

DAFTAR PUSTAKA

- Ali K, Hamed MA, Hassan H, Esmail A, Sheneef A. 2018. Identification of fungal pathogens in otomycosis and their drug sensitivity: Our experience. *Int. Arch. Otorhinolaryngol.* 22(4):400–403.
- Alide T, Wangila P, Kiprop A. 2020. Effect of cooking temperature and time on total phenolic content, total flavonoid content and total in vitro antioxidant activity of garlic. *BMC Res. Notes.* 13(1):1–7.
- Atchade E, Jean-Baptiste S, Houzé S, Chabut C, Massias L, Castier Y, Brugière O, Mal H, Montravers P. 2017. Fatal invasive aspergillosis caused by *Aspergillus niger* after bilateral lung transplantation. *Med. Mycol. Case Rep.* 17(April):4–7.
- Atif MJ, Amin B, Ghani MI, Ali M, Cheng Z. 2020. Variation in morphological and quality parameters in garlic (*Allium sativum* L.) bulb influenced by different photoperiod, temperature, sowing and harvesting time. *Plants.* 9(2):1–16.
- Bar M, Binduga UE, Szychowski KA. 2022. Methods of Isolation of Active Substances from Garlic (*Allium sativum* L.) and Its Impact on the Composition and Biological Properties of Garlic Extracts. *Antioxidants.* 11(7).
- Bavadharani S, Premamalini T, Karthika K, Kindo AJ. 2022. In Vitro Production of Virulence Factors and Antifungal Susceptibility Pattern of *Aspergillus* Isolates from Clinical Samples in a Tertiary Care Center. *J. Lab. Physicians.* 14(04):479–484.
- Bhadange YA, Carpenter J, Saharan VK. 2024. A Comprehensive Review on Advanced Extraction Techniques for Retrieving Bioactive Components from Natural Sources. *ACS Omega.* 9(29):31274–31297.
- Bhatwalkar SB, Mondal R, Krishna SBN, Adam JK, Govender P, Anupam R. 2021. Antibacterial Properties of Organosulfur Compounds of Garlic (*Allium sativum*). *Front. Microbiol.* 12(July):1–20.
- Bojanović M, Stalević M, Arsić-Arsenijević V, Ignjatović A, Randelović M, Golubović M, Živković-Marinkov E, Koraćević G, Stamenković B, Otašević S. 2023. Etiology, Predisposing Factors, Clinical Features and Diagnostic Procedure of Otomycosis: A Literature Review. *J. Fungi.* 9(6).
- Cadena J, Thompson GR, Patterson TF. 2021. Aspergillosis: Epidemiology, Diagnosis, and Treatment. *Infect. Dis. Clin. North Am.* 35(2):415–434.
- Cahyana I, Kurniasari L, Maharani F. 2021. Ekstraksi Senyawa Tanin Dari Kulit Bawang Putih (*Allium Sativum* L.) Berbantu Gelombang Mikro. *J. Fak. Tek. Univ. Wahid Hasyim.* 1(1):115–121.
- Chang YC, Lamichhane AK, Cai H, Walter PJ, Bennett JE, Kwon-Chung KJ. 2021.

- Moderate levels of 5-fluorocytosine cause the emergence of high frequency resistance in cryptococci. *Nat. Commun.* 12(1):1–13.
- Chaurasiya AK, Pradhananga RB, Sah NP, Rijal BP, Pokhrel BM, Dulal S. 2021. Invasive *Aspergillus niger* Is the Sole Etiological Agent for CSOM : A Clinical Case from Nepal. *Case Rep. Infect. Dis.* 2021:1–5.
- Chen Y, Gao Y, Yuan M, Zheng Z, Yin J. 2023. Anti-*Candida albicans* Effects and Mechanisms of Theasaponin E1 and Assamsaponin A. *Int. J. Mol. Sci.* 24(11).
- Christoper W, Natalia D, Rahmayanti S. 2018. Uji Aktivitas Antijamur Ekstrak Etanol Umbi Bawang Dayak (*Eleutherine americana* (Aubl.) Merr. Ex K. Heyne.) terhadap *Trichophyton mentagrophytes* secara In Vitro. *J. Kesehatan. Andalas.* 6(3):685.
- Corona-España AM, García-Ramírez MA, Rodríguez-Buenfil IM, Delgado-Saucedo JI, González-Reynoso O. 2025. Synthesis Mechanism and Therapeutic Effects of Thiosulfinates and Polysulfides of Different Species of Garlic from the *Allium* Genus. *Pharmaceutics.* 17(4).
- Denning DW. 2024. Global incidence and mortality of severe fungal disease. *LANCET Infect. Dis.* 24(7):428–438.
- Enrica Mello, Brunella Posteraro, Antonietta Vella, Elena De Carolis RT, Tiziana D’Inzeo, Paul E. Verweij MS. 2017. Susceptibility Testing of Common and Uncommon *Aspergillus* Species against Posaconazole and Other Mold-Active. 61(6):1–7.
- Espinel-Ingroff A, Arthington-Skaggs B, Iqbal N, Ellis D, Pfaller MA, Messer S, Rinaldi M, Fothergill A, Gibbs DL, Wang A. 2007. Multicenter evaluation of a new disk agar diffusion method for susceptibility testing of filamentous fungi with voriconazole, posaconazole, itraconazole, amphotericin B, and caspofungin. *J. Clin. Microbiol.* 45(6):1811–1820.
- Faturrahman F, Sukiman S, Suryadi BF, Sarkono S, Hidayati E. 2022. Perbandingan Aktivitas Antimikroba Ekstrak Etanol dari Tiga Spesies *Ganoderma* Asal Pulau Lombok. *J. Sains Teknol. Lingkungan.* 7(2):160–172.
- Fitriana YAN, Fatimah VAN, Fitri AS. 2020. Aktivitas Anti Bakteri Daun Sirih: Uji Ekstrak KHM (Kadar Hambat Minimum) dan KBM (Kadar Bakterisidal