

## DAFTAR PUSTAKA

1. Ridawati; Sri Laksmi Jenie, B.; Djuwita, I.; Sjamsuridzal, W. Aktivitas Antifungal Minyak Atsiri Jinten Putih Terhadap *Candida parapsilosis* SS25, *C. orthopsis* NN14, *C. metapsilosis* MP27, Dan *C. etchellsii* MP18. *Makara Sains* 2011, 15 (1), 58–62.
2. Donsì, F.; Ferrari, G. Essential Oil Nanoemulsions as Antimicrobial Agents in Food. *J. Biotechnol.* 2016, 233, 106–120.
3. Okla, M. K.; Alamri, S. A.; Salem, M. Z. M.; Ali, H. M.; Behiry, S. I.; Nasser, R. A.; Alaraidh, I. A.; Al-Ghtani, S. M.; Soufan, W. Yield, Phytochemical Constituents, and Antibacterial Activity of Essential Oils from the Leaves/Twigs, Branches, Branch Wood, and Branch Bark of Sour Orange (*Citrus aurantium* L.). *Processes* 2019, 7 (6).
4. Efruan, G. K.; Martosupono, M.; Rondonuwu S, F. Bioaktifitas Senyawa 1 , 8-Sineol Pada Minyak Atsiri. *Semin. Nas. Pendidik. dan Saintek* 2016 2016, 2016, 171–181.
5. Rasooli, I.; Allameh, A. Caraway (*Carum carvi* L.) Essential Oils. In *Essential Oils in Food Preservation, Flavor and Safety*; Preedy, V. R., Ed.; 2016; pp 287–293. <https://doi.org/10.1016/B978-0-12-416641-7.00032-8>.
6. Begum, J.; Bhuiyan, M. N. I.; Chowdhury, J. U.; Hoque, M. N.; Anwar, M. N. Antimicrobial Activity of Essential Oil from Seeds of *Carum carvi* and Its Composition. *Bangladesh J. Microbiol.* 2008, 25 (2), 85–89.
7. Johri, R. K. *Cuminum cymimum* and *Carum carvi*: An Update. *Pharmacogn. Rev.* 2011, 5 (9), 63–72. <https://doi.org/10.4103/0973-7847.79101>.
8. Sachan, A. K.; Das, D. R.; Kumar, M. *Carum carvi*-An Important Medicinal Plant. *J. Chem. Pharm. Res.* 2016, 8 (3), 529–533.
9. Khalil, N.; Ashour, M.; Fikry, S.; Singab, A. N.; Salama, O. Chemical Composition and Antimicrobial Activity of the Essential Oils of Selected Apiaceous Fruits. *Futur. J. Pharm. Sci.* 2018, 4 (1), 88–92.
10. Lasram, S.; Zemni, H.; Hamdi, Z.; Chenenaoui, S.; Houissa, H.; Tounsi, M. S.; Ghorbel, A. Antifungal and Antiaflatoxinogenic Activities of *Carum carvi* L., *Coriandrum sativum* L. Seed Essential Oils and Their Major Terpene Component against *Aspergillus Flavus*. *Ind. Crops Prod.* 2019, 134 (March), 11–18. <https://doi.org/10.1016/j.indcrop.2019.03.037>.
11. Nasiri, S.; Shams-ghahfarokhi, M.; Razzaghi-abyaneh, M. Inhibitory Effect of *Carum carvi* Essential Oil on the Growth of *Candida albicans*. *Sci. J. Microbiol.* 2014, 3 (July), 74–77. <https://doi.org/10.14196/sjm.v3i7.1510>.
12. Hajlaoui, H.; Arraouadi, S.; Noumi, E.; Aouadi, K.; Adnan, M.; Khan, M. A.; Kadri, A.; Snoussi, M. Antimicrobial, Antioxidant, Anti-Acetylcholinesterase, Antidiabetic, and Pharmacokinetic Properties of *Carum carvi* L. and *Coriandrum sativum* L. Essential Oils Alone and in Combination. *Molecules* 2021, 2–18.
13. Goyal, M.; Gupta, V. K.; Singh, N.; Mrinal. *Carum carvi*- An Updated Review. *Indian J. Pharm. Biol. Res.* 2018, 6 (04), 14–24. <https://doi.org/10.30750/ijpbr.6.4.4>.
