

DAFTAR PUSTAKA

- Adam, Z.A.; Omer, A.F.A. *Antibacterial Activity of Azadirachta indica (Neem) Leaf Extract against Bacterial Pathogens in Sudan*. *Am. J. Res. Commun.* (2015), 3, 246–251.
- Agarwal T, Singh R, Shukla AD, Waris I, Gujrati A. Comparative analysis of antibacterial activity of four Piper betle varieties. *Adv Appl Sc Res.* (2012); 3: 698–705.
- Agus, A. (2010). *Tanaman Obat Indonesia*, Jakarta.
- Agusta, A. (2000). *Minyak Atsiri Tumbuhan Tropika Indonesia*. Penerbit ITB. Bandung
- Agustina, D., Kurniawan, B. D., & Palupi, I. (2016). *Modulation of Antibiotic Activity Against Streptococcus pneumoniae by N-acetylcysteine and ascorbic acid*. *Journal of Agromedicine and Medical Sciences*, 2(3), 1-7.
- Ahmed, Bahar. (2007). *Chemistry of Natural Products*. New Delhi: Departement of Pharmaceutical Chemistry Faculty of Science Jamia Hamdard.
- Aiello, Susan E. *The Merck etinary manual*. USA: Merck Sharp & Dohme Corp; (2012).
- Alabri, T.H.A.; Al Musalami, A.H.S.; Hossain, M.A.; Weli, A.M.; Al-Riyami, Q. Comparative Study of Phytochemical Screening, Antioxidant and Antimicrobial Capacities of Fresh and Dry Leaves Crude Plant Extracts of Datura metel L. *J. King Saud Univ. Sci.* (2014), 26, 237–243. [CrossRef]
- Allen, L.V., Popovich, N.G, and Ansel, H.C. (2005). *Ansel's Pharmaceutical Dossage Forms and Drug Delivery Systems*, Eighth edition, America, P.
- Almatroodi, S.A., Alsahli, M.A., Almatroudi, A., Khan, A.A. and Rahmani, A.H., (2021). Peppermint,(Mentha× piperita): Role in Management of Diseases through Modulating Various Biological Activities. *Pharmacognosy Journal*, 13(3).
- Amalia, A., Dwiyantri, R.D. and Haitami, H., (2016). Daya hambat NaCl terhadap pertumbuhan Staphylococcus aureus. *Medical Laboratory Technology Journal*, 2(2), pp.42-45.
- Amin, Z. A., Abdulla, M. A., Ali, H. M., Alshawsh, M. A., & Qadir, S. W. (2012). Assessment of in vitro antioxidant, antibacterial and immune activation potentials of aqueous and ethanol extracts of Phyllanthus niruri. *Journal of the Science of Food and Agriculture*, 92(9), 1874-1877.

- Ananto, F. J., Herwanto, E. S., Nugrahandhini, N. B., Chizma, Y., Abidin, M. Z., & Suswati, I. (2015). ELEVATION (KELOR LEAVES As ANTIBIOTICS For PSEUDOMONAS): IN VIVO METHOD TO DETERMINE ANTIBACTERIAL ACTIVITY OF MORINGA LEAVES GEL AS NATURAL ANTIBIOTICS AGAINST *Pseudomonas aeruginosa*. *Pharmacy*, 12(01).
- Angelina M, Turnip M, Khotimah S. Uji Aktivitas Antibakteri Ekstrak Etanol Daun Kemangi (*Ocimum sanctum* L.) Terhadap Pertumbuhan Bakteri *E. coli* dan *Staphylococcus aureus*. *Jurnal Protobiont* Vol.4(1). (2015): 184-189.
- Anggraini, D., Yulindra, U.G., Savira, M., Djojosingito, F.A. and Hidayat, N., (2018). Prevalensi dan Pola Sensitivitas Antimikroba Multidrug Resistant *Pseudomonas aeruginosa* di RSUD Arifin Achmad. *Majalah Kedokteran Bandung*, 50(1), pp.6-12.
- Anju, T., Rai, N.K.S. and Kumar, A., (2022). *Sauropus androgynus* (L.) Merr.: a multipurpose plant with multiple uses in traditional ethnic culinary and ethnomedicinal preparations. *Journal of Ethnic Foods*, 9(1), pp.1-29.
- Antonescu, A.I.; Miere, F.; Fritea, L.; Ganea, M.; Zdrinca, M.; Dobjanschi, L.; Antonescu, A.; Vicas, S.I.; Bodog, F.; Sindhu, R.K.; et al. *Perspectives on the combined effects of ocimum basilicum and trifolium pratense extracts in terms of phytochemical profile and pharmacological effects*. *Plants* (2021), 10, doi:10.3390/plants10071390.
- Ariharan, V.N., Devi, V.M. and Prasad, P.N., (2013). Antibacterial activity of sauropus and rogynous leaf extracts against some pathogenic bacteria. *Rasayan J. Chem*, 6(2), pp.134-137.
- Asare, G.A., K. Bugyei, A. Sittie, E.S. Yahaya, B. Gyan, S. Adjei, P. Addo, E.K. Wiredu, D.N. Adjei, and A.K. Nyarko. (2012). *Genotoxicity, cytotoxicity and toxicological evaluation of whole plant extracts of the medicinal plant Phyllanthus niruri (Phyllanthaceae)*. *Genetics and Molecular Research* 11(1): 100-111.
- Astuti SM. Skrining fitokimia dan uji aktifitas antibiotika ekstrak etanol daun, batang, bunga dan umbi tanaman binahong (*anredera cordifolia* (ten) steenis. Balai Besar Pengujian Mutu Dan Sertifikasi Obat Hewan (BBPMSOH). Bogor. Dan Fakultas Kejuruteraan Kimia, Universiti Malaysia Pahang. Pahang. (2011).
- Aviany, H. B., & Pujiyanto, S. (2020). Analisis Efektivitas Probiotik di Dalam Produk Kecantikan sebagai Antibakteri terhadap Bakteri *Staphylococcus epidermidis*. *Berkala Bioteknologi*, 3(2).
- Aygun G, Demirkiran O, Utku T, Mete B, Urkmez S, Yilmaz M, Yasar H, Dikmen Y, Oztürk R. Environmental contamination during a

