

DAFTAR PUSTAKA

- Abbaszadegan, A., Sahebi, S., Gholami, A., Delroba, A., Kiani, A., Iraj, A. dan Abbott, P. V., 2014. Time-dependent Antibacterial Effects of Aloe vera and Zataria multiflora Plant Essential Oils Compared to Calcium Hydroxide in Teeth Infected with Enterococcus faecalis. *Journal of Investigative and Clinical Dentistry*, 7(1): 93-101.
- Ahmad, A., Husain, A., Mujeeb, M., Khan, S. A., Najmi, A. K., Siddique, N. A., Damanhour, Z. A. dan Anwar, F., 2013. A Review on Therapeutic Potential of Nigella sativa: A Miracle Herb. *Asian Pacific Journal of Tropical Biomedicine*, 3(5): 337-352.
- Asmah, N., 2020. Pathogenicity Biofilm formation of Enterococcus faecalis. *Journal of Syiah Kuala Dentistry Society*, 5(1): 47-50.
- Amina, B. dan Rachida, A., 2013. Molecular Composition and Antibacterial Effect of Essential Oil of Nigella sativa. *African Journal of Biotechnology*, 12(20): 3006-3011.
- Athanassiadis, B., Abbott, P. V. dan Walsh, L. J., 2007. The Use of Calcium Hydroxide, Antibiotics and Biocides as Antimicrobial Medicaments in Endodontics. *Australian dental journal*, 52: S64-S82.
- Bachtiar, Z. A., 2016. Perawatan Saluran Akar pada Gigi Permanen Anak dengan Bahan Gutta Percha. *Jurnal PDGI*, 65(2): 60-67.
- Basheer, S. N. dan Sharma, D. K., 2022. Antimicrobial Efficacy of a Novel Irrigant, Nigella–Eugenia Oil Composite against Enterococcus faecalis and Candida albicans. *World Journal of Dentistry*, 13(2): 96-103.
- Bazvand, L., Aminozarbian, M. G., Farhad, A., Noormohammadi, H., Hasheminia, S. M. dan Mobasherizadeh, S., 2014. Antibacterial Effect of Triantibiotic Mixture, Chlorhexidine Gel, and Two Natural Materials Propolis and Aloe vera Against Enterococcus faecalis: An ex vivo study. *Dental research journal*, 11(4): 469.
- Bhardwaj, A., Ballal, S. dan Velmurugan, N., 2012. Comparative Evaluation of the Antimicrobial Activity of Natural Extracts of Morinda citrifolia, papain and aloe vera (all in gel formulation), 2% chlorhexidine gel and calcium hydroxide, against Enterococcus faecalis: An in vitro study. *Journal of conservative dentistry: JCD*, 15(3): 293.
- Callixte, C., Arwati, H., Irene, T., dan Shoukat, S., 2021. Chemical Composition and In vitro Antibacterial and Cytotoxic Effect of Nigella sativa L. Seed Extract. *KEMAS: Jurnal Kesehatan Masyarakat*, 16(3): 308-314.
- Carvalho, N. C., Guedes, S. A. G., Albuquerque-Júnior, R. L. C., de Albuquerque, D. S., de Souza Araújo, A. A., Paranhos, L. R., Camargo, S. E. A., dan Ribeiro, M. A. G., 2018. Analysis of Aloe vera Cytotoxicity and Genotoxicity Associated with Endodontic Medication and Laser

- Photobiomodulation. *Journal of Photochemistry and Photobiology B: Biology*, 178: 348-354.
- Chaieb, K., Kouidhi, B., Jrah, H., Mahdouani, K. dan Bakhrouf, A., 2011. Antibacterial Activity of Thymoquinone, an Active Principle of Nigella sativa and Its Potency to Prevent Bacterial Biofilm Formation. *BMC Complementary and Alternative Medicine*, 11(1):1-6.