14. Mugao, L. G.; Gichimu, B. M.; Muturi, P. W.; Mukono, S. T. Characterization of the Volatile Components of Essential Oils of Selected Plants in Kenya. *Biochem. Res. Int.* 2020, 2020, 1–8. <https://doi.org/10.1155/2020/8861798>.
15. Mayuni. *Teknologi Dan Analisa Minyak Atsiri*; Andalas University Press: Padang, 2006.
16. Heliawati, L. *Kimia Organik Bahan Alam*; Pascasarjana-UNPAK: Bogor, 2018.
17. Pandey, A. K.; Kumar, P.; Singh, P.; Tripathi, N. N.; Bajpai, V. K. Essential Oils :

- Sources of Antimicrobials and Food Preservatives. *Front. Microbiol.* 2017, 7 (January), 1–14. <https://doi.org/10.3389/fmicb.2016.02161>.
18. Rassem, H.; Nour, A.; Yunus, R. M. Techniques For Extraction of Essential Oils From Plants: A Review. *Aust. J. Basic Appl. Sci.* 2016, 10 (16), 117–127.
  19. Mustiadi, L.; Astuti, S.; Purkoncoro, A. E. *Buku Ajar Distilasi Uap Dan Bahan Bakar Pelet Arang Sampah Organik*; CV IRDH: Malang, 2020.
  20. Aryani, F.; Noorcahyati; Arbainsyah. *Pengenalan Atsiri ( Melaleuca Cajuputi ) Cara Poduksi Dan Pengujian*; Samarinda, 2020.
  21. Djafar, F.; Supardan, M. D.; Gani, A. Pengaruh Ukuran Partikel, SF Rasio Dan Waktu Proses Terhadap Rendemen Pada Hidrodistilasi Minyak Jahe (The Influence of Particle Size, SF Ratio and Time of Process to Yield in Hydrodistillation of Ginger Oil). *Has. Penelit. Ind.* 2010, 23 (2), 47–54.
  22. McMster, M. C. A GC/MS Primer. In *GC/MS: A Practical User's Guide*; Wiley, 2008; pp 1–20.
  23. Sastrohamidjojo, H. *Dasar-Dasar Spektroskopi*; Gadjah Mada University Press: Yogyakarta, 2013.
  24. Stashenko, E.; Martínez, J. R. Gas Chromatography-Mass Spectrometry; 2014.
  25. Burnett-Boothroyd, S. C.; McCarthy, B. J. Antimicrobial Treatments of Textiles for Hygiene and Infection Control Applications: An Industrial Perspective. *Text. Hyg. Infect. Control* 2011, 196–209.
  26. Krüger, W.; Vielreicher, S.; Kapitan, M.; Jacobsen, I. D.; Niemiec, M. J. Fungal-Bacterial Interactions in Health and Disease. *Pathog. (Basel, Switzerland)* 2019, 8 (2), 70.
  27. Radji, M. *Buku Ajar Mikrobiologi : Panduan Mahasiswa Farmasi & Kedokteran*; Manurung, J., Ed.; EGC: Jakarta, 2010.
  28. Mutiawati, V. K. Pemeriksaan Mikrobiologi Pada *Candida albicans*. 2016, 53–63.
  29. Ariani, N. *Rahasia Herbal Kurkumin Mengobati Vulvovaginal Kandidiasis*; Adriyanto, Ed.; Lakeisha: Klaten, 2021.
  30. Idroes, R.; Khairan; Nurisma, N. wulan; Wawaddah, N.; Pradysta, R. R. G.; Rofina. *Skrining Aktivitas Tumbuhan Yang Berpotensi Sebagai Bahan Antimikroba Di Kawasan IE BROK (Upflow Geothermal Zone) Aceh Besar*; Syiah Kuala University Press: Aceh, 2019.
  31. Yusmaniar; Wardiyah; Nida, K. *Mikrobiologi Dan Parasitologi*; 2017.
  32. Mounyr, B.; Sadiki, M.; Ibnsouda, S. K. Methods for in Vitro Evaluating Antimicrobial Activity : A Review. *J. Pharm. Anal.* 2016, 6 (2), 71–79.
  33. Putra, I. M. A. S. Uji Aktivitas Antibakteri Ekstrak Etanol Daun Sirsak (*Annonae muricata L.*) Dengan Metode Difusi Agar Cakram Terhadap *Escherichia coli*. *J. Ilm. Medicam.* 2015, 1 (1), 15–19.