- carbapenem-resistant *Acinetobacter baumannii* outbreak in an intensive care unit. *Journal of Hospital Infection*. (2002);52: 259– 62.
- Azizah, B. dan Salamah, N., (2013). Standarisasi Parameter Non Spesifik dan Perbandingan Kadar Kurkumin Ekstrak Etanol dan Ekstrak Terpurifikasi Rimpang Kunyit. *Pharmaciana*.
- Bagalkotkar, G., Sagineedu, S.R., Saad, M.S. and Stanslas, J., (2006). Phytochemicals from *Phyllanthus niruri* Linn. and their pharmacological properties. *Journal of pharmacy and pharmacology*, 58(12), pp.1559-1570.
- Baharutan, A., Rares, F.E. and Soeliongan, S.,(2015). Pola bakteri penyebab infeksi nosokomial pada ruang perawatan intensif anak di BLU RSUP Prof. DR. RD Kandou Manado. *e-Biomedik*, 3(1).
- Balouiri M, Sadiki M, Ibsouda SK. *Methods for In Vitro Evaluating Antimicrobial Activity: A Review*. *Journal of Pharmaceutical Analysis*. (2016); 6:71-79
- Bancessi, A., Pinto, M.M.F., Duarte, E., Catarino, L. and Nazareth, T., (2020). The antimicrobial properties of *Moringa oleifera* Lam. for water treatment: a systematic review. *SN Applied Sciences*, 2(3), pp.1-9.
- Bassolé I HN, Lamien-Meda A, Bayala B, Obame LC, Ilboudo AJ, Franz C, Novak J, Nebié RC, Dicko R. Chemical composition and antimicrobial activity of *Cymbopogon citratus* and *Cymbopogon giganteus* essential oils alone and in combination. *Phytomedicine*. (2011); 18: 1070-1074.
- Bhat, S., Maheshwari, P., Kumar, S., & Kumar, A., (2002). *Mentha* species: in vitro regeneration and genetic transformation. *Mol Biol Today*, 3:11–23.
- Bidault, P., Chandad, F., & Grenier, D. (2007). Systemic antibiotic therapy in the treatment of periodontitis. *Journal of the Canadian Dental Association*, 73(6).
- Borah, J. C. (2015). Shikimic acid: a highly prospective molecule in pharmaceutical industry. *Curr. Sci*, 109(9), 1672-1679.
- Brooks, G.F., Janet, S.B., Stephen A.M. (2001). *Jawetz, Melnick and Adelbergs, Mikrobiologi Kedokteran*, Alih Bahasa oleh Mudihardi, E., Kuntaman, Wasito, E.B., Mertaniasih, N.M., Harsono, S., dan Alimsardjono, L. Jakarta : Penerbit Salemba Medika
- Bunawan, H., Bunawan, S.N., Baharum, S.N. and Noor, N.M., (2015). *Sauropus androgynus* (L.) Merr. induced bronchiolitis obliterans: from botanical studies to toxicology. *Evidence-based complementary and alternative medicine*, 2015.

- Bupesh, G.; Amutha, C.; Nandagopal, S.; Ganeshkumar, A.; Sureshkumar, P.; Murali, K.S. Antibacterial activity of *Mentha piperita* L. (peppermint) from leaf extracts-A medicinal plant. *Acta Agric. Slov.* 2007, 89, 73–79. [CrossRef]
- Cahyani. Daun Kemangi (*Ocinum Cannum*) Sebagai Alternatif Pembuatan Handsanitizier. Cahyani (2014), 9, 136–142, doi:10.15294/kemas.v9i2.2843.
- Carolia, N., & Noventi, W. (2016). Potensi ekstrak daun sirih hijau (*Piper betle* L.) sebagai alternatif terapi *Acne vulgaris*. *Jurnal Majority*, 5(1), 140-145.
- Cendranata WO, Mintarsih DK, dan Adiastuti EP. (2011). Daya hambat ekstrak daun sambiloto (*Andrographis paniculata*) terhadap populasi bakteri pada ulser recurrent aphthous stomatitis. *J PDGI*, 60(1): 20-23.
- Cowan, MM. Plant Products as Antimicrobial Agents, *Clin Microbiol Rev*, (1999); 12 (4): 565– 571
- da Silva Ramos, R., Rodrigues, A.B.L., Farias, A.L.F., Simões, R.C., Pinheiro, M.T., Ferreira, R.M.D.A., Costa Barbosa, L.M., Picanço Souto, R.N., Fernandes, J.B., Santos, L.D.S. and de Almeida, S.S.M.D.S., (2017). Chemical composition and in vitro antioxidant, cytotoxic, antimicrobial, and larvicidal activities of the essential oil of *Mentha piperita* L.(Lamiaceae). *The Scientific World Journal*, (2017).
- Dalimartha, S., Purnama, B. T., SpGK, M. S., Nora Sutarina, S., Mahendra, B., Akp, I., & Darmawan, R. (2008). *Care yourself*, Hipertensi. Penebar PLUS+.
- Damayanti R, Mulyono. Khasiat & manfaat daun sirih: obat mujarab dari masa ke masa. Jakarta: Agromedia Pustaka; (2003).
- Dangkulwanich, M. and Charaslertrangsi, T., (2020). Hydrodistillation and antimicrobial properties of lemongrass oil (*Cymbopogon citratus*, Stapf): An undergraduate laboratory exercise bridging chemistry and microbiology. *Journal of Food Science Education*, 19(2), pp.41-48.
- Darsana, I.G.O., (2012), Potensi Daun Binahong (*Anredera Cordifolia* (Tenore) Steenis) dalam Menghambat Pertumbuhan Bakteri *Escherichia Coli* secara In Vitro, *Indonesia Medicus Veterinus*, 1 (3), 337 – 351.
- de Padua, L.S., and Bunyaphatsara, R.H.M.J. Lemmens. (1999). *Plant resources of South East Asia no 12(1)*. Backhuys Publishers, Leiden: 21-70.
- Denton, M., & Kerr, K. G. (1998). Microbiological and clinical aspects of infection associated with *Stenotrophomonas maltophilia*. *Clinical microbiology reviews*, 11(1), 57-80.

- Desam, N.R., Al-Rajab, A.J., Sharma, M., Mylabathula, M.M., Gowkanapalli, R.R. and Albratty, M., (2019). Chemical constituents, in vitro antibacterial and antifungal activity of *Mentha* × *Piperita* L.(peppermint) essential oils. *Journal of King Saud University-Science*, 31(4), pp.528-533.
- Desnita, R., Luliana, S., & Anastasia, D. S. (2018). Antiinflammatory activity patch ethanol extract of leaf katuk (*Sauropus androgynus* L. Merr). *Jurnal Ilmu Kefarmasian Indonesia*, 16(1), 1-5. Cahyani, N. M. E. (2014). Daun kemangi (*ocinum cannum*) sebagai alternatif pembuatan handsanitizier. *KEMAS: Jurnal Kesehatan Masyarakat*, 9(2), 136-142.
- Dewangga, V. S., & Qurrohman, M. T. (2019). Potensi Antibakteri Ekstrak Etanol Herba Meniran Hijau (*Phyllanthus niruri* Linn.) Dalam Menghambat Pertumbuhan *Staphylococcus aureus*. *Jurnal Kesehatan Kusuma Husada*, 144-150.
- Dewi N. Khasiat dan cara olah sambiloto untuk menumpas berbagai penyakit. Yogyakarta: Pustaka Baru; (2013).
- Dewi, A.K. (2013). Isolasi, Identifikasi dan Uji Sensitivitas *Staphylococcus aureus* terhadap Amoxicillin dari Sampel Susu Kambing Peranakan Ettawa (PE) Penderita Mastitis di Wilayah Girimulyo, Kulonprogo, Yogyakarta. *Jurnal Sain Veteriner* 31(2): 138-150
- Dharmawan, A., & Layanto, N. (2018). Mekanisme resistensi *acinetobacter baumannii* terhadap antibiotik golongan karbapenem. *Jurnal kedokteran meditek*.
- Djamil, R., Zaidan, S. (2016). Isolasi Senyawa Flavonoid dari Ekstrak Metanol Daun Katuk (*Sauropus androgynus* L.) *Euphobiaceae*. *Jurnal Ilmu Kefarmasian Indonesia*. Vol. 14, No. 2, Hal: 58-61. ISSN 1693-1831.
- Dwyana, Z., & Johannes, E. (2012). Uji Efektivitas Ekstrak Kasar Alga Merah *Euclima Cottonii* Sebagai Antibakteri Terhadap Bakteri Patogen. *Jurnal Ilmu Kefarmasian*, 7(1).
- Ekpenyong, C.E., Akpan, E. and Nyoh, A., (2015). Ethnopharmacology, phytochemistry, and biological activities of *Cymbopogon citratus* (DC.) Stapf extracts. *Chinese journal of natural medicines*, 13(5), pp.321-337.
- Erhabor JO, Erhabor RC, Idu M-D. In vitro antibacterial and cytogenotoxicological properties of the aqueous extract of *Cymbopogon citratus* Stapf (DC) leaf. *Afri Health Sci*. (2019);19(2). 2056-2067. <https://dx.doi.org/10.4314/ahs.v19i2.29>
- Farias, P.K.S., Silva, J.C.R.L., Souza, C.N.D., Fonseca, F.S.A.D., Brandi, I.V., Martins, E.R., Azevedo, A.M. and Almeida, A.C.D., (2019).

