

DAFTAR PUSTAKA

- Ahn, S. H., Song, J. E., Kim, S., Cho, S. H., Lim, Y. K., Kook, J. K., Kook, M. S., Lee, T. H. 2016. NOX1/2 activation in human gingival fibroblasts by *Fusobacterium nucleatum* facilitates attachment of *Porphyromonas gingivalis*. *Archives of Microbiology*. 198 (6): 573–583.
- Anzian. A., Muhialdin, B. J., Mohammed, N. K., Kadum, H., Marzlan, A. A. Sukor, R., Hussin, A. S. M. 2020. Antibacterial activity and metabolomics profiling of torch ginger (*Etilingera elatior* Jack) flower oil extracted using subcritical carbon dioxide (CO₂). *Evidence-based Complementary and Alternative Medicine*. 2020 (1): 1-8.
- Aswal., D., Monica, C., Abidin., T. 2012. Daya antibakteri ekstrak etanol buah mahkota dewa terhadap *Fusobacterium nucleatum* sebagai bahan medikamen saluran akar. *Dentika Dental journal*. 17 (1): 53-57.
- Aviantina, M. E. 2019. Uji aktivitas penghambatan biofilm ekstrak etanol daun kirinyu (*Chromolaena odorata* (L.) R. M. King & H. Rob.) terhadap bakteri *Staphylococcus aureus*. *Skripsi*. Fakultas Farmasi Universitas Sanata Dharma. Yogyakarta.
- Bahador, A., Khaledi, A., Ghorbanzadeh, R. 2013. Evaluation of antibacterial properties of nano silver Iranian MTA against *Fusobacterium nucleatum*. *European Journal of Experimental Biology*. 3 (6): 88–94.
- Balagopal, S., Arjunker, R. 2013. Chlorhexidine : the gold standard antiplaque agent. *Journal of pharmaceutical Sciences and Research*. 5 (12): 270-274.
- Bharath, N., Sowmya, N. K., Mehta, D. S. 2015. Determination of antibacterial activity of green coffee bean extract on periodontogenic bacteria like *Porphyromonas gingivalis*, *Prevotella intermedia*, *Fusobacterium nucleatum* and *Aggregatibacter actinomycetemcomitans*: An in vitro study. *Contemporary Clinical Dentistry*. 6 (2): 166-169.
- Brookes, Z. L. S., Bescos, R., Belfield, L. A., Ali, K., Roberts, A. 2020. Current uses of chlorhexidine for management of oral disease: a narative review. *Journal of Dentistry*. 4 (1): 1-9.
- Chairunnisa, S., Wartini, N.M., Suhendra, L. 2019. Pengaruh suhu dan waktu maserasi terhadap karakteristik ekstrak daun bidara (*Ziziphus mauritiana* L.) sebagai sumber saponin. *Jurnal Rekayasa dan Manajemen Agroindustri*. 7 (4): 552-560.
- Chew, J., Zilm, P. S., Fuss, J. M., Gully, N. J. 2012. A proteomic investigation of *Fusobacterium nucleatum* alkaline-induced biofilms. *BMC Microbiology*. 12 (189):1-14.
- Choon, S. Y. dan Ding, P., 2017. Physiological changes of torch ginger (*Etilingera elatior*) inflorescence during development. *HortScience*. 52 (3): 479–482.
- Dewi, A. R., Nur'Aini, I., Bahri, I. S., Afifah, H. N., Fattah, A., Tunjung, W. A. S.

2016. Antihyperuricemic activity of ginger flower (*Etilingera elatior* Jack.) extract in beef broth-induced hyperuricemic rats (*Rattus norvegicus*). *AIP Conference Proceedings*. 1755 (2016).
- Di Domenico, E. G., Toma, L., Provot, C., Ascenzioni, F., Sperduti, I., Prigano, G., Gallo, M. T., Pimpinelli, F., bordignon, V., Bernardi, T., Ensoli, F. 2016. Development of an in vitro assay, based on the biofilm ring test, for rapid profiling of biofilm-growing bacteria. *Frontiers in Microbiology*. 7 (1492): 1-14.
- Endarini, L. H. 2016. *Farmakognisi dan Fitokimia*. Pusdik SDM Kesehatan. Jakarta. pp. 13-14.
- Farida, S. dan Maruzy, A. 2016. Kecombrang (*Etilingera elatior*): Sebuah tinjauan penggunaan secara tradisional, fitokimia dan aktivitas farmakologinya. *Jurnal Tumbuhan Obat Indonesia*. 9 (1): 19–28.