- Dera, A. A., Ahmad, I., Rajagopalan, P., Al Shahrani, M., Saif, A., Alshahrani, M. Y., Alraey, Y., Alamri, A. M., Alasmari, S., Makkawi, M. dan Alkhatami, A.G., 2021. Synergistic Efficacies of Thymoquinone and Standard Antibiotics Against Multi-drug Resistant Isolates. *Saudi Medical Journal*, 42(2): 196.
- Endo, M. S., Ferraz, C. C., Zaia, A. A., Almeida, J. F. dan Gomes, B. P., 2013. Quantitative and qualitative analysis of microorganisms in root-filled teeth with persistent infection: monitoring of the endodontic retreatment. *European journal of dentistry*, 7(03): 302-309.
- Eskandarinezhad, M., Barhaghi, M. H. S., Allameh, K., Sadrhaghghi, A., dan Katebi, K., 2022. The comparison of calcium hydroxide, curcumin, and Aloe vera antibacterial effects on 6-week-old Enterococcus faecalis biofilm as an intracanal medicament: An in vitro study. *Dental Research Journal*: 19.
- Evans, M., Davies, J. K., Sundqvist, G. dan Figdor, D., 2002. Mechanisms Involved in the Resistance of Enterococcus faecalis to Calcium Hydroxide. *International endodontic journal*, 35(3): 221-228.
- Ferreira, A. S., Macedo, C., Silva, A. M., Delerue-Matos, C., Costa, P., dan Rodrigues, F., 2022. Natural Products for the Prevention and Treatment of Oral Mucositis—A Review. *International Journal of Molecular Sciences*, 23(8): 4385.
- Forouzanfar, F., Bazzaz, B. S. F. dan Hosseinzadeh, H., 2014. Black Cumin (Nigella sativa) and Its Constituent (Thymoquinone): A Review on Antimicrobial Effects. *Iranian journal of Basic Medical Sciences*, 17(12): 929-938.
- Garg, N., dan Garg, A., 2014, *Textbook of Endodontics*, 3rd ed., Jaypee Brothers Medical Publishers, New Delhi. hal. 56, 57, 227.
- Ghasemi, N., Behnezhad, M., Asgharzadeh, M., Zeinalzadeh, E. dan Kafil, H. S., 2020. Antibacterial Properties of Aloe vera on Intracanal Medicaments against Enterococcus faecalis Biofilm at Different Stages of Development. *International Journal of Dentistry*, 2020(8855277):1-6.
- Govindaraju, L., Jenarathanan, S., Subramanyam, D. and Ajitha, P., 2021. Antibacterial activity of various intracanal medicament against enterococcus faecalis, streptococcus mutans and staphylococcus aureus: an in vitro study. *Journal of Pharmacy & Bioallied Sciences*, 13(Suppl 1): S157-S161

- Hadjazi, D., Daouadji, K. L., Reffas, F. Z. I., Benine, M. L. dan Abbouni, B., 2015. Antibacterial Activity of the Essential Oils of Nigella sativa L. Against Pathogens Bacteria. *Global Journal of Biotechnology & Biochemistry*, 10(2): 100-105.
- Hafizha, H., Suardita, K. dan Pribadi, N., 2018. Daya Antibakteri Ekstrak Batang Pisang Ambon (*Musa paradisiaca* var. *sapientum*) terhadap Pertumbuhan *Enterococcus faecalis*. *Conservative Dentistry Journal*, 8(2): 85-90.
- Hassan, G. dan Ghafoor, S., 2020. Herbal Medicines: An Adjunct to Current Treatment Modalities for Periodontal Diseases. *Biomedica*, 36(1): 15-22.
- Integrated Taxonomic System (ITIS), Aloe vera, https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=182653#null (Diakses 30 April 2022)
- Integrated Taxonomic System (ITIS), Enterococcus faecalis, https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=961474#null (Diakses 30 April 2022)
- Integrated Taxonomic System (ITIS), Nigella sativa, https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=506592#null (Diakses 5 mei 2022)
- Ismail, I. H., Al-Bayaty, F. H., Yusof, E. M., Khan, H. B. S. G., Hamka, F. A. dan Azmi, N.A., 2020. Evaluation of Antimicrobial Effect of Malaysian Geopropolis with Aloe vera Against *Enterococcus faecalis* to be used as an Intracanal Medicament in Endodontics. *Journal of Conservative Dentistry: JCD*, 23(5): 489.