Antioxidant activity of essential oils from condiment plants and their effect on lactic cultures and pathogenic bacteria. *Ciência Rural*, 49.

- Fatimatuzzahra, N., Rahayu, F., A. H. (2004). *Tumbuhan Obat dan Khasiatnya*. Jakarta: Niaga Swadaya.
- Fitriyah, Lailatul, Rita Dwi Ratnani, and Indah Hartati. "Ekstraksi hidrotropi andrographolide dari tumbuhan sambiloto (*Andrographis paniculata* Ness) menggunakan larutan urea." *Majalah Ilmiah MOMENTUM* 11, no.1(2015).
- Fuglie, L. J. (2001). *The Miracle Tree: The Multiple Attributes of Moringa*. Dakar, Senegal, Church World Service
- Gaio, I., Saggiorato, A.G., Treichel, H., Cichoski, A.J., Astolfi, V., Cardoso, R.I., Toniazzo, G., Valduga, E., Paroul, N. and Cansian, R.L., (2015). Antibacterial activity of basil essential oil (*Ocimum basilicum* L.) in Italian-type sausage. *Journal für Verbraucherschutz und Lebensmittelsicherheit*, 10(4), pp.323-329.
- Gauthier, J.M., Massicotte, A. (2015), Statins and their effect on cognition: Let's clear up the confusion, *Canadian Pharmacist Journal/ Revue des Pharmaciens du Canada*, 148(3): 150-155.
- Gente, M., Leman, M. & Anindita. (2015). Uji Efek Analgesia Ekstrak Daun Kecubung (*Datura metel*) pada Tikus Wistar (*Rattus norvegicus*) Jantan. *Jurnal e-GIGI*, 3(2), 470-475
- Gishen, N.Z.; Taddese, S.; Zenebe, T.; Dires, K.; Mengiste, B.; Shenkute, D.; Tesema, A.; Shiferaw, Y.; Luelekal, E. In vitro antimicrobial activity of six Ethiopian medicinal plants against *Staphylococcus aureus*, *Escherichia coli* and *Candida albicans*. *Eur. J. Integr. Med.* (2020), 36, 101121. [CrossRef]
- Golan DE, Wilkins WL. *Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy* (3rd ed.). LWW, (2008); p.720.
- Gomes, T.A., Hernandez, R.T., Torres, A.G., Salvador, F.A., Guth, B.E.C., Vaz, T.M., Irino, K., Silva, R.M., & Vieira, M.A. (2011). *Adhesinencoding genes from Shiga toxin-producing Escherichia coli are more prevalent in atypical than in typical enteropathogenic E. coli*. *Journal of Clinical Microbiology*, (49):3334-333710. DOI: 10.1128/JCM.00779-11.
- Guimaraes, I.; Baptista-Silva, S.; Pintado, M.; Oliveira, L.A. Polyphenols: A Promising Avenue in Therapeutic Solutions for Wound Care. *Appl. Sci.* (2021), 11, 1230. [CrossRef]
- Gunawan, I W. G., Gede Bawa, I G. A., Sutrisnayanti, N. L., (2008). Isolasi dan Identifikasi Senyawa Terpenoid yang Aktif Antibakteri pada Herba

- Meniran (*Phyllanthus niruri* Linn). Jurusan Kimia FMIPA Universitas Udayana. Jurnal Kimia 2 (1), Januari 2008 : 31-39.
- Günther, E. (1948) The essential oils: History and origin in plants production analysis. Krieger Publishing, New York, 235-240.
- Guntur, A., Selena, M., Bella, A., Leonarda, G., Leda, A., Setyaningsih, D. and Riswanto, F.D.O., Kemangi (*Ocimum basilicum* L.): Kandungan Kimia, Teknik Ekstraksi, dan Uji Aktivitas Antibakteri. *Journal of Food and Pharmaceutical Sciences*, pp. (2021). 513-528.
- H AR, Cahyanto T, Sujarwo T, Lestari RI. Uji Aktivitas Antibakteri Daun Beluntas (*Pluchea indica* (L.) Less) Terhadap Propionibacterium Penyebab Jerawat. (2015): 141-161.
- Hammer, K.A.; Carson, C.F.; Riley, T.V. Antimicrobial activity of essential oils and other plant extracts. *J. Appl. Microbiol.* (1999), 86, 985–990.
- Harefa, D., (2020). Pemanfaatan Hasil Tanaman Sebagai Tanaman Obat Keluarga (TOGA). *Madani: Indonesian Journal of Civil Society*, 2(2), pp.28-36.
- Hariana, A. H. (2004). Tumbuhan Obat dan Khasiatnya. Jakarta: Niaga Swadaya.
- Hejazi A, Falkiner FR. *Seratia Marcescens*. *J Med Microbiol.* (1997); 46: 913-919.
- Herlina N, Fifi A, Aditia DC, Poppy DH, Qurotunnada dan Baharuddin T. (2015). Isolasi dan identifikasi *Staphylococcus aureus* dari susu mastitis subklinis di Tasikmalaya, Jawa Barat. *Pros Sem Nas Masy Biodiv Indon.* 1(3): 413-417.
- Hersoelityorini, W., & Suyanto, A. (2013). Aktivitas antioksidan dan sifat organoleptik teh daun sirsak (*Annona muricata* Linn.) berdasarkan variasi lama pengeringan. *Jurnal Pangan dan gizi*, 4(1).
- Hesse M. (2002). *Alkaloids Nature's Curse or Blessing*. Zurich (CH): J Wiley
- Hidayat, S. dan Napitupulu, R.M. (2015). *Kitab Tumbuhan Obat*. Jakarta: Agriflo.
- Hossain, M.A., Kabir, M.J., Salehuddin, S.M., Rahman, S.M., Das, A.K., Singha, S.K., Alam, M.K. and Rahman, A., (2010). Antibacterial properties of essential oils and methanol extracts of sweet basil *Ocimum basilicum* occurring in Bangladesh. *Pharmaceutical biology*, 48(5), pp.504-511.
- Hossain, S., Urbi, Z., Karuniawati, H., Mohiuddin, R.B., Moh Qrimida, A., Allzrag, A.M.M., Ming, L.C., Pagano, E. and Capasso, R., (2021). *Andrographis paniculata* (burm. F.) wall. Ex nees: an updated review

of phytochemistry, antimicrobial pharmacology, and clinical safety and efficacy. *Life*, 11(4), p.348.