- Fauzan, A., Dewi, S. S., Wilson, W. 2019. Efektifitas daya hambat ekstrak etanol bawang daun (*Aliium fistulosum*. L) terhadap bakteri *Salmonella typhi*, *Escherichia coli*, dan *Staphylococcus aureus*. *Jurnal Labora Medika*. 3 (2019): 54-57.
- Fauzia, N.S., Hartman, H., Jeffrey, J. 2021. Perbandingan efektivitas obat kumur povidone iodine dengan klorheksidin terhadap indeks plak. *Oceana Biomedicina Journal*. 4 (1): 11.
- Ghani, M. H. 2021. Aktivitas antibakteri ekstrak etanol tangkai *Begonia multangula* Blume terhadap penghambatan pembentukan biofilm *Fusobacterium nucleatum* penyebab periodontitis kronis. *Skripsi*. Fakultas Kedokteran Jurusan Kedokteran Gigi Universitas Jenderal Soedirman. Purwokerto.
- Ghasemzadehk, A., H. Z. E. Jaafar, A. Rahmat, S. Ashkani. 2015. Secondary metabolites constituents and antioxidant, anticancer and antibacterial activities of *Etilingera elatior* (Jack) R.M. Sm grown in different locations of Malaysia. *BMC Complementary Alternative Medicine* 15 (1) : 1-11.
- Hamzah, H., Hertiani, T., Pratiwi, S. U. T., Nuryastuti, T. N. 2021. Efek saponin terhadap penghambatan planktonik dan mono - spesies biofilm *Candida albicans* ATCC 10231 Pada fase pertengahan, pematangan dan degradasi. *Majalah Farmasetik*. 17 (2): 198–205.
- Hamzah, H., Pratiwi, S. U. T., Hertiani, T. 2018. Efficacy of thymol and eugenol against polymicrobial biofilm. *Indonesian Journal of Pharmacy*. 29 (4): 214-221.
- Hamzah, H., Rasdianah, N., Nurwijayanto, A., Nandini, E. 2021. Aktivitas ekstrak etanol daun calincing terhadap biofilm *Candida albicans*. *Jurnal Farmasetis*. 10 (1): 21-28.

- Hasanah, F., Siregar, N.C., Gunawan, A., Sujono, Aviana, T. 2020. Pengaruh jenis pelarut terhadap hasil ekstraksi senyawa skopoletin ubi jalar ungu (*Ipomoea batatas* L.). *Journal of Agro-based Industry*. 37 (1): 74-82.
- Husni, E., Yesika, R., Aldi, Y. 2020. The extract of kincung flower (*Etilingera elatior* (Jack) R.M.Sm.) activity to decrease IL-4 and IgE levels in type I hypersensitivity white male mice. *Pharmacognosy Journal*. 12 (4): 682–686.
- Jagani, S., Chelikani, R., Kim, D. S., 2019. Effects of phenol and natural phenolic compounds on biofilm formation by *Pseudomonas aeruginosa*. *Biofouling*. 25 (4): 321–324.
- Jiang, Y., Geng, M., Bai, L. 2020. Targeting biofilms therapy: current research strategies and development hurdles. *Microorganisms*. 8(8): 1-34.
- Julianto, T. S. 2019. *Fitokimia Tinjauan Metabolit Sekunder dan Skrining Fitokimia*. Universitas Islam Indonesia. Yogyakarta. pp. 42-57.
- Katzung, B. G., Masters, S. B., Trevor, A. J. 2013. *Farmakologi Dasar & klinik Vol.2*. 12th ed. EGC. Jakarta.
- Kementerian Kesehatan RI. 2018. *Laporan Provinsi Jawa Tengah Riskesdas 2018*. Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB).
- Kementerian Kesehatan RI. 2019. InfoDATIN Kesehatan Gigi Nasional September 2019. *Pusdatin Kemenkes RI*. 1–6.
- Khoirunnisa, I., Sumiwi, S. A. 2019. Review artikel : peran flavonoid pada berbagai aktivitas farmakologi. *Farmaka*. 17 (2): 131-142.
- Kining, E., Falah, S., Nurhidayat, N. 2016. Aktivitas antibiofilm ekstrak air daun pepaya (*Carica papaya* L.) terhadap bakteri *Pseudomonas aeruginosa* secara in vitro. *Current Biochemistry*. 2 (3): 150–163.
