DAFTAR PUSTAKA

Abrantes, P. M. D. S., dan Africa, C. W. J., (2020), Measuring *Streptococcus mutans*, *Streptococcus sanguinis* and *Candida albicans* biofilm formation using a real-time impedance-based system, *Journal of Microbiological Methods*, 169: 1–5.

Abubakar, Y., Tijjani, H., Egbuna, C., Adetunji, C. O., Kala, S., Kryeziu, T. L., dan Patrick-Iwuanyanwu, K. C., (2019), *Natural Remedies for Pest, Disease and Weed Control,* Elsevier, hal.29–42.

APAARI, (2012), *Jackfruit Improvement in the Asia-Pacific Region - A Status Report,* Bangkok: Asia-Pacific Association of Agricultural Research Institutions, hal. 1-9.

ATCC, 2019, *Streptococcus sanguinis (ATCC® 10556™)*, www.atcc.org, diakses 20 Mei 2021.

Badan Pusat Statistik, (2019), *Produksi Tanaman Buah-buahan 2019*. https://www.bps.go.id/indicator/55/62/1/produksi-tanaman-buah-buahan.html, diakses 11 Maret 2021.

Bathla, S., (2011), *Periodontics Revisited*, New Delhi: Jaypee Brothers, hal 67-68.

Bi, Y., Xia, G., Shi, C., Wan, J., Liu, L., Chen, Y., Wu, Y., Zhang, W., Zhou, M., He, H., & Liu, R., (2021), Therapeutic strategies against bacterial biofilms, *Fundamental Research*, 1(2): 193–212.

Candra, M. W., Ticoalu, S. H. R., dan Juliatri, (2015), Gambaran kebersihan mulut dan karies gigi pada vegetarian lacto-ovo di Jurusan Keperawatan Universitas Klabat Airmadidi, *Jurnal E-GiGi(EG)*, 3(1), 115–120.

Emilson, C. G., (1994), Potential efficacy of chlorhexidine against *mutans Streptococci* and human dental caries, *Journal of Dental Research*, 73(3): 682–691.

Evans, A., Leishman, S. J., Walsh, L. U., dan Seow, W. K., (2015), Inhibitory effects of antiseptic mouthrinses on *Streptococcus mutans, Streptococcus sanguinis* and *Lactobacillus acidophilus*, *Australian Dental Journal*, 60(2): 247–254.

Fachon-Kalweit, S., Elder, B. L., & Fives-Taylor, P. (1985). Antibodies that bind to fimbriae block adhesion of *Streptococcus sanguis* to saliva-coated hydroxyapatite. In *Infection and Immunity*, 48(3): 617-624.

Friesen, L., 2021, *Cannabis Science and Technology*, 4(3): 13–16. www.cannabissciencetech.com

Garg, N., dan Garg, A., (2015), *Operative Dentistry*, New Delhi Jaypee Brothers, hal. 42 dan 45.

Glaister D., Athersuch R., (1990), Apparent failure of brain heart infusion broth to cultivate meningococci from clinically infected patient, In *Med Lab Sci*, 47(3):158-62.

Gross, E. L., Beall, C. J., Kutsch, S. R., Firestone, N. D., Leys, E. J., dan Griffen, A. L., (2012), Beyond *Streptococcus mutans*: dental caries onset linked to multiple species by 16S rRNA community analysis, *PLoS ONE*, 7(10): 1–11.

Hamzah, H., Hertiani, T., Utami Tunjung Pratiwi, S., dan Nuryastuti, T., (2019), The inhibition activity of tannin on the formation of mono-Species and polymicrobial biofilm *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and *Candida albicans*, *Majalah Obat Tradisional*, 24(2): 110.

Hamzah, H., Pratiwi, S. U. T., dan Hertiani, T., (2018), Efficacy of thymol and eugenol against polymicrobial biofilm, *Indonesian Journal of Pharmacy*, 29(4): 214–221.

Huang, Q., Liu, X., Zhao, G., Hu, T., dan Wang, Y., (2018), Potential and challenges of tannins as an alternative to in-feed antibiotics for farm animal production, *Animal Nutrition*, 4(2): 137–150.