- Huriawati, F., Yuhanna, W. L., & Mayasari, T. (2016). Pengaruh metode pengeringan terhadap kualitas serbuk seresah *Enhalus acoroides* dari Pantai Tawang Pacitan. *Bioeksperimen: Jurnal Penelitian Biologi*, 2(1), 35-43.
- Hutabarat, V., & Silalahi, H. (2017). Pengaruh Rawat Gabung Pasien HIV/AIDS dengan Infeksi *Pseudomonas Aeruginosa* Terhadap Risiko Transmisi ke Pasien Lain di Ruang Dahlia II Rumah Sakit Penyakit Infeksi Prof. Dr. Sulianti Saroso. *The Indonesian Journal of Infectious Diseases*, 1(3), 8-13.
- Ibrahim, I., Evama, Y., & Sylvia, N. (2021). Ekstrak Minyak Dari Serai Dapur (*Cymbopogon Citratus*) Dengan Menggunakan Metode Maserasi. *Jurnal Teknologi Kimia Unimal*, 10(2), 57-70.
- Ibrahim, S.R., Bagalagel, A.A., Diri, R.M., Noor, A.O., Bakhsh, H.T. and Mohamed, G.A., (2022). Phytoconstituents and Pharmacological Activities of Indian Camphorweed (*Pluchea indica*): A Multi-Potential Medicinal Plant of Nutritional and Ethnomedicinal Importance. *Molecules*, 27(8), p.2383.
- Jafari B, Amirreza E, Babak MA, Zarifeh H. Antibacteria Activities of Lemon Grass Methanol Extract and Essence Pathogenic Bacteria. *American-Eurasian J. Agric and EnvironSci*. (2012); 12(8): 1042-1046
- Jaiswal D, Rai PK, Kumar A, Mehta S, Watal G. (2009). Effect of *Moringaoleifera* Lam. Leaves aqueous extract therapy in hyperglycemic rats. *Journal of Ethnopharmacol*, 123:392-296.
- Jeyakumar, E., Lawrence, R. and Pal, T., (2011). Comparative evaluation in the efficacy of peppermint (*Mentha piperita*) oil with standards antibiotics against selected bacterial pathogens. *Asian Pacific Journal of Tropical Biomedicine*, 1(2), pp.S253-S257.
- Juliantina, F.R. (2008). Manfaat Sirih Merah (*Piper Crocatum*) Sebagai Agen Anti Bakterial Terhadap Bakteri Gram Positif dan Gram Negatif. *JKKI-Jurnal Kedokteran dan Kesehatan Indonesia*. Vol.1(3):5-8.
- Jumiarni, Wa Ode.(2020). Eksplorasi Jenis Dan Pemanfaatan Tumbuhan Obat Pada Masyarakat Suku Muna di Permukiman Kota Wuna. *Traditional Medicine Journal*..
- Kadarohman A. (2009). Eksplorasi Minyak Atsiri Sebagai Bioaditif Bahan Bakar Solar. *Jurnal Pengajaran MIPA* 14(2):121-142
- Kalemba, D. A. A. K., & Kunicka, A. (2003). Antibacterial and antifungal properties of essential oils. *Current medicinal chemistry*, 10(10), 813-829.

- Karlina C.Y., Ibrahim M., Trimulyono G. (2013). Aktivitas Antibakteri Ekstrak Herba Krokot (*Portulaca oleracea* L.) terhadap *Staphylococcus aureus* dan *Escherichia coli*. *Jurnal UNESA Lentera Bio*. 2 (1) : 87–93.
- Kashyap, P., Kumar, S., Riar, C.S., Jindal, N., Baniwal, P., Guiné, R.P., Correia, P.M., Mehra, R. and Kumar, H., (2022). Recent advances in Drumstick (*Moringa oleifera*) leaves bioactive compounds: Composition, health benefits, bioaccessibility, and dietary applications. *Antioxidants*, 11(2), p.402.
- Kemenkes, R. I. (2017). Keputusan Menteri Kesehatan Republik Indonesia Nomor Hk. 01.07/Menkes/187/2017 Tentang Formularium Ramuan Obat Tradisional Indonesia Dengan. Formularium Ramuan Obat Tradisional Indonesia.
- Khan, I.; Ahmad, K.; Khalil, A.T. alh.; Khan, J.; Khan, Y.A. I.; Saqib, M.S. haha.; Umar, M.N. avee.; Ahmad, H. *Evaluation of antileishmanial, antibacterial and brine shrimp cytotoxic potential of crude methanolic extract of Herb Ocimum basilicum* (Lamiacea). *J. Tradit. Chin. Med.* (2015), 35, 316–322, doi:10.1016/s0254-6272(15)30104-7.
- Kizil, S., Hasimi, N., Tolan, V., Kilinc, E. and Yuksel, U., (2010). Mineral content, Kizil, S., Hasimi, N., Tolan, V., Kilinc, E. and Yuksel, U., (2010). Mineral content, essential oil components and biological activity of two mentha species (*M. piperita* L., *M. spicata* L.). *Turkish Journal of Field Crops*, 15(2), pp.148-153.
- Kumar, N., Misra, P., Dube, A., Bhattacharya, S., Dikshit, M. and Ranade, S., (2010). Piper betle Linn. a maligned Pan-Asiatic plant with an array of pharmacological activities and prospects for drug discovery. *Current science*, pp.922-932.
- Kumar, S., & Pandey, A. K. (2013). Chemistry and biological activities of flavonoids: an overview. *The scientific world journal*, 2013.
- Kundabala M, Suchitra U. *Enterococcus faecalis*: An endodontic pathogen. *J Endod.* (2002); 11-3
- Lamothe R. Plant ANtimicrobial Agents and Their Effects on Plant and Human Pathogens. *Int. J. Mol Sci* 10. (2009): 3400-3419.
- Layanto, N., & Dharmawan, A. (2022). Infeksi dan Pola Kepekaan *Stenotrophomonas maltophilia* di ICU RS X. *Jurnal Kedokteran Meditek*, 28(1), 24-29.
- Le Loir Y, Baron F, Gautier M. (2003). *Staphylococcus aureus* and Food Poisoning. *Laboratoire de Microbiologie. Ecole Nationale Supérieure Agronomique de Rennes*, Institut Nationale de la Recherche Agronomique, France. [http:// www.funpcrp.com.br/gmr/instruction for authors.htm](http://www.funpcrp.com.br/gmr/instruction_for_authors.htm).

- Lee, N.Y., Khoo, W.K., Adnan, M.A., Mahalingam, T.P., Fernandez, A.R. and Jeevaratnam, K., (2016). The pharmacological potential of *Phyllanthus niruri*. *Journal of pharmacy and pharmacology*, 68(8), pp.953-969.
- Linarti R, Muslihah S, Nuri. Uji antiinflamasi ekstrak metanol daun sirih merah (*Piper crocatum* Ruiz & Pav) pada tikus putih. *ISJD*. (2011); 16(1): 34-42.
- Lister PD, Wolter DJ, Hanson ND. Antibacterial-resistant *Pseudomonas aeruginosa*: clinical impact and complex regulation of chromosomally encoded resistance mechanisms. *Clin Microbiol Rev*. (2009);22(4):582–610.
- Liu, Y., Tan, J. Y., Zou, H. D., Qi, Z. T., Naseem, A., Pan, J., ... & Kuang, H. X. (2021). Seven undescribed steroids from the leaves of *Datura metel* L. *Steroids*, 173, 108877.
- Lomlin L., Jirayupong N. and Plubrukan A., (2003), *Heat Accelerated Degradation of Solid State Andrographolide*, *Chemical Pharmaceutical Bulletin*, 51, 24-26
- Lu, R., Zhao, X., Li, J., Niu, P., Yang, B., Wu, H., ... & Tan, W. (2020). Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *The lancet*, 395(10224), 565-574.
- Mahboubi, M. and Kazempour, N., (2014). Chemical composition and antimicrobial activity of peppermint (*Mentha piperita* L.) *Essential oil. Songklanakar J. Sci. Technol*, 36(1), pp.83-87.
- Mahon, CR; Lechman, D. M. G. (2019). *Textbook of Diagnostic Microbiology*. In Elsevier (6th ed., Vol.15, Issue 3). Elsevier. <https://doi.org/10.2307/486972>.
- Mangalagiri, N.P., Panditi, S.K. and Jeevigunta, N.L.L., (2021). Antimicrobial activity of essential plant oils and their major components. *Heliyon*, 7(4), p.e06835.
- Martunis, M. (2012). Pengaruh suhu dan lama pengeringan terhadap kuantitas dan kualitas pati kentang varietas granola. *Jurnal Teknologi dan Industri Pertanian Indonesia*, 4(3).
- Meena AK, Goyal R, Subraya BG, Kamath S, Anand KM, Aggrawal M. A novel anti-oxidant lemon grass oil mouth wash - a clinical trial. *Asian J ExpBiol Sci*. (2011); 2(3): 482-6.
- Mercy Ngajow, Jemmy Abidjulu, Vanda S. Kamu., (2013), Pengaruh Antibakteri Ekstrak Kulit Batang Matoa (*Pometia pinnata*) terhadap Bakteri *Staphylococcus aureus* secara In vitro.

