/s12906-018-2137-5>
- Cortés-Rojas, D. F., de Souza, C. R. F., & Oliveira, W. P. (2014). Clove (Syzygium aromaticum): A precious spice. *Asian Pacific Journal of Tropical Biomedicine*, 4(2), 90–96. [https://doi.org/10.1016/S2221-1691\(14\)60215-X](https://doi.org/10.1016/S2221-1691(14)60215-X)
- Cowan. (1999). Plant Product As Antimicrobial Agents. Oxford: Miami University. Halaman 331
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.
- Cushnie, T. P. T., & Lamb, A. J. (2005). Antimicrobial activity of flavonoids. *International Journal of Antimicrobial Agents*, 26(5), 343–356. <https://doi.org/10.1016/j.ijantimicag.2005.09.002>
- Das, B., Mandal, D., Dash, S. K., Chattopadhyay, S., Tripathy, S., Dolai, D. P., Dey, S. K., & Roy, S. (2016). Eugenol Provokes ROS-Mediated Membrane Damage-Associated Antibacterial Activity against Clinically Isolated Multidrug-Resistant *Staphylococcus aureus* Strains . *Infectious Diseases: Research and Treatment*, 9, IDRT.S31741. <https://doi.org/10.4137/idrt.s31741>
- Davidson, P.M., 2001. Chemical preservatives and naturally antimicrobial compounds. In:Beuchat, M.P., Montville, L.R. (Eds.), Food Microbiology: Fundamentals and Frontiers, second ed. ASM Press, Washington DC, pp. 593–628
- Davis, W. W., & Stout, T. R. (1971). Disc plate method of microbiological antibiotic assay. II. Novel procedure offering improved accuracy. *Applied Microbiology*, 22(4), 666–670. <https://doi.org/10.1128/aem.22.4.666-670.1971>
- 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. <https://doi.org/10.1016/j.arabjc.2013.02.015>
- Drexler M; Institute of Medicine (US). What You Need to Know About Infectious Disease. Washington (DC): National Academies Press (US); 2010. I, How Infection Works. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK209710/>
- EARS. Antimicrobial resistance surveillance in Europe. Stockholm: ECDC; 2013
- Eumkeb, G., & Chukrathok, S. (2013). Synergistic activity and mechanism of action of ceftazidime and apigenin combination against ceftazidime-resistant *Enterobacter cloacae*. *Phytomedicine*, 20(3–4), 262–269. <https://doi.org/10.1016/j.phymed.2012.10.008>
- Fardan, I., & Harimurti, S. (2018). Formulasi Sediaan Gel Minyak Atsiri Daun Cengkeh (Syzygium aromaticum (L.) Merr. & L.M.Perry) Sebagai Antiseptik Tangan dan

- Uji Daya Hambat Terhadap Bakteri Staphylococcus aureus. *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)*, 15(2), 218-230. doi:<http://dx.doi.org/10.30595/pharmacy.v15i2.3001>
- Febriani, R., Caturludysari, A., & Pritalia, V. (2020). Pemanfaatan Kain Serat Alam Pada Busana Wanita dengan Tren Gaya Hidup "Back to Nature." *Jurnal Rupa*, 4(1), 26. <https://doi.org/10.25124/rupa.v4i1.2316>
- Golin, A. P., Choi, D., & Ghahary, A. (2020). *Hand sanitizers*: A review of ingredients, mechanisms of action, modes of delivery, and efficacy against coronaviruses. *American Journal of Infection Control*, 48(9), 1062–1067. <https://doi.org/10.1016/j.ajic.2020.06.182>
- Greenaway, R. E., Ormandy, K., Fellows, C., & Hollowood, T. (2018). Impact of *hand sanitizer* format (gel/foam/liquid) and dose amount on its sensory properties and acceptability for improving hand hygiene compliance. *Journal of Hospital Infection*, 100(2), 195–201. <https://doi.org/10.1016/j.jhin.2018.07.011>
- Gunawan, & Hendra, D. (2018). Penurunan Senyawa Saponin pada Gel Lidah Buaya. *Jurnal Teknologi Pangan*, 9(1), 41–44.