- Jain, H., Mulay, S., dan Mullany, P., 2016. Persistence of endodontic infection and *Enterococcus faecalis*: Role of horizontal gene transfer. *Gene reports*, 5: 112-116.
- Jain, S., Rathod, N., Nagi, R., Sur, J., Laheji, A., Gupta, N., Agrawal, P. dan Prasad, S., 2016. Antibacterial Effect of Aloe vera Gel Against Oral Pathogens: An in-vitro study. *Journal of clinical and diagnostic research: JCDR*, 10(11): ZC41.
- Kandaswamy, D., Venkateshbabu, N., Gogulnath, D. dan Kindo, A. J., 2010. Dentinal Tubule Disinfection with 2% Chlorhexidine Gel, Propolis, *Morinda citrifolia* Juice, 2% Povidone Iodine, and Calcium Hydroxide. *International endodontic journal*, 43(5): 419-423.
- Kim, D. dan Kim, E., 2014. Antimicrobial effect of calcium hydroxide as an intracanal medicament in root canal treatment: a literature review-Part I. In vitro studies. *Restorative Dentistry & Endodontics*, 39(4): 241-252.
- Kriplani, R., Thosar, N., Baliga, M. S., Kulkarni, P., Shah, N., dan Yeluri, R., 2013. Comparative evaluation of antimicrobial efficacy of various root canal filling materials along with aloe vera used in primary teeth: a

- microbiological study. *Journal of Clinical Pediatric Dentistry*, 37(3): 257-262.
- Kumar, A., Tamanna, S. dan Iftekhar, H., 2019. Intracanal medicaments–Their use in modern endodontics: A narrative review. *Journal of Oral Research and Review*, 11(2): 94.
- Kurian, B., Swapna, D. V., Nadig, R. R., Ranjini, M. A., Rashmi, K. dan Bolar, S. R., 2016. Efficacy of Calcium Hydroxide, Mushroom, and Aloe vera as an Intracanal Medicament Against Enterococcus faecalis: An in vitro study. *Endodontology*, 28(2): 137.
- Kurnia, D. dan Ratnapuri, P. H., 2019. Aktivitas Farmakologi dan Perkembangan Produk Dari Lidah Buaya (Aloe vera L.). *Jurnal Pharmascience*, 6(1): 38-49.
- Lengai, G. M., Muthomi, J. W. dan Mbega, E. R., 2020. Phytochemical activity and role of botanical pesticides in pest management for sustainable agricultural crop production. *Scientific African*, 7: e00239.
- Madhubala, M. M., Srinivasan, N. dan Ahamed, S., 2011. Comparative Evaluation of Propolis and Triantibiotic Mixture as an Intracanal Medicament Against Enterococcus faecalis. *Journal of endodontics*, 37(9): 1287-1289.
- Marchese, A., Arciola, C. R., Barbieri, R., Silva, A. S., Nabavi, S. F., Tsetegho Sokeng, A. J., Izadi, M., Jafari, N. J., Suntar, I., Daglia, M. dan Nabavi, S. M., 2017. Update on Monoterpenes as Antimicrobial Agents: A Particular Focus on p-cymene. *Materials*, 10(8): 947.
- Memar, M. Y., Raei, P., Alizadeh, N., Aghdam, M. A. dan Kafil, H. S., 2017. Carvacrol and Thymol: Strong Antimicrobial Agents Against Resistant Isolates. *Reviews in Medical Microbiology*, 28(2): 63-68.