- Meyer, M. C., Rastogi, P., Beckett, C. S., & McHowat, J. (2005). Phospholipase A2 inhibitors as potential anti-inflammatory agents. *Current pharmaceutical design*, 11(10), 1301-1312.
- Miean KH, Mohamed S. Flavonoid (Myricitin, Quercetin, Kaempferol, Luteolin, and Apigenin) Content of Edible Tropical Plants. *J Agric Food Chem* (2001);49:3106-12
- Millezi, A.F., Caixeta, D.S., Rossoni, D.F., Cardoso, M.D.G. and Piccoli, R.H., (2012). In vitro antimicrobial properties of plant essential oils Thymus vulgaris, Cymbopogon citratus and Laurus nobilis against five important foodborne pathogens. *Food Science and Technology*, 32(1), pp.167-172.
- Mishra, U.S.; Mishra, A.; Kumari, R.; Murthy, P.N.; Naik, B.S. Antibacterial Activity of Ethanol Extract of *Andrographis paniculata*. *Indian J. Pharm. Sci.* (2009), 71, 436–438. [CrossRef]
- Moosavi-Nasab, M., Jamal Saharkhiz, M., Ziaee, E., Moayedi, F., Koshani, R. and Azizi, R., (2016). Chemical compositions and antibacterial activities of five selected aromatic plants essential oils against foodborne pathogens and spoilage bacteria. *Journal of Essential Oil Research*, 28(3), pp.241-251.
- Mpila DA, Fatimawali, Wiyono WI. Uji Aktivitas Antibakteri Ekstrak Etanol Daun Mayana (*Coleus atropurpureus* [L] Benth) terhadap *Staphylococcus aureus*, *Escherichia coli* dan *Pseudomonas aeruginosa* secara InVitro. Manado: Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Sam Ratulangi. (2012);1(1):13-21.
- Mukunya, D., (2019). Infections: HIV and related-diseases, anti-microbial resistance and neglected tropical diseases. *African Health Sciences*, 19(2), pp.IV-V.
- Muthusamy, A., Punitha, M, and Beslin, L. G. (2014). *Phytochemical Screening of Datura metel Linn and Its Antimicrobial Activity on Selected Human Pathogens*. *International Journal of Bioassays*, 3(11), 3474-3478
- Mutlu-Ingok, A., Devecioglu, D., Dikmetas, D.N., Karbancioglu-Guler, F. and Capanoglu, E., (2020). Antibacterial, antifungal, antimycotoxigenic, and antioxidant activities of essential oils: *An Updated Review*. *Molecules*, 25(20), p.4711.
- Naumann, H. D., Muir, J. P., Lambert, B. D., Tedeschi, L. O., & Kothmann, M. M. (2013). Condensed tannins in the ruminant environment: a perspective on biological activity. *Journal of Agricultural Sciences*, 1(1), 8-20.

- Nayaka, N.M.D.M.W., Sasadara, M.M.V., Sanjaya, D.A., Yuda, P.E.S.K., Dewi, N.L.K.A.A., Cahyaningsih, E. and Hartati, R., (2021). Piper betle (L): Recent review of antibacterial and antifungal properties, safety profiles, and commercial applications. *Molecules*, 26(8), p.2321.
- Ngajow, M., Jemmy. A., Kamu, V.S. (2013). Pengaruh Antibakteri Ekstrak Kulit batang Matoa (*Pometia pinnata*) terhadap Bakteri *Staphylococcus aureus* secara In Vitro. FMIPA Unsrat Manado. *Jurnal MIPA UNSRAT Online* 2(2): 128-132
- Nguefack, J.; Budde, B.B.; Jakobsen, M. *Five essential oils from aromatic plants of Cameroon: Their antibacterial activity and ability to permeabilize the cytoplasmic membrane of Listeria innocua examined by flow cytometry*. *Lett. Appl. Microbiol.* (2004), 39, 395–400, doi:10.1111/j.1472-765X.2004.01587.x.
- Niah, R., & Baharsyah, R. N. (2018). Potensi Ekstrak Daun Tanaman Karamunting (*Melastoma Malabathricum* L.) Di Daerah Kalimantan Sebagai Antibakteri *Staphylococcus Aureus*. *Jurnal Ilmiah Manuntung*, 4(1), 36-40.
- Noor El-Deen, A., Mona, M. I., Mohamed, A. E., & Omima, A. (2010). Comparative studies on the impact of Humic acid and formalin on ectoparasitic infestation in Nile tilapia *Oreochromis niloticus*. *Nature and Science*, 8(2), 121-125.
- Nuria, M.C., A. Faizatun., and 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.
- Nuria, M.C., A. Faizatun., dan Sumantri. (2009). Uji Antibakteri Ekstrak Etanol Daun Jarak Pagar (*Jatropha curcas* L) terhadap Bakteri *Staphylococcus aureus* ATCC 25923, *Escherichia coli* ATCC 25922, dan *Salmonella typhi* ATCC 1408. *Jurnal Ilmu – ilmu Pertanian*. 5: 26 – 37
- Nurmashita, D.; Rijai, L.; Sulistiarini, R. Pengaruh Penambahan Ekstrak Daun Kemangi (*Ocimum basilicum* L.) Terhadap Aktivitas Antibakteri Basis Pasta Gigi. *J. Sains dan Kesehatan*. (2015), 1, 159–167, doi:10.25026/jsk.v1i4.34.
- Ochieng, J. B., Boisen, N., Lindsay, B., Santiago, A., Ouma, C., Ombok, M., ... & Nataro, J. P. (2014). *Serratia marcescens* is injurious to intestinal epithelial cells. *Gut Microbes*, 5(6), 729-736.
- Okwu, D. E., & Igara, E. C. (2009). Isolation, characterization and antibacterial activity of alkaloid from *Datura metel* Linn leaves. *African Journal of pharmacy and pharmacology*, 3(5), 277-281.