- Hakimi, A. A., & Armstrong, W. B. (2020). *Hand sanitizer* in a Pandemic: Wrong Formulations in the Wrong Hands. *Journal of Emergency Medicine*, 59(5), 668–672. <https://doi.org/10.1016/j.jemermed.2020.07.018>
- Handa, S., Khanuja, S.P., Longo, G. and Rakesh, D.D. (2008) Extraction Technologies for Medicinal and Aromatic Plants. United Nations Industrial Development Organization and the International Centre for Science and High Technology, 260 p.
- Harborne, J.B. (1987). Metode Fitokimia Edisi ke dua. Bandung: ITB Press.
- Harborne, J.B.(1996). Metode Fitokimia, Cetakan II. diterjemahkan oleh Kosasih Padma Winata dan Iwang SoediroN. Bandung:ITB Press. 70-72.
- Hashi, A., Kumie, A., & Gasana, J. (2017). Hand washing with soap and WASH educational intervention reduces under-five childhood diarrhoea incidence in Jigjiga District, Eastern Ethiopia: A community-based cluster randomized controlled trial. *Preventive Medicine Reports*, 6, 361–368. <https://doi.org/10.1016/j.pmedr.2017.04.011>
- Heim, K. E., Tagliaferro, A. R., & Bobilya, D. J. (2002). Flavonoid antioxidants: Chemistry, metabolism and structure-activity relationships. *Journal of Nutritional Biochemistry*, 13(10), 572–584. [https://doi.org/10.1016/S0955-2863\(02\)00208-5](https://doi.org/10.1016/S0955-2863(02)00208-5)
- Jawetz, M. A. (2010). Mikrobiologi Kedokteran (25 ed.). (G. F. Brooks, K. C. Carroll, J. S. Butel, S. A. Morse, T. A. Mietzner, Penyunt., A. W. Nugroho, D. Ramadhani, H. Santasa, N. Yasdelita, & K. W. Nimala, Penerj.) New York: Mc Graw Hil.
- Kaur, K., Kaushal, S., & Rani, R. (2019). Chemical Composition, Antioxidant and Antifungal Potential of Clove (*Syzygium aromaticum*) Essential Oil, its Major Compound and its Derivatives. *Journal of Essential Oil-Bearing Plants*, 22(5), 1195–1217. <https://doi.org/10.1080/0972060X.2019.1688689>
- Kusmiyati, K., & Agustini, N. W. S. (2007). Uji Aktivitas Senyawa Antibakteri dari Mikroalga Porphyridium cruentum. *Biodiversitas*, 8, 48–53.
- Kyaw, B. M., Arora, S., & Lim, C. S. (2012). Bactericidal antibiotic-phytochemical combinations against methicillin resistant *Staphylococcus aureus*. *Brazilian Journal of Microbiology*, 43(3), 938–945. <https://doi.org/10.1590/S1517-83822012000300013>

- Lipinwati, Rahman, A. O., & Primayana. (2018). Dengan Air Dan Dengan Sabun Cuci Tangan Cair Dalam Menjaga Kebersihan Tangan Pada Mahasiswa / I Fakultas Kedokteran Universitas Jambi. *Jmj*, 6, 137–145.
- Lowy F. D. (2003). Antimicrobial resistance: the example of *Staphylococcus aureus*. *The Journal of clinical investigation*, 111(9), 1265–1273.
<https://doi.org/10.1172/JCI18535>
- Ma, J., Jiang, L., Chen, Y., & Kang, J. (2017). Activities and mechanisms of eugenol and cinnamaldehyde against *Legionella pneumophila*. *International Journal of Clinical and Experimental Medicine*, 10(12), 16460–16467.
- Madigan M.T., Martinko J.M., Stahl D.A., Clark D.P. 2012. Biology of Microorganism. 13th ed. San Francisco: Pearson. P. 140-141
- Marjoni R. (2016). Dasar-Dasar Fitokimia Untuk Diploma III Farmasi. Jakarta: Trans Info Media.