- Najafi, K., Ganbarov, K., Gholizadeh, P., Tanomand, A., Rezaee, M. A., Mahmood, S. S., Asgharzadeh, M. dan Kafil, H.S., 2020. Oral cavity infection by Enterococcus faecalis: virulence factors and pathogenesis. *Reviews in Medical Microbiology*, 31(2): 51-60.
- Niroomand, A., 2019. Assessment of the Antibacterial Potential of Aloe vera as a Source of Antibacterial Agents. *Archives of Medical Laboratory Sciences*, 5(3): 21-25.
- Norhayati, N., Ujrumiah, S., Noviany, A. dan Carabelly, A.N., 2019. Antibacterial Potential of Kapul Fruit Skin (Baccaurea macrocarpa) on Streptococcus sanguis. *ODONTO: Dental Journal*, 6(2): 118-124.
- Noviyandri, P. R., Andayani, R. dan Rizky, E., 2018. Potensi Ekstrak Alga Merah Gracilaria Yerrucosa sebagai Penghambat Perkembangan Pembentukan Biofilm Enterococcus faecalis pada Infeksi Saluran Akar Gigi. *Journal of Syiah Kuala Dentistry Society*, 3(1): 6-15.
- Pereira, R. S., Rodrigues, V. A. A., Furtado, W., Gueiros, S., Pereira, G. S., dan Avila-Campos, M. J., 2017. Microbial analysis of root canal and

- periradicular lesion associated to teeth with endodontic failure. *Anaerobe*, 48: 12-18.
- Permatasari, R. dan Irbahani, M., 2021. Pemilihan Medikamen Intrakanal pada Perawatan Saluran Akar. *M-Dental Education and Research Journal*, 1(3): 157-170.
- Prabasari, P. I., Sumarya, I. M. dan Juliasih, N. K. A., 2019. Daya Hambat Ekstrak Lidah Buaya (*Aloe barbadensis* Miller) Terhadap Pertumbuhan Bakteri *Staphylococcus aureus* Secara In Vitro. *JURNAL WIDYA BIOLOGI*, 10(01): 23-32.
- Prada, I., Micó-Muñoz, P., Giner-Lluesma, T., Micó-Martínez, P., Collado-Castellano, N., dan Manzano-Saiz, A., 2019. Influence of microbiology on endodontic failure. Literature review. *Medicina oral, patología oral y cirugía bucal*, 24(3): 364.
- Putra, N., 2015. Effect Antimicrobacterial *Nigella sativa* for Inhibits Growth of Bacteria. *Jurnal Majority*, 4(4): 70-73.
- Raju, Vignesh Guptha, A. Shafie Ahamed, Dr V. Madhuram Krishnamurthy, dan Selvendran K. E., 2021. Antimicrobial efficacy of Aqueous *Nigella sativa*, Aqueous Neem leaf extract, 3% Sodium hypochlorite, and 2% Chlorhexidine against endodontic pathogens belonging to different categories: An in vitro Study. *NATURAL VOLATILES & ESSENTIAL OILS (NVEO) Journal*: 5460-5465.
- Sahebi, S., Khosravifar, N., SedighShamsi, M. dan Motamedifar, M., 2014. Comparison of the Antibacterial Effect of Sodium Hypochlorite and *Aloe Vera* Solutions as Root Canal Irrigants in Human Extracted Teeth Contaminated with *Eenterococcus faecalis*. *Journal of Dentistry*, 15(1):39.
- Salman, B. N., Sallah, S., Abdi, F., Salahi, S., Rostamizadeh, K., dan Shabestari, S. B., 2021. The Comparison of Antimicrobial Effect of *Nigella sativa* Nanoparticle and Chlorhexidine Emulsion on the Most Common Dental Cariogenicic Bacteria. *Medical Journal of the Islamic Republic of Iran*, 35: 149.
- Santoso, M. L., Sudirman, A. dan Setyowati, L., 2012. Konsentrasi Hambat Minimum Larutan Propolis Terhadap Bakteri *Enterococcus faecalis*. *Jurnal PDGI*, 61(3): 96-101.