- Onawunmi, G.O., Yisak, W.A. and Ogunlana, E.O., (1984). Antibacterial constituents in the essential oil of *Cymbopogon citratus* (DC.) Stapf. *Journal of Ethnopharmacology*, 12(3), pp.279-286.
- Orth, A. B., Royse, D. J., & Tien, M. I. N. G. (1993). Ubiquity of lignin-degrading peroxidases among various wood-degrading fungi. *Applied and environmental microbiology*, 59(12), 4017-4023.
- Paju N, Yamlean PV, Kojong N (2013). Uji Efektivitas Salep Ekstrak Daun Binahong (*Anredera cordifolia* Steenis.) pada Kelinci (*Oryctolagus cuniculus*) yang Terinfeksi Bakteri *Staphylococcus aureus*. *Pharmakon* 2(1):51–61.
- Pari L, Karamac M, Kosinska A, Rybarczyk A, Amarowicz R. (2007). Antioxidant activity of the crude extracts of drumstick tree (*Moringaoleifera* Lam.) and sweet brommweed (*SopariaducistL*) leaves. *Polish Journal Of Food And Nutrition Sciences* 57(2) :201-208.
- Patra, B., Deep, S.K., Rosalin, R. and Pradhan, S.N., (2022). Flavored Food Additives on the Leaves of Piper betle L.: A Human Health Perspective. *Applied Biochemistry and Biotechnology*, pp.1-23.
- Paul M, Anto KB. Antibacterial activity of *Sauropus androgynus* (L.) Merr. *Int J Plant Sci.* (2010);6:189–92.
- Peixoto, J. R. O., Silva, G. C., Costa, R. A., Vieira, G. H. F., Fonteles Filho, A. A., & dos Fernandes Vieira, R. H. S. (2011). In vitro antibacterial effect of aqueous and ethanolic *Moringa* leaf extracts. *Asian Pacific journal of tropical medicine*, 4(3), 201-204.
- Permatasari, A.; Kusmita, L.; Franyoto, Y.D. Uji Aktivitas Antibakteri Kombinasi Minyak Atsiri Umbi Bawang merah (*Allium Cepa* L.) dan Daun Kemangi (*Ocimum americanum* L.) terhadap Bakteri *Staphylococcus aureus* Atcc 25923 Secara In Vitro. *Media Farm. Indonesia.* (2015), 10, 151–355
- Petrus, A.J.A. (2013). *Sauropus androgynus* (L.) Merrill-A potentially nutritive functional leafy-vegetable. *Asian Journal of Chemistry.*25(17):9425-9433.
- Phanthong, P.; Lomarat, P.; Chomnawang, M.T.; Bunyapraphatsara, N. *Antibacterial activity of essential oils and their active components from Thai spices against foodborne pathogens.* *ScienceAsia* (2013), 39, 472–476, doi:10.2306/scienceasia1513-1874.2013.39.472
- Pollack R.A., Findlay L., Mondschein W., Modesto R.R. (2016). *Praktik Laboratorium Mikrobiologi (Laboratory Exercises in Microbiology)*, Edisi 4. Jakarta: Buku Kedokteran EGC.
- Prabu, S. L., Umamaheswari, A., & Puratchikody, A. (2019). Phytopharmacological potential of the natural gift *Moringa oleifera*

- Lam and its therapeutic application: An overview. *Asian Pacific Journal of Tropical Medicine*, 12(11), 485.
- Prabu, S.L., Umamaheswari, A. and Puratchikody, A., (2019). Phytopharmacological potential of the natural gift *Moringa oleifera* Lam and its therapeutic application: An overview. *Asian Pacific Journal of Tropical Medicine*, 12(11), p.485.
- Prapanza I, Marianto LA. Khasiat dan manfaat sambiloto: raja pahit penakluk aneka penyakit. Jakarta: Agromedia Pustaka; (2003).
- Prisinda, D., Setiawan, A. S., & Fitriadi, F. (2018). *Antibacterial potential of Ocimum sanctum oils in relation to Enterococcus faecalis ATCC 29212. Dental Journal (Majalah Kedokteran Gigi)*, 51(3), 104-107.
- Adam, Z.A.; Omer, A.F.A. Antibacterial Activity of *Azadirachta indica* (Neem) Leaf Extract against Bacterial Pathogens in Sudan. *Am. J. Res. Commun.* (2015), 3, 246–251.
- Pulipati, S., Koushik, O.S. and Babu, P.S., (2016). Phytochemical analysis and antibacterial efficacy of *Mentha piperita* (L) ethanolic leaf extract against clinical isolates of uropathogens. *British Microbiology Research Journal*, 13(6), pp.1-5.
- Purnamaningsih H, Nururrozi A, Indarjulianto S. Saponin : Dampak terhadap Ternak (Ulasan) Saponin : *Impact on Livestock (A Review)*. *J Peternak Sriwij.* (2017);6(2):79-90.
- Purwoko, M.Y., Syamsudin, S. and Simanjuntak, P., (2020). Standardisasi Parameter Spesifik dan Nonspesifik Ekstrak Etanol Daun Kelor (*Moringa oleifera*) Asal Kabupaten Blora. *SAINSTECH FARMA*, 13(2), pp.124-129.
- Putri, W. S., Warditiani, N. K., & Larasanty, L. P. F. (2013). Skrining fitokimia ekstrak etil asetat kulit buah manggis (*Garcinia mangostana* L.). *Jurnal Farmasi Udayana*, 2(4), 56-60.
- Qolbi, N., & Yuliani, R. (2018). Skrining Aktivitas Antibakteri Ekstrak Etanol 70% Sepuluh Daun Tanaman Terhadap *Klebsiella Pneumoniae*. *Pharmacon: Jurnal Farmasi Indonesia*, 15(1), 8-18.
- Rahayu, A., Rini, C.S., Prakoso, Y.A., Palgunadi, B.U. and Munandar, M.A., (2020). Effects of *Sauropus androgynus* extract and its combination with ampicillin against Methicillin-resistant *Staphylococcus aureus*: an in vitro study. *Int J One Health*, 6, pp.128-33.
- Rahman, M.M., Sheikh, M.M.I., Sharmin, S.A., Islam, M.S., Rahman, M.A., Rahman, M.M. and Alam, M.F., (2009). Antibacterial activity of leaf juice and extracts of *Moringa oleifera* Lam. against some human pathogenic bacteria. *CMU J Nat Sci*, 8(2), p.219.

- Rahmi Y, Darmawi, Mahdi A, Faisal J, Fakhrurrazi, dan Yudha F. (2015). Identification of *Staphylococcus aureus* in preputium and vagina of horses (*Equus caballus*). *Journal Medika Veterinaria*. 9(2): 15-158.
- Raja, R. R. (2012). Medicinally Potential Plants of Labiatae (Lamiaceae) family : An overview. *Res J Med Plant*: 1-11. Doi: 10.3923/rjmp.
- Ramadhani, P., & Mukhtar, H. (2017). Uji Aktivitas Antibakteri Ekstrak Etanol Daun Katuk (*Sauropus Androgynus* (L.) Merr) Terhadap Bakteri *Staphylococcus Aureus* Dan *Eschericia Coli* Dengan Metode Difusi Agar. *Indonesia Natural Research Pharmaceutical Journal*, 2(2), 34-45.
- Retnowati, Y., Bialangi, N., & Posangi, N. W. (2011). Pertumbuhan bakteri *Staphylococcus aureus* pada media yang diekspos dengan infus daun sambiloto (*Andrographis Paniculata*). *Jurnal Sainstek*, 6(2).
- Reveny J. Daya antimikroba ekstrak dan fraksi daun sirih merah (*Piper betle* Linn.). Sumatra Utara: *Jurnal Ilmu Dasar*. (2011); 12(1): 6-12.
- Rifai, M. A. (1981). Plasma Nutfah, erosi genetika dan usaha pelestarian tumbuhan obat Indonesia. Makalah Pertemuan Konsultasi Penyuluhan Pengadaan Tanaman Obat. Dit. Jen. POM Dep. Kes, Jakarta 6-8 April 1981.
- Rinawati, N.D. (2010). Daya Antibakteri Tumbuhan Majapahit (*Crescentia cujete* L.) terhadap *Vibrio alginolyticus*. *Jurnal Biologi*. Fakultas MIPA Institut Teknologi Sepuluh November, Surabaya.
- Row, L.C.M. and Ho, J.C., (2009). The antimicrobial activity, mosquito larvicidal activity, antioxidant property and tyrosinase inhibition of *Piper betle*. *Journal of the Chinese Chemical Society*, 56(3), pp.653-658.
- Saeed, S., Naim, A. and Tariq, P., (2006). In vitro antibacterial activity of peppermint. *Pakistan Journal of Botany*, 38(3), p.869.
- Safitri AU (2016) Aktivitas Antibakteri Nanopartikel Kitosan Berbasis Cangkang Lobster terhadap Bakteri. *Staphylococcus aureus* dan *Staphylococcus epidermidis*. FPIK IPB. Bogor
- Salamon, I., Kryvtsova, M., Bucko, D. and Tarawneh, A.H., (2021). Chemical characterization and antimicrobial activity of some essential oils after their industrial large-scale distillation. *Journal of microbiology, biotechnology and food sciences*, 2021, pp.984-988.
- Salasa, A. M., Daswi, D. R., & Arisanty, A. (2022). Potensi Antibakteri Ekstrak Etanol Daun Pegagan (*Centella asiatica* (L.) Urban) Terhadap Pertumbuhan *Enterococcus faecalis* dan *Citrobacter freundii*. *Media Farmasi*, 18(1), 67-73.