- Kusumawati, E., Supriningrum, R., Rozadi, R. 2017. Uji aktivitas antibakteri ekstrak etanol daun kecombrang *Etilingera elatior* (Jack) R.M.Sm terhadap *Salmonella typhi*. *Jurnal Ilmiah Manuntung*. 1 (1): 1.
- Lachumy, S. J. T., Sasidharan, S., Sumathy, V., Zuraini, Z. 2010. Pharmacological activity, phytochemical analysis and toxicity of methanol extract of *Etilingera elatior* (torch ginger) flowers. *Asian Pacific Journal of Tropical Medicine*. 3 (10): 769–774.
- Lang, N. P., Lindhe, J. 2015. *Clinical Periodontology and Implant Dentistry*. 6th ed. Wiley Blackwell. Pondicherry.
- Le, K. Y., Otto, M. 2015. Quorum-sensing Regulation in *Staphylococci* – An Overview. *Frontiers in Microbiology*. 6 (1174): 1-8.
- Leonarto, M. N., Habar, E. H. 2020. The impact of mouth-rinsing using chlorhexidine gluconate 0.2% to the amount of plaque-causing bacteria colonies in fixed orthodontic users. *Journal of Dentomaxillofacial Science*. 2 (2): 91-94.

- Lestari, T., Nofianti, T., Tuslinah, L., Ruswanto, R., Adityas, F. 2018. Karakterisasi nanopartikel ekstrak bunga kecombrang dengan penambahan poloksamer. *Talenta Conference Series: Tropical Medicine (TM)*. 1 (3): 121–124.
- Lindawati, Y., Primasari, A., Suryanto, D., 2018. *Fusobacterium nucleatum*: bakteri anaerob pada lingkungan kaya oksigen (dihubungkan dengan staterin saliva). *Talenta Conference Series: Tropical Medicine (TM)*. 1 (1): 181–188.
- Maimulyanti, A. dan Prihadi, A. R. 2015. Chemical composition , phytochemical and antioxidant activity from extract of *Etilingera elatior* flower from Indonesia. *Journal of Pharmacognosy and Phytochemistry*. 3 (6): 233–238.
- Manik, V. O. 2020. Efektivitas ekstrak buah merah (*Pandanus conoideus* Lam) terhadap pertumbuhan bakteri *Fusobacterium nucleatum* secara in vitro. *Skripsi*. Fakultas Kedokteran Gigi Universitas Sumatera Utara. Medan.
- Martinez-Klimova, E., Rodríguez-Peña, K., Sánchez, S. 2017. Endophytes as sources of antibiotics. *Biochemical Pharmacology*. 134: 1–17.
- Naufalin, R., Jenie, B. S. L., Kusnandar, F., Sudarwanto, M., Rukmini, H. 2005. Aktivitas antibakteri ekstrak bunga kecombrang terhadap bakteri patogen dan perusak pangan. *Jurnal Teknologi dan Industri Pangan*. 16(2005): 119-125.
- Naufalin, R., Rukmini, H. S. 2011. Potensi antioksidan hasil ekstraksi tanaman kecombrang (*Nicolaia speciosa* Horan) selama penyimpanan. *Conference Paper of Seminar Nasional Membangun Daya Saing Produk Pangan Berbasis Bahan Baku Lokal*. Surakarta Indonesia, pp. 1-13.
- Nazir, M. A. 2017. Prevalence of periodontal disease, its association with systemic diseases and prevention. *International Journal of Health Sciences*. 1 (2): 72–80.
- Newman, M. G., Takei, H. H., Klokkevold, P. R., dkk. 2019. *Newman and Carranza's Clinical Periodontology*. Elsevier. China.
- Noviyanty, A., Salingkat, C.A., Syamsiar. 2019. Pengaruh jenis pelarut terhadap ekstraksi dari kulit buah naga merah (*Hylocereus polyrhizus*). *Kovalen*. 5 (3): 271-279.
- Nurhamidin, A. P. R., Fatimawali, Antasionasti, I. 2021. Uji aktivitas antibakteri ekstrak n-heksan biji buah langsung (*Lansium domesticum* Corr) terhadap bakteri *Staphylococcus aureus* dan *Klebsiella pneumoniae*. *Pharmacon*. 10 (1): 748-755.