Indriani, dan Iswan, (2020), Isolasi dan identifikasi metabolit sekunder dari ekstrak etil asetat batang bangka *(Artocarpus heterophyllus Lmk.)* dan aktivitasnya sebagai antibakteri, *KOVALEN: Jurnal Riset Kimia*, 6(1): 81–

ITIS, *Artocarpus heterophyllus Lam.*, https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=184183#null, diakses 29 April 2021.

ITIS, *Streptococcus sanguinis*, https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=966473#null, diakses 16 April 2021.

Kemala, D., Hendiani, I., dan Satari, M. H., (2018), Uji daya antibakteri ekstrak etanol kulit buah manggis *(Garcinia mangostana L)* terhadap *Streptococcus sanguinis* ATCC 10556, *Padjajaran Journal of Dental Researchers and Students,* 2(2): 137–140.

Kementerian Kesehatan RI, (2018), *Hasil Utama RISKESDAS*, hal. 101.

Kolliyavar, B., Shettar, L., dan Thakur, S., (2016), Chlorhexidine: the gold standard mouth wash, *Journal of Pharmaceutical and Biomedical Sciences*, 6(2): 106–109.

Kusumawati, E., Apriliana, A., dan Yulia, R., (2017), Kemampuan antibakteri ekstrak etanol daun nangka *(Atrocarpus heterophyllus Lam.)* terhadap *Escherichia coli*, *Jurnal Sains Dan Kesehatan*, 1(7): 327–332.

Lamont, R. J., Hajishengallis, G. N., Koo, H. (Michel), dan Jenkinson, H. F., (2019), *Oral Microbiology and Immunology*, 3rd Ed, Edinburgh: Elsevier, hal 63, 70, 90, 106, dan 108.

Limoli, D.H., Jones, C.J. dan Wozniak, D.J., (2015), Bacterial extracellular polysaccharides in biofilm formation and function, *Microbiology Spectrum*, 3(3): 1–30.

Lozano, C.P., Díaz-Garrido, N., Kreth, J. dan Giacaman, R.A., (2019), *Streptococcus mutans* and *Streptococcus sanguinis* expression of competition-Related Genes, under Sucrose, *Caries Research*, 53(2): 194–203.

Mahon, C.R. dan Lehman, D.C., (2019), *Textbook of Diagnostic Microbiology*, edisi ke 6, Missouri: Elsevier, hal, 1766-1771, 1781, 2506.

Mambang, D.E.P. dan Rezi, J., (2018), Efektivitas antibakteri ekstrak etanol daun nangka *(Artocarpus heterophyllus L)* terhadap pertumbuhan bakteri *Staphylococcus aureus*, *Jurnal Agroteknosains* , 02(1): 179–187.

Mandal, A., Singh, D., Siddiqui, H., Das, D. dan Dey, A., (2017), New dimensions in mechanical plaque control: An overview, *Indian Journal of Dental Sciences*, 9(2): 133.

Marlina, D., Kurniati, M., Hamid, F., Larasathi, F., Irnawita, F. dan Kedokteran, F., (2018), Visualisasi matriks biofilm *Escherichia coli* dengan media bacteriological peptone, sucrose dan ethanol, *Jurnal Kesehatan*, 9(1): 26–32. *http://ejurnal.poltekkes-tjk.ac.id/index.php/JK*,.

Marrelli, M., Conforti, F., Araniti, F. dan Statti, G.A., (2016), Effects of saponins on lipid metabolism: a review of potential health benefits in the treatment of obesity, *Molecules*, 21(10): 1–20.

Marsh, P., Lewis, M., Roger, H.M., William, D. dan Wilson, M., (2016), *Marsh and Martin's Oral Microbiology*, Washington DC: ASM Press, hal. 13, 41, 37, 63, 70, 81, 84-88, 90, 106, 108.

Marsh, P. dan Zaura, E., (2017), Dental biofilm: ecological interactions in health and disease, *Journal of Clinical Periodontology*, 44: S12–S22.

Mathur, S., Mathur, T., Srivastava, R. dan Khatri, R., (2011), Chlorhexidine: the gold standard in chemical plaque control, *Review Article National Journal of Physiology*, 1(2): 45–50.