  34. Lisnawati, N.; Prayoga, T. *Ekstrak Buah Belimbing Wuluh (Averrhoa bilimbi L.)*; CV. Jakad Media Publishing: Surabaya.
  35. Jelita, S. F.; Setyowati, G. W.; Ferdinand, M.; Zuhrotun, A.; Megantara, Z. Uji Toksisitas Infusa *Acalypha Siamesis* Dengan Metode Brine Shrimp Lethality Test (BSLT). *Farmaka* 2020, 18 (1), 14–22.
  36. Hamidi, M.; Jovanova, B.; Panovska, T. Toxicological Evaluation of the Plant Products Using Brine Shrimp (*Artemia salina L.*) Model. *Maced. Pharm. Bull.* 2014, 60 (1), 9–18.
  37. Utami, M. R.; Ardiyanti, Y. Analisis Aktivitas Toksisitas Beberapa Minyak Atsiri Dengan Metode Brine Shrimp Lethality Test. *J. Holist. Heal. Sci.* 2019, 3 (1), 14–20.
  38. Taghizadeh, S. F.; Rezaee, R.; Mehmandoust, M.; Madarshahi, F. S.; Tsatsakis, A.; Karimi, G. Coronatine Elicitation Alters Chemical Composition and Biological

- Properties of Cumin Seed Essential Oil. *Microb. Pathog.* 2019, **130** (March), 253–258.
39. Suryati; Aziz, E. D.; Efdi, M.; Wahyuni, F. S.; Hefni, D. Analysis of The Essential Oil from *Lantana camara* Leaves and Its Cytotoxic Potential Against T-47D Breast Cancer Cells. *J. Risat Kim.* 2021, **12**, 1–9.
  40. Hidayat, T. Isolasi Dan Analisis Minyak Atsiri Dari Piper betle Linn. Dan Piper Cf. Ramipilum C. Dc. Serta Uji Aktivitas Antibakteri, Universitas Andalas, 2020.
  41. Martiningsih, N. W.; Suryanti, I. A. P. Skrining Fitokimia Dan Aktivitas Antijamur Minyak Atsiri Daun Kemangi (*Ocimum Sp.*). In *Seminar Nasional Riset Inovatif*, 2017; pp 631–636.
  42. Meyer, B. N.; Ferrigni, N. R.; Putnam, J. E.; Jacobsen, L. B.; Nichols, D. E. .; McLaughlin, L. Brine Shrimp: A Convenient General Bioassay for Active Plant Constituents. *J. Med. Plant Reseach* 1982, **45**, 31–32.
  43. Laribi, B.; Kouki, K.; Bettaieb, T.; Mougou, A.; Marzouk, B. Essential Oils and Fatty Acids Composition of Tunisian , German and Egyptian Caraway (*Carum carvi L.*) Seed Ecotypes : A Comparative Study. *Ind. Crop. Prod.* 2013, **41**, 312–318. <https://doi.org/10.1016/j.indcrop.2012.04.060>.
  44. Gajić, I.; Stanojević, L.; Dinić1, A.; Stanojević, J.; Nikolić, L.; Nikolić, V.; Savić, V. The Chemical Composition of the Essential Oil and Volatile Compounds from Caraway Fruit (*Carum carvi L.*) Extracted by Headspace-Solid Phase Microextraction and the Antioxidant Activity. *Adv. Technol.* 2020, **9** (July), 37–43. <https://doi.org/10.5937/savteh2001037G>.
  45. Al-Rubaye, A. F.; Kadhim, M. J.; Hameed, I. H. Phytochemical Profiles of Methanolic Seeds Extract of *Cuminum cyminum* Using GC-MS Technique. *Int. J. Curr. Pharm. Rev. Res.* 2017, **8** (02), 114–124.
  46. Ahmed, A. F.; Shi, M.; Liu, C.; Kang, W. Comparative Analysis of Antioxidant Activities of Essential Oils and Extracts of Fennel (*Foeniculum vulgare* Mill.) Seeds from Egypt and China. *Food Sci. Hum. Wellness* 2019, **8** (1), 67–72.