- Pargaputri, A. F., Munadziroh, E., Indrawati, R. 2017. The effect of *Pluchea indica* less leaves extract againts biofilm of *Enterococcus faecalis* and *Fusobacterium nucleatum* in vitro. *Denta Jurnal Kedokteran Gigi*. 11 (1): 51–61.

- Perangin-Angin, Y., Purwaningrum, Y., Asbur, Y., Rahayu, M.S., Nurhayati. 2019. Pemanfaatan kandungan metabolit sekunder yanag dihasilkan tanaman pada cekaman biotik. *Agriland*. 7 (1) : 39-47.
- Periasamy, S., Chalmers, N. I., Du-Thumm, L., and Kolenbrander, P. E. 2019. *Fusobacterium nucleatum* ATCC 10953 requires *Actinomyces naeslundii* ATCC 43146 for growth on saliva in a three-species community that includes *Streptococcus oralis* 34. *Applied and Environmental Microbiology*. 75 (10): 3250–3257.
- Pratiwi, S. U. T., Lagendijk, E. L., Hertiani, T., Weert, S. D., Hondel, J. J. V. D., 2015. Antimicrobial effects of Indonesian medicinal plants extracts on planktonic and biofilm growth of *Pseudomonas aeruginosa* and *Staphylococcus aureus*. *International Journal of Pharmacy and Pharmaceutical Sciences*. 7(4): 183–191.
- Purbowati, R. 2019. Biofilm formation and detection of A/D genes in MRSA (Methicillin - Resistant *Staphylococcus aureus*) and MSSA (Methicillin - Sensitive *Staphylococcus aureus*). *Journal of Biological Researches*. 24 (2): 88-93.
- Putri, F. A., Naufalin, R., Wicaksono, R. 2019. Antimicrobial edible coating application of Kecombrang flower concentrate to reduce microbial growth on gourami fish sausage. *IOP Conference Series: Earth and Environmental Science*. 250 (1): 1-8.
- Rahmi, M., Putri, D. H. 2020. The antimicrobial activity of DMSO as a natural extract solvent. *Serambi Biologi*. 5 (2): 56-58.
- Rosmalinda, U., Aini, S. R., Wirasisya, D. G. 2019. Aktivitas antibiofilm getah jarak pagar (*Jatropha curcas L.*) pada *Staphylococcus aureus* ATCC 25923. *Natural B*. 5 (1): 7–12.
- Sahromi. 2016. Kebun Raya Samosir: studi tentang kekayaan flora dan potensinya. *Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia*. 2 (2): 243-249.
- Samaranayake, L. 2018. *Essential Microbiology for Dentistry*. 5th ed. Churchill Livingstone. China.
- Saputi, D., Abrar, M., Mubarak, Z., Mudatsir. 2021. The role of *Fusobacterium nucleatum* on chronic periodontitis (literature review). *Advances in Health Sciences Research*. 32: 17-21.
- Seniati, Marbiah, Irham, A. 2019. Pengukuran kepadatan bakteri *Vibrio harveyi* secara cepat dengan menggunakan spektrofotometer. *Agrokompleks*. 19 (2): 12-19.
- Signat, B., Rocques, C., Poulet, P., Duffaut, D. 2015. Role of *Fusobacterium nucleatum* in periodontal health and disease. *Current Issues in Molecular Biology*. 13 (2): 25-36.

- Slobodníková, L., Fialová, S., Rendeková, K., Kováč, J., Mučaji, P. 2016. Antibiofilm activity of plant polyphenols. *Molecules*. 21 (12): 1–15.
- Soemarie, Y. B., Apriliana, A., Ansyori, A. K., Purnawati, P. 2019. Uji aktivitas antibakteri ekstrak etanol bunga kecombrang (*Etlingera elatior* (Jack) R. M.Sm.) terhadap bakteri *Propionibacterium acnes*. *Al Ulum Jurnal Sains dan Teknologi*, 5 (1): 13.
- Solmaz, G., Korachi, M. 2013. Inhibition and disruption properties of chlorhexidine gluconate on single and multispecies oral biofilms. *Jundishapur Journal of Microbiology*. 6 (1): 61–66.
- Srey, Sontimuang, Thengyai, Ovatlarnporn, Puttarak. 2014. Anti alpha-glucosidase, anti alpha-amylase, anti-oxidation, and anti-inflammation activities of *Etlingera elatior* Rhizome. *Journal of Chemical and Pharmaceutical Research*. 6 (12): 885–891.