Mohan, V. R., Tresina, P. S., dan Daffodil, E. D., (2015), Antinutritional factors in legume seeds: characteristics and determination, In *Encyclopedia of Food and Health*, hal. 215-undefined.

Ngajow, M., Abidjulu, J. dan Kamu, V.S., (2013), Pengaruh antibakteri ekstrak kulit batang matoa *(Pometia pinnata)* terhadap Bakteri *Staphylococcus aureus* secara in vitro, *Jurnal MIPA UNSRAT*, 2(2): 128–132.

Nightingale, K.J., Chinta, S.K., Agarwal, P., Nemelivsky, M., Frisina, A.C., Cao, Z., Norman, R.G., Fisch, G.S. dan Corby, P., (2014), Toothbrush efficacy for plaque removal, *International Journal of Dental Hygiene*, 12(4): 251–256.

Nurjanah, S., Isbiyantoro dan Fadhillah, H., (2018), Ekstrak daun kembang bulan *(Tithonia diversifolia* (Hemsl.) A. Gray) sebagai antibakteri terhadap

Streptococcus mutans dan *Streptococcus sanguinis*, *Jurnal Farmasi Lampung*, 7(1): 33–40.

Ojwang, R., Muge, E., Mbatia, B., Mwanza, B. dan Ogoyi, D., (2017), Comparative analysis of phytochemical composition and antioxidant activities of methanolic extracts of leaves, roots and bark of jackfruit *(Artocapus heterophyllus)* from selected regions in Kenya and Uganda, *Journal of Advances in Biology dan Biotechnology*, 16(1): 1–13.

Okahashi, N., Nakata, M., Terao, Y., Isoda, R., Sakurai, A., Sumitomo, T., Yamaguchi, M., Kimura, R.K., Oiki, E., Kawabata, S. dan Ooshima, T., (2011), Pili of oral *Streptococcus sanguinis* bind to salivary amylase and promote the biofilm formation, *Microbial Pathogenesis*, 50(3–4): 148–154.

Panche, A.N., Diwan, A.D. dan Chandra, S.R., (2016), Flavonoids: an overview, *Journal of Nutritional Science*, 5: 1–15.

Parashar, A., (2015), Mouthwashes and their use in different oral conditions, *Scholars Journal of Dental Sciences (SJDS)*, 2(2B): 186–191. *www.saspublisher.com*.

Patabang, W.A., Leman, M.A., Maryono, J., Studi, P., Dokter, P. dan Kedokteran, G.F., (2016), Perbedaan jumlah pertumbuhan koloni bakteri rongga mulut sebelum dan sesudah menggunakan obat kumur yang mengandung khlorheksidine, *Jurnal Ilmiah Farmasi-UNSRAT*, 5(1): 26–31.

Penda, P.A.C., Kaligis, S.H.M. dan Juliatri, (2015), Perbedaan indeks plak sebelum dan sesudah pengunyahan buah apel, *Jurnal e-GiGi (eG)*, 3(2): 380–385.

Pleszczyńska, M., Wiater, A., Bachanek, T., dan Szczodrak, J., (2017), Enzymes in therapy of biofilm-related oral diseases, *Biotechnology and Applied Biochemistry*, 64(3): 337–346.

Rabin, N., Zheng, Y., Opoku-Temeng, C., Du, Y., Bonsu, E. dan Sintim, H.O., (2015), Biofilm formation mechanisms and targets for developing antibiofilm agents, *Future Medicinal Chemistry*, 7(4): 493–512.

Ranasinghe, R.A.S.N., Maduwanthi, S.D.T. dan Marapana, R.A.U.J., (2019), Nutritional and health benefits of backfruit (*Artocarpus heterophyllus* Lam.): a review, *International Journal of Food Science*, 1–12.

Saggu, S. K., Jha, G., dan Mishra, P. C., (2019), Enzymatic degradation of biofilm by metalloprotease from microbacterium sp. Sks10, *Frontiers in Bioengineering and Biotechnology*, 7.