- Saleh, M., Rares, F. E., & Soeliongan, S. (2015). Pola Bakteri aerob penyebab infeksi nosokomial pada ruangan neonatal intensive care unit (NICU) BLU RSUP Prof. Dr. R. D Kandou Manado. *e-Biomedik*, 3(1).
- Sandi, A., Sangadji, M. N., & Samudin, S. (2019). (Moringa oleifera L.) PADA BERBAGAI KETINGGIAN TEMPAT TUMBUH. e-J. Agrotekbis, 7(1), 9.
- Santana, T., Rahayu, A., & Mulyaningsih, Y. (2021). Karakterisasi morfologi dan kualitas berbagai aksesi katuk (*Sauropus androgynus* (L.) Merr.). *Jurnal Agronida*, 7(1).
- Sawitti, Yendhi M, Mahatmi H, Besung INK. Daya hambat perasan daun sambiloto terhadap pertumbuhan bakteri *Escherichia coli*. *Indonesia Medicus Veterinus*. (2013);2(2):142–50.
- Schuhmacher A, Reichling J, Schnitzler P. Virucidal effect of peppermint oil on the enveloped viruses herpes simplex virus type 1 and type 2 in vitro. *Phytomedicine*. (2003);10(6-7):504-10.
- Setyorini, E., (2013). Hubungan Praktek Higiene Pedagang Dengan Keberadaan *Escherichia Coli* Pada Rujak Yang Di Jual Di Sekitar Kampus Universitas Negeri Semarang. *Unnes Journal of Public Health*, 2(3).
- Shafique, M.; Khan, S.J.; Khan, N.H. *Study of antioxidant and antimicrobial activity of sweet basil (Ocimum basilicum) essential oil*. *Pharmacologyonline* (2011), 1, 105–111.
- Shah, G., Shri, R., Panchal, V., Sharma, N., Singh, B., & Mann, A. S. (2011). Scientific basis for the therapeutic use of *Cymbopogon citratus*, stapf (Lemon grass). *Journal of advanced pharmaceutical technology & research*,2(1).3.
- Sharma, M., Dhaliwal, I., Rana, K., Delta, A.K. and Kaushik, P., (2021). Phytochemistry, Pharmacology, and Toxicology of *Datura* Species—A Review. *Antioxidants*, 10(8), p.1291.
- Sienkiewicz, M.; Łysakowska, M.; Pastuszka, M.; Bienias, W.; Kowalczyk, E. *The potential of use basil and rosemary essential oils as effective antibacterial agents*. *Molecules* (2013), 18, 9334–9351, doi:10.3390/molecules18089334.
- Silalahi, M. (2020). *Phyllanthus amarus* Schum Dan Bioaktivitasnya. *Jurnal Pendidikan dan Biologi*, 12(1), 44-51.
- Silalahi, M., Nisyawati, E.B. Walujo, J. Supriatna, and W. Mangunwardoyo. (2015). The local knowledge of medicinal plants trader and diversity of medicinal plantsin the Kabanjahe traditional market, North Sumatra, Indonesia. *Journal of Ethnopharmacology* 175: 432-443.

- Silveira, S.M.D., Cunha Júnior, A., Scheuermann, G.N., Secchi, F.L. and Vieira, C.R.W., (2012). Chemical composition and antimicrobial activity of essential oils from selected herbs cultivated in the South of Brazil against food spoilage and foodborne pathogens. *Ciência Rural*, 42, pp.1300-1306.
- Singh, R., Shushni, M.A. and Belkheir, A., (2015). Antibacterial and antioxidant activities of *Mentha piperita* L. *Arabian Journal of Chemistry*, 8(3), pp.322-328.
- Sipayung, Y., P. Surjowardojo., Sarwiyono. (2014). Inhibition of *Moringa Oleifera* Lam Leaf Juice to Growth of *Streptococcus bovis* and *Escherichia coli* that Caused Mastitis in Dairy Cows. Fakultas Peternakan Universitas Brawijaya. Malang
- Siswanto E. (2015). Pengaruh Aromaterapi Daun Mint Dengan Inhalasi Sederhana Terhadap Penurunan Sesak Nafas Pada Pasien Tuberculosis Paru. *Jurnal Keperawatan dan Kebidanan*. STIKes Dian Husada Mojokerto.
- Soekiman S. Infeksi nosokomial di rumah sakit. Jakarta: CV sagung seto; (2016): h. 26-38.
- Soković, M., Glamočlija, J., Marin, P.D., Brkić, D. and Van Griensven, L.J., (2010). Antibacterial effects of the essential oils of commonly consumed medicinal herbs using an in vitro model. *Molecules*, 15(11), pp.7532-7546.
- Srimoon, Rawinipa, and Suchanya Ngiewthaisong. "Antioxidant and antibacterial activities of Indian marsh fleabane (*Pluchea indica* (L.) Less)." *Asia-Pacific Journal of Science and Technology* 20, no. 2 (2015): 144-154.
- Stiles Me, & Lai-King Ng ., (1981), *Biochemical Characteristics And Identification Of Enterobacteriaceae Isolated from Meats*, Applied And Environmental Microbiology, Vol. 41, No. 3, hal. 639-645
- Sujono, H., Rizal, S., Purbaya, S. and Jasmansyah, J., (2019). Antibacterial Activity of the Essential Oil from Betel leaf (*Piper betle* L.) against *Streptococcus pyogenes* and *Staphylococcus aureus*. *Jurnal Kartika Kimia*, 2(1), pp.30-36.
- Sule A, Ahmed QU, Samah OA, Omar MN. Screening for Antibacterial Activity of *Andrographis paniculata* used in Malaysian folkloric medicine: A possible alternative for the treatment of skin infections. *Ethnobotanical Leaflets*. (2010); 14:445-56.
- Sulistyaningsih, T., Hapsari, R., & Farida, H. (2018). Perbandingan Pertumbuhan *Haemophilus Influnzae* Pada Agar Coklat Berbasis Blood

Agar, Tryptic Soy Agar dan Columbia Agar. *Diponegoro Medical Journal (Jurnal Kedokteran Diponegoro)*, 7(2), 1622-1634.