- Sungthong, B., Srichaikul, B. 2018. Antioxidant activities, acute toxicity and chemical profiling of torch ginger (*Etlingera elatior* Jack.) inflorescent extract. *Pharmacognosy Journal*. 10 (5): 979–982.
- Suryani, N., Nurjanah, D., Indriatmoko, D.D. 2019. Aktivitas antibakteri ekstrak batang kecombrang (*Etlingera elatior* (Jack) R.M.Sm.) terhadap bakteri plak gigi *Streptococcus mutans*. *Jurnal Kartika Kimia*. 2 (1): 23–29.
- Tartaglia, G.M., Tadakamadla, S.K., Connelly, S.T., Sforza, C., Martín, C. 2019. Adverse events associated with home use of mouthrinses: a systematic review. *Therapeutic Advances in Drug Safety*. 10 (2): 1–16.
- Tefiku, U., Popovska, M., Cana, A., Zendeli-Bedxeti, L., Recica, B., Spasovska-Gjorgovska, A., Spasovski, S. 2020. Determination of the role of *Fusobacterium nucleatum* in the pathogenesis in and out the mouth. *Prilozi*. 41 (1): 87–99.
- Thurnheer, T., Karygianni, L., Flury, M., Belibasakis, G. N. 2019. *Fusobacterium* species and subspecies differentially affect the composition and architecture of supra- and subgingival biofilms models. *Frontiers in Microbiology*. 10 (1716): 1–11.
- Touyz, L.Z.G. 2017. The pathophysiology of oral biofilms and it's relation to Initial gum disease and caries. *Journal of Dentistry, Oral Disorders & Therapy*. 5 (3): 1–6.
- Utami, R., Aini, S. R., Wirasisya, D. Y. 2019. Aktivitas antibiofilm getah jarak pagar (*Jatropha curcas* L.) pada *Staphylococcus aureus* ATCC 25923. *Natural*. 5 (1): 7-12.
- Uthari, N. M., Soegianto, L., Hermanu, L. S. 2017. Uji Potensi Antibakteri dan Antibiofilm Minyak Atsiri Umbi Teki (*Cyperus rotundus* L.) terhadap *Staphylococcus aureus* ATCC 6538. *Journal of Pharmacy Science and Practice*. 4 (2): 76-81.

- Velavan, S. 2015. Phytochemical techniques: a review. *World Journal of Science and Research*. 1 (2): 80-91.
- Wahyudi, A., Bahar, Y., Septianawati, P. 2018. Pengaruh ekstrak etanol daun kemangi (*Ocimum basilicum L folium*) terhadap kadar SGOT dan SGPT tikus putih (*Rattus norvegicus* strain wistar) yang diinduksi MSG. *Herb Medicine Journal*. 1 (1): 31-38.
- Wiguna, D., Pratiwi, A. R., Ramadhan, Z. B. 2018. Uji aktivitas antimikroba ekstrak bunga kecombrang (*Etilingera elatior*) terhadap pertumbuhan *Salmonella typhi* secara *in vitro*. *Jurnal Ilmiah Penalaran dan Penelitian Mahasiswa*. 9 (4): 160-168.
- Wijekoon, M. M., Karimand, A. A., Bhat, R. 2011. Evaluation of nutritional quality of torch ginger (*Etilingera elatior* Jack.) inflorescence. *International Food Research Journal*. 18 (4): 1415–1420.
- Winarsih, S., Khasanah, U. 2019. Aktivitas antibiofilm fraksi etil asetat ekstrak daun putri malu (*Mimosa pudica*) pada bakteri Methicilin-Resistant *Staphylococcus aureus* (MRSA) secara *in vitro*. *Majalah Kesehatan*. 6 (2): 76–85.
- Yamanaka-Okada, A., Sato, E., Kouchi, T., Kimizuka, R., Kato, T., Okuda, K. 2015. Inhibitory effect of cranberry polyphenol on cariogenic bacteria. *The Bulletin of Tokyo Dental College*. 49 (3): 107–112.
- Yu, O. Y., Zhao, I. S., Mei, M. L., Lo, E. C. M., Chu, C. H. 2017. Dental biofilm and laboratory microbial culture models for cariology research. *Dentistry Journal*. 5 (2): 21.
- Zain, S. A. M. 2019. Efektifitas ekstrak kulit buah naga merah terhadap pertumbuhan bakteri *Fusobacterium nucleatum* ATCC® 25586™ (*in vitro*). *Skripsi*. Fakultas Kedokteran Gigi Universitas Sumatera Utara. Medan.