Sapara, T.U., Waworuntu, O. dan Juliatri, (2016), Efektivitas Antibakteri Ekstrak Daun Pacar Air *(Impatiens balsamina L.)* terhadap Pertumbuhan *Porphyromonas gingivalis*, *Jurnal Ilmiah Farmasi-UNSRAT*, 5(4): 10–17.

Saragih, D.E. dan Arsita, E.V., (2019), Kandungan Fitokimia Zanthoxylum acanthopodium dan potensinya sebagai tanaman obat di Wilayah Toba Samosir dan Tapanuli Utara, Sumatera Utara, *Pros Sem Nas Masy Biodiv Indon*, 5(1): 71–76.

Senpuku, H., Tuna, E. B., Nagasawa, R., Nakao, R., dan Ohnishi, M., (2019), The inhibitory effects of polypyrrole on the biofilm formation of Streptococcus mutans, *PLoS ONE*, 14(11).

Seoudi, N., Bergmeier, L.A., Drobniewski, F., Paster, B. dan Fortune, F., (2015), The oral mucosal and salivary microbial community of behçet's syndrome and recurrent aphthous stomatitis, *Journal of Oral Microbiology*, 7(1): 1–9.

Smullen, J., Finney, M., Storey, D.M. dan Foster, H.A., (2012), Prevention of artificial dental plaque formation in vitro by plant extracts, *Journal of Applied Microbiology*, 113(4): 964–973.

Tan, R., Yu, A., Liu, Z., Liu, Z., Jiang, R., Wang, X., Liu, J., Gao, J., dan Wang, X., (2021), Prediction of minimal inhibitory concentration of meropenem against klebsiella *pneumoniae* using metagenomic data, *Frontiers in Microbiology*, 12.

Tandelilin, R.T.C. dan Saini, R., (2018), *Dental Plaque: A Biofilm*, Sleman: PT Kanisius, hal. 57, 62.

The Author(s), (2018), Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017, *The Lancet*, 392, 10159, 1789–1858.

Umniyati, H., Miegasivia, B. dan Zakki, M., (2020), CrossMark The effectiveness of oral health education and toothbrush training in decreasing plaque index score among Elementary Students in Jakarta, *Journal of Dentomaxillofacial Science*, 5(3): 168–172.

Utami, D., Pratiwi, S. T., Haniastuti, T., dan Hertiani, T., (2021), Eugenol and thymol as potential inhibitors for polymicrobial oral biofilms: An in vitro study, *Journal of International Oral Health*, 13(1), 45.

Wahyulianingsih, Handayani, S., dan Malik, Abd., (2016), Penetapan kadar flavonoid total ekstrak daun cengkeh (Syzygium aromaticum (L.) Merr & Perry, *Jurnal Fitofarmaka Indonesia*, *3*(2), 188–193.

WHO, (2016), *Promoting Oral Health in Africa*, WHO Regional Office for Africa, hal. 2.

Widarti, E., Wardani, B., Lutfi, M. dan Nugroho, W.A., (2013), Identifikasi sifat fisik buah nangka *(Artocarpus heterophyllus)*, *Jurnal Keteknikan Pertanian Tropis dan Biosistem*, 1(3): 224–230.

Wiradona, I., Widjanarko, B. dan Syamsulhuda, B.M., (2013), Pengaruh perilaku menggosok gigi terhadap plak gigi pada siswa kelas IV dan V di SDN wilayah Kecamatan Gajahmungkur Semarang, *Jurnal Promosi Kesehatan Indonesia*, 8(1): 59–68.

Yamaguchi, M., Terao, Y., Ogawa, T., Takahashi, T., Hamada, S., dan Kawabata, S, (2006), Role of *Streptococcus sanguinis* sortase a in bacterial colonization, *Microbes and Infection*, *8*(12–13): 2791–2796.

Yu, M., dan Chua, S. L., (2020), Demolishing The great wall of biofilms in gram-negative bacteria: to Disrupt or disperse?, *Medicinal Research Reviews*, 40(3), 1103–1116

Zhu, B., Macleod, L.C., Kitten, T. dan Xu, P., (2018), *Streptococcus sanguinis* biofilm formation dan interaction with oral pathogens, *Future Microbiology*, 13(8): 915–932.