- Martiasih, M., Sidharta, B. B. R., & Atmodjo, P. K. (2012). AKTIVITAS ANTIBAKTERI EKSTRAK BIJI PEPAYA (*Carica papaya L.*) TERHADAP *Escherichia coli* DAN *Streptococcus pyogenes*. *Artikel, Fakultas Teknobiologi Universitas Atma Jaya Yogyakarta.*, 1–12.
- Mukherjee, R., Zhi-Feng Huang, Nadgony, B. (2014). Multiple percolation tunneling staircase in metal-semiconductor nanoparticle composites. *Applied Physics Letters*.
- Nachnani, S., Scuteri, A., Newman, M. G., Avanessian, A. B., & Lomeli, S. L. (1992). E-Test: A New Technique for Antimicrobial Susceptibility Testing for Periodontal Microorganisms. *Journal of Periodontology*, 63(7), 576–583.
<https://doi.org/10.1902/jop.1992.63.7.576>
- Nazilla Reshka Fathurrahman, & Fakultas, I. M. (2013). ARTIKEL TINJAUAN: TEKNIK ANALISIS INSTRUMENTASI SENYAWA TANIN Nazilla. *Farmaka*, 4, 1–15.
- Neveu, V., Perez-Jiménez, J., Vos, F., Crespy, V., du Chaffaut, L., Mennen, L., Knox, C., Eisner, R., Cruz, J., Wishart, D., & Scalbert, A. (2010). Phenol-Explorer: an online comprehensive database on polyphenol contents in foods. *Database : The Journal of Biological Databases and Curation*, 2010, 1–9.
<https://doi.org/10.1093/database/bap024>
- Ningrum, R., Purwanti, E., & Sukarsono, S. (2017). Alkaloid Compound Identification of *Rhodomyrtus tomentosa* Stem as Biology Instructional Material for Senior High School X Grade. *Jurnal Pendidikan Biologi Indonesia*, 2(3), 231.
<https://doi.org/10.22219/jpbi.v2i3.3863>
- Nn, A. (2015). A Review on the Extraction Methods Use in Medicinal Plants, Principle, Strength and Limitation. *Medicinal & Aromatic Plants*, 04(03), 3–8.
<https://doi.org/10.4172/2167-0412.1000196>
- Nuria, maulita cut, Faizaitun, Arvin, Sumantri, (2009), Uji Aktivitas Antibakteri Ekstrak Etanol Daun Jarak Pagar (*Jatropha Curcas L*) Terhadap Bakteri *Staphylococcus Aureus* Atcc 25923, *Escherichia Coli* Atcc 25922, Dan *Salmonella Typhi* Atcc 1408, *Mediagro.*;5(2):26–37.
- Park, M., Gwak, K., Yang, I., Choi, W., Jo, H., Chang, J., Jeung, E., & Choi, I. (2007). *Antifungal Activities of the Essential Oils in*. 45(5), 460–465.
- Pelczar, M. J., Chan, E. C. S., 1988. Dasar-Dasar Mikrobiologi. Jakarta: Universitas Indonesia Press.
- Pratiwi. 2008. Mikrobiologi Farmasi. Jakarta: Erlangga

- Radji, M., Suryadi, H., & Ariyanti, D. (2007). Uji aktivitas antimikroba beberapa merek dagang pembersih tangan antiseptik. *Majalah Ilmu Kefarmasian*, 4(1), 1–6.
- Raina, V. K., Srivastava, S. K., Aggarwal, K. K., Syamasundar, K. V., & Kumar, S. (2001). Essential oil composition of *Syzygium aromaticum* leaf from Little Andaman, India. *Flavour and Fragrance Journal*, 16(5), 334–336. <https://doi.org/10.1002/ffj.1005>
- Rini, E. P., & Nugraheni E. R. (2018). Uji Daya Hambat Berbagai Merek Handsanitizer Gel Terhadap Pertumbuhan Bakteri *Escherichia coli* dan *Staphylococcus aureus*. *Journal of Pharmaceutical Science and Clinical Research*, 1(10), 18-26.
- Rosmawati. T (2012) *Pengaruh ekstrak daun Cengkeh (Syzygium aromaticum) terhadap penghambatan pertumbuhan Staphylococcus aureus secara in vitro*. Ambon, 2 (2). pp. 63-75. ISSN 2252-858X
- Saeed, S., & Tariq, P. (2008). In vitro antibacterial activity of clove against gram negative bacteria. *Pakistan Journal of Botany*, 40(5), 2157–2160.