- Suru, E., Yamlean, P. V., & Lolo, W. A. (2019). Formulasi dan uji efektivitas krim antibakteri ekstrak etanol daun beluntas (*Pluchea indica* Less.) terhadap bakteri *Propionibacterium acnes*. *PHARMACON*, 8(1), 214-224.
- Susanti, N.M.P, Budiman, I.N.A, Warditiani, N.K. 2014. Skrining Fitokimia Ekstrak Etanol 90% Daun (*Sauropus androgynus* (L.) Merr.). UNUD. Bali.. Syafira, A. F., Masyhudi, M., & Yani, S. (2019). Efektivitas Ekstrak Etanol Daun Beluntas *Pluchea Indica* (L.) Less Terhadap Bakteri Saliva Secara In Vitro. *ODONTO: Dental Journal*, 6(2), 68-75.
- Syahrurachman A, Chatim A, Asmono N. (1993). Mikrobiologi Kedokteran. Binarupa Aksara, Jakarta. [Indonesian].
- Szymanowska, U.; Złotek, U.; Karaš, M.; Baraniak, B. *Anti-inflammatory and antioxidative activity of anthocyanins from purple basil leaves induced by selected abiotic elicitors*. *Food Chem.* (2015), 172, 71–77, doi:10.1016/j.foodchem.(2014).09.043.
- Tafrihi, M., Imran, M., Tufail, T., Gondal, T.A., Caruso, G., Sharma, S., Sharma, R., Atanassova, M., Atanassov, L., Valere Tsouh Fokou, P. and Pezzani, R., (2021). The wonderful activities of the genus *Mentha*: Not only antioxidant properties. *Molecules*, 26(4), p.1118.
- Tapsell, L.C. Hemphill, I., Cobiac, L., Patch, C.S., Sullivan, D.R., Fenech, M., Roodenrys, S., Keogh, J.B., Clifton, P.M., Williams, P.G., Fazio, V.A., Inge, K.E. (2006). Health benefits of herbs and spices: the past, the present, the future. *Med. J. Aust*, 185 (Suppl.4), S4-S24.
- Taukoorah, U.; Lall, N.; Mahomoodally, F. Piper Betle L. (Betel Quid) Shows Bacteriostatic, Additive, and Synergistic Antimicrobial Action When Combined with Conventional Antibiotics. *S. Afr. J. Bot.* (2016), 105, 133–140. [CrossRef]
- Thomas, A. N. S. (2007). *Tanaman Obat Tradisional 2*. Yogyakarta: Kanisius.
- Thuy, B.T.P., Hieu, L.T., My, T.T.A., Hai, N.T.T., Loan, H.T.P., Thuy, N.T.T., Triet, N.T., Van Anh, T.T., Dieu, N.T.X., Quy, P.T. and Van Trung, N., (2021). Screening for *Streptococcus pyogenes* antibacterial and *Candida albicans* antifungal bioactivities of organic compounds in natural essential oils of *Piper betle* L., *Cleistocalyx operculatus* L. and *Ageratum conyzoides* L. *Chemical Papers*, 75(4), pp.1507-1519.
- Tjitrosoepomo, G. (2010). *Taksonomi tumbuhan obat-obatan*. Yogyakarta : Gajah Mada University Press.

- Tombakan, C., Waworuntu, O., & Buntuan, V. (2016). Potensi penyebaran infeksi nosokomial di ruangan instalasi rawat inap khusus tuberkulosis (irina c5) BLU Rsup Prof. Dr. RD Kandou Manado. *e-Biomedik*, 4(1).
- Trivedi Mahendra Kumar, Alice Branton, Dahryn Trivedi, Gopal Nayak, Mayank Gangwar, Snehasis Jana. (2015). Assessment of antibiogram of bifield energy treated *Serratia marcescens*. *European Journal of Preventive Medicine*
- Tsai, M.L., Wu, C.T., Lin, T.F., Lin, W.C., Huang, Y.C. and Yang, C.H., (2013). Chemical composition and biological properties of essential oils of two mint species. *Tropical Journal of Pharmaceutical Research*, 12(4), pp.577-582.
- Untoro M, Fachriyah E, Kusriani D. Jurnal Kimia Sains dan Aplikasi Isolasi dan Identifikasi Senyawa Golongan Alkaloid dari Rimpang Lengkuas Merah (*Alpinia purpurata*). *J Sci Appl Chem*. (2016);19(2):58-62.
- Valle Jr, D.L., Cabrera, E.C., Puzon, J.J.M. and Rivera, W.L., (2016). Antimicrobial activities of methanol, ethanol and supercritical CO₂ extracts of Philippine Piper betle L. on clinical isolates of gram positive and gram negative bacteria with transferable multiple drug resistance. *PloS one*, 11(1), p.e0146349.
- Valour F, Senechal A, Dupieux C, Karsenty J, Lustig S, Breton P, et al. Actinomycosis: etiology, clinical features, diagnosis, treatment, and management. *Infect Drug Resist*. (2014); 7:183-97.
- Verrillo, M., Cozzolino, V., Spaccini, R. and Piccolo, A., (2021). Humic substances from green compost increase bioactivity and antibacterial properties of essential oils in Basil leaves. *Chemical and Biological Technologies in Agriculture*, 8(1), pp.1-14.
- Vlase, L., Benedec, D., Hanganu, D., Damian, G., Csillag, I., Sevastre, B., Mot, A.C., Silaghi-Dumitrescu, R. and Tilea, I., (2014). Evaluation of antioxidant and antimicrobial activities and phenolic profile for *Hyssopus officinalis*, *Ocimum basilicum* and *Teucrium chamaedrys*. *Molecules*, 19(5), pp.5490-5507.
- Web A, Starr M. Acute gastroenteritis in children. *Aust Fam Physician* (2005);34:227-31
- Widjaja, E. A., Rahayuningsih, Y., Rahajoe, J. S., Ubaidillah, R., Maryanto, I., Walujo, E. B., & Semiadi, G. (Eds.). (2014). *Kekinian keanekaragaman hayati Indonesia*. LIPI Press.
- Widjaja, E. A., Rahayuningsih, Y., Rahajoe, J. S., Ubaidillah, R., Maryanto, I., Walujo, E. B., & Semiadi, G. (Eds.). (2014). *Kekinian keanekaragaman hayati Indonesia, 2014*. LIPI Press.

- Wijayanti, M.P., Yuliawati, S. and Hestningsih, R., (2015). Uji Toksisitas Ekstrak Daun Tembakau (*Nicotiana tobacum L.*) Dengan Metode Maserasi Terhadap Mortalitas Larva *Culex quinquefasciatus* Say. Di Laboratorium. *Jurnal Kesehatan Masyarakat (Undip)*, 3(1), pp.143-151.
- Winarno, F.G.(1995).*Kimia Pangan dan Gizi*.Gramedia Pustaka.Jakarta.
- Winarsih, S., Purwantiningrum, D. A., & Wardhani, A. S. (2015). Efek Antibakteri Ekstrak Daun Katuk (*Sauropus androgynus*) terhadap Pertumbuhan Salmonella Typhi secara In Vitro. *Mutiara Medika: Jurnal Kedokteran dan Kesehatan*, 15(2), 96-103.
- Madduluri, S., Rao, K. B., & Sitaram, B. (2013). In vitro evaluation of antibacterial activity of five indigenous plants extract against five bacterial pathogens of human. *International Journal of Pharmacy and Pharmaceutical Sciences*, 5(4), 679-684.
- Wondinu, T., Asfaw, Z., dan Kelbessa, E. (2007). Ethnobotanical study of medicinal plants around Dheeraa Town, Arsi Zone, Ethiopia. *Journal of Ethnopharmacology*. 112(04):152-161.
- Wu DC, Chan WW, Metelitsa AI, Fiorillo L, Lin AN. Pseudomonas skin infection. *Am J Clin Dermatol*. (2011);12(3):157–169.
- Yadegarinia, D., Gachkar, L., Rezaei, M.B., Taghizadeh, M., Astaneh, S.A. and Rasooli, I., (2006). Biochemical activities of Iranian *Mentha piperita L.* and *Myrtus communis L.* essential oils. *Phytochemistry*, 67(12), pp.1249-1255.
- Zaidan, M.R.; Noor Rain, A.; Badrul, A.R.; Adlin, A.; Norazah, A.; Zakiah, I. In vitro screening of five local medicinal plants for antibacterial activity using disc diffusion method. *Trop. Biomed.* (2005), 22, 165–170. [PubMed]