  47. Pelczar, M.; Chan, E. C. S. *Dasar-Dasar Mikrobiologi* 2; UI Press: Jakarta, 2009.
  48. Sudewi, S.; Lolo, W. A. Kombinasi Ekstrak Buah Mengkudu (*Morinda citrifolia* L.) Dan Daun Sirsak (*Annona muricata* L.) Dalam Menghambat Bakteri *Escherichia coli* Dan *Staphylococcus aureus* (Combination of Noni Fruit Extract (*Morinda citrifolia* L.) and Soursop Leaves (*Annona Muricata*. *Kartika J. Ilm. Farm.* 2016, **4** (2), 36–42. <https://doi.org/10.26874/kjif.v4i2.65>.
  49. Ibrahim, S.; Suryati; Aziz, E. D. Uji Aktivitas Sitotoksik Dan Antibakteri Ekstrak Daun Tumbuhan Rengas (*Gluta renghas* L ). *J. Risat Kim.* 2020, **11** (1), 52–60.
  50. Rahmawati, D. *Mikrobiologi Farmasi: Dasar-Dasar Mikrobiologi Untuk Mahasiswa Farmasi*; Pustaka Baru Press: Yogyakarta, 2019.
  51. Kurnilia, K. W.; Sudirga, S. K.; Ramona, Y. Potensi Minyak Atsiri Cananga Odorata Dan *Cymbopogon Citratus* Dalam Menghambat Pertumbuhan *Staphylococcus aureus* ATCC 25923 Dan *Candida albicans* ATCC 10231 Secara In Vitro. *Metamorf. J. Biol. Sci.* 2020, **7** (2), 191–198.
  52. Farag, R. S.; Daw, Z. Y.; Abo-Raya, S. H. Influence of Some Spice Essential Oils on *Aspergillus Parasiticus* Growth and Production of Aflatoxins in a Synthetic Medium. *J. Food Sci.* 1989, **54** (1), 74–76.
  53. Rahmi, M.; Felicia, A. A. Antifungal Activity of Onion (*Allium cepa* L .) Essential Oil on *Candida albicans*. *Ilmu Gizi Indones.* 2019, **03** (01), 59–64.
  54. Shahbazi, Y. Chemical Composition and In Vitro Antibacterial Activity of *Mentha Spicata* Essential Oil against Common Food-Borne Pathogenic Bacteria. *J. Pathog.* 2015, **1**–5. <https://doi.org/10.1155/2015/916305>.
  55. Diaz, K.; Werner, E.; Besoain, X.; Flores, S.; Donoso, V.; Said, B.; Nelson, C.; Ernesto, V.; Montenegro, I.; Madrid, A. In Vitro Antifungal Activity and Toxicity of

- Dihydrocarvone-Hybrid Derivatives against *Monilinia Fructicola*. *antibiotics* 2021, 10 (818), 11.
- 56. Al-Behadili, W. A. A.; Faaz, R. A.; Tarmooz, A. A. Antifungal Activity of *Carum carvi* L . Extraction against *Candida albican* and *Aspergillus niger*. *Plant Arch.* 2019, 19 (November), 1799–1805.
  - 57. Zuraida. Analisis Toksisitas Beberapa Tumbuhan Hutan Dengan Metode Brine Shrimp Lethality Test (Bslt) (Toxicity Analysis of Forestry Plants Using Brine Shrimp Lethality Test (BSLT) Method). *J. Penelit. Has. Hutan* 2018, 36 (3), 239–246. <https://doi.org/10.20886/jphh.2018.36.3.239-246>.
  - 58. Castilho, R. B. de; Nunez, C. V.; Lago, A. F.; Santos, A. C. F.; Coutinho, L. H.; Lucas, C. A.; Pilling, S.; Silva-Moraes, M. O.; Souza, G. G. B. de. Excitation and Ionic Fragmentation of The Carvone Molecule (C<sub>10</sub>H<sub>14</sub>O) Aroundthe O 1s Edge. *J. Electron Spectros. Relat. Phenomena* 2014, 61–68.
  - 59. Marsius, S. Analisis Komponen Minyak Atsiri Kulit Jeruk Pepaya (Citrus Medical Varproper) Dengan GC-MS Dan Uji Antioksidan Menggunakan Metode DPPH, Sumatera Utara, 2015.
  - 60. Sibarani, R. Y. Analisis Komponen Kimia Dan Uji Aktivitas Antibakteri Serta Antioksidan Minyak Atsiri Daun Kemangi (O. X Africanum Lour.) Dari Daerah Tanah Jawa, Universitas Sumatera Utara, 2019.