- Saleem, M., Nazir, M., Ali, M. S., Hussain, H., Lee, Y. S., Riaz, N., & Jabbar, A. (2010). Antimicrobial natural products: An update on future antibiotic drug candidates. *Natural Product Reports*, 27(2), 238–254. <https://doi.org/10.1039/b916096e>
- Sari, F.P. dan S. M. Sari. Ekstraksi Zat Aktif Antimikroba dari Tanaman Yodium (*Jatropha multifida* Linn) sebagai Bahan Baku Alternatif Antibiotik Alami. Semarang: Fakultas Teknik Universitas Diponegoro. 2011.
- Shakinaz, A.E.S., Refaat, A.A., dan El, S.S.T., 2010, Production of Biodiesel using Micowaves Technique, J. Advanced Research, 1, 309-314.
- Situmeang,S., Sembiring, T.,(2019). Efektivitas *Hand sanitizer* dalam membunuh kuman di tangan. *Jurnal AnLabMed*, 1(1).
- Sugiyono. (2014). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta
- Sugiyono. 2015. Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D). Bandung: Alfabeta.
- Suhendar, U., & Sogandi, S. (2019). IDENTIFIKASI SENYAWA AKTIF EKSTRAK DAUN CENGKEH (*Syzygium aromaticum*) SEBAGAI INHIBITOR *Streptococcus mutans*. *Al-Kauniyah: Jurnal Biologi*, 12(2), 229–239. <https://doi.org/10.15408/kauniyah.v12i2.12251>
- Staphylococcus aureus* Rosenbach, 1884 in GBIF Secretariat (2021). GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei> accessed via GBIF.org on 2021-06-05.
- Tahir, M., Chuzaemi, S., Widodo, E. and Hafsa, H. 2020. CHEMICAL COMPOUNDS AND ANTIOXIDANT CONTENTS OF CLOVES LEAVES ESSENTIAL OIL. AGROLAND The Agricultural Sciences Journal (e-Journal) 7 (1), 37-44
- Tanko, Y., Mohammed, A., Okasha, M. A., Umar, A. H., & Magaji, R. A. (2008). Antinociceptive and anti-inflammatory activities of ethanol extract of *Syzygium aromaticum* flower bud in Wistar rats and mice. *African Journal of Traditional, Complementary and Alternative Medicines*, 5(2), 209–212. <https://doi.org/10.4314/ajtcam.v5i2.31275>
- Tayel, A. A., Shaban, S. M., Moussa, S. H., Elguindy, N. M., Diab, A. M., Mazrou, K. E., Ghanem, R. A., & El-Sabbagh, S. M. (2018). Bioactivity and application of plant seeds' extracts to fight resistant strains of *Staphylococcus aureus*. *Annals of*

- Agricultural Sciences*, 63(1), 47–53. <https://doi.org/10.1016/j.aoas.2018.04.006>
- Taylor, T. A., & Unakal, C. G. (2020). *Staphylococcus Aureus*. In *StatPearls*. StatPearls Publishing.
- Truit, C., Wesley, G., 2018. The Efficacy of Alcohol Based Wipes, Gel, Foam, and Spray Compared with Liquid Soap in Eliminating Transient HandBacteria. *J Pharm* 421mar
- Ulanowska, K., Tkaczyk, A., Konopa, G., & Węgrzyn, G. (2006). Differential antibacterial activity of genistein arising from global inhibition of DNA, RNA and protein synthesis in some bacterial strains. *Archives of Microbiology*, 184(5), 271–278. <https://doi.org/10.1007/s00203-005-0063-7>
- Van Acker, H., & Coenye, T. (2017). The Role of Reactive Oxygen Species in Antibiotic-Mediated Killing of Bacteria. *Trends in microbiology*, 25(6), 456–466. <https://doi.org/10.1016/j.tim.2016.12.008>
- Vandepitte, S. 2005. Prosedur Laboratorium Dasar untuk Bakteriologis Klinis. Edisi 2. Jakarta: Buku Kedokteran EGC
- Veronita, F., Wijayati, N., & Mursiti, S. (2017). Isolasi Dan Uji Aktivitas Antibakteri Daun Binahong Serta Aplikasinya Sebagai *Hand sanitizer*. *Indonesian Journal of Chemical Science*, 6(2), 138–144.