- Sari, A. N. dan Untara, T. E., 2014. Root Canal Retreatment Menggunakan Kombinasi Kalsium Hidroksida dan Chlorhexidine sebagai Medikamen Intra Kanal Insisivus Sentral Kiri Maksila. *Majalah Kedokteran Gigi Indonesia*, 21(2): 165-170.
- Subrata, A., Prahasti, A. E., dan Iskandar, B.O., 2019. Influence of two root canal obturation techniques with resin based sealer to *Enterococcus faecalis* penetration. *Journal of Indonesian Dental Association*, 2(1): 21-28.

- Suryati, N., Bahar, E. dan Ilmiawati, I., 2017. Uji Efektivitas Antibakteri Ekstrak Aloe vera terhadap Pertumbuhan Escherichia coli secara In Vitro. *Jurnal Kesehatan Andalas*, 6(3): 518-522.
- Tarigan, G., Abidin, T. dan Agusnar, H., 2013. Efek Antibakteri Sea Cucumber (Stichopus Variegatus) Sebagai Bahan Medikamen Saluran Akar terhadap Bakteri Enterococcus Faecalis. *Dentika Dental Journal*, 17(4): 366-369.
- Torabinejad, M., Ashraf Fouad, dan Shahrkh Shabahang, 2019, *Endodontics: Principles and Practice, 6th ed*, ELSEVIER, hal. 320.
- Varshini, R., Subha, A., Prabhakar, V., Mathini, P., Narayanan, S. dan Minu, K., 2019. Antimicrobial efficacy of Aloe vera, lemon, Ricinus communis, and Calcium Hydroxide as Intracanal Medicament Against Enterococcus faecalis: A confocal microscopic study. *Journal of pharmacy & bioallied sciences*, 11(Suppl 2): S256.
- Vasudeva, A., Sinha, D. J., Tyagi, S. P., Singh, N. N., Garg, P. dan Upadhyay, D., 2017. Disinfection of Dentinal Tubules with 2% Chlorhexidine Gel, Calcium Hydroxide and Herbal Intracanal Medicaments Against Enterococcus faecalis: An in-vitro study. *Singapore dental journal*, 38: 39-44.
- Venkateshbabu, N., Anand, S., Abarajithan, M., Sheriff, S. O., Jacob, P. S. dan Sonia, N., 2016. Suppl-1, M9: Natural Therapeutic Options in Endodontics-A Review. *The open dentistry journal*, 10, hal. 214.
- Xiang, H., Cao, F., Ming, D., Zheng, Y., Dong, X., Zhong, X., Mu, D., Li, B., Zhong, L., Cao, J. dan Wang, L., 2017. Aloe-emodin Inhibits Staphylococcus aureus Biofilms and Extracellular Protein Production at the Initial Adhesion Stage of Biofilm Development. *Applied Microbiology and Biotechnology*, 101(17): 6671-6681.
- Youssef, A. S., El Feky, S. A., El-Asser, S. A. dan Abd Allah, R.A., 2013. Microorganisms Isolated from Surgical Wounds Infection and Treatment with Different Natural Products and Antibiotics. *African Journal of Microbiology Research*, 7(30): 3895-3902.
- Zakaria, M. N., Putri, Y.S., Rahaju, A., Fatmawati, S. dan Cahyanto, A., 2021. Inhibitory Effect of Calcium Hydroxide Combined with *Nigella Sativa* Against *Enterococcus faecalis*. *Dental Journal (Majalah Kedokteran Gigi)*, 54(4): 181-185.
- Zand, V., Mokhtari, H., Hasani, A. dan Jabbari, G., 2017. Comparison of the Penetration Depth of Conventional and Nano-Particle Calcium Hydroxide into Dentinal Tubules. *Iranian endodontic journal*, 12(3): 366.
- Zhang, C., Du, J. dan Peng, Z., 2015. Correlation between Enterococcus faecalis and persistent intraradicular infection compared with primary intraradicular infection: a systematic review. *Journal of endodontics*, 41(8): 1207-1213.