- Wael, S., Mahulette, F., Wilhelmus Watuguly, T., & Wahyudi, D. (2018). Pengaruh Ekstrak Daun Cengkeh (*Syzygium aromaticum*) terhadap Limfosit dan Makrofag Mencit Balb/c. *Jalan Yos Sudarso No. 338 Serengan*, 23(2), 79–83.
- Wardania, A. K., Malfadinata, S., & Fitriana, Y. (2020). Uji Aktivitas Antibakteri Penyebab Jerawat *Staphylococcus epidermidis* Menggunakan Ekstrak Daun Ashitaba (*Angelica keiskei*). *Lumbung Farmasi: Jurnal Ilmu Kefarmasian*, 1(1), 14. <https://doi.org/10.31764/lf.v1i1.1206>
- Wiegand, I., Hilpert, K., & Hancock, R. E. W. (2008). Agar and broth dilution methods to determine the minimal inhibitory concentration (MIC) of antimicrobial substances. *Nature Protocols*, 3(2), 163–175. <https://doi.org/10.1038/nprot.2007.521>
- Willey, J.M., L.M. Sherwood, and C.J. Woolverton(2008). Prescott, Harley, and Klein's *Microbiology*, Seventh Edition. New York: The Mc Graw-Hill Companies.
- Yadav, M. K., Chae, S. W., Im, G. J., Chung, J. W., & Song, J. J. (2015). Eugenol: A phyto-compound effective against methicillin-resistant and methicillin-sensitive *Staphylococcus aureus* clinical strain biofilms. *PLoS ONE*, 10(3), 1–21. <https://doi.org/10.1371/journal.pone.0119564>
- Zahro, L., & Agustini, R. (2013). Uji aktivitas antibakteri ekstrak kasar saponin jamur tiram putih (*Pleurotus ostreatus*) terhadap *Staphylococcus aureus* and *Escherichia coli*. *UNESA Journal of Chemistry*, 2(3), 120–129.
- Zhang, Q. W., Lin, L. G., & Ye, W. C. (2018). Techniques for extraction and isolation of natural products: A comprehensive review. *Chinese Medicine (United Kingdom)*, 13(1), 1–26. <https://doi.org/10.1186/s13020-018-0177-x>
- Zhang, Y., Wang, Y., Zhu, X., Cao, P., Wei, S., & Lu, Y. (2017). Antibacterial and antibiofilm activities of eugenol from essential oil of *Syzygium aromaticum* (L.) Merr. & L. M. Perry (clove) leaf against periodontal pathogen *Porphyromonas gingivalis*. *Microbial Pathogenesis*, 113(October), 396–402. <https://doi.org/10.1016/j.micpath.2017.10.054>
- Zheng, Ling & Jung, Kyu-Seok & Heu, Sunggi & Lee, Sun-Young. (2013). Antimicrobial

- activity of natural antimicrobial substances against spoilage bacteria isolated from fresh produce. *Food Control.* 32. 665–672. 10.1016/j.foodcont.2013.01.009.
- Zhou, K., & Yu, L. (2004). Effects of extraction solvent on wheat bran antioxidant activity estimation. *LWT - Food Science and Technology*, 37(7), 717–721. <https://doi.org/10.1016/j.lwt.2004.02.008>
- Ziegler, J., & Facchini, P. J. (2008). Alkaloid biosynthesis: Metabolism and trafficking. *Annual Review of Plant Biology*, 59, 735–769. <https://doi.org/10.1146/annurev.arplant.59.032607.092730>
- Zukhri, S., Hidayanti,N. (2017). AKTIVITAS ANTIMIKROBA EKSTRAK ETANOL PELEPAH PISANG RAJA (Musa X Paradisiaca L.) PADA BAKTERI *Staphylococcus aureus*. GASTER, XV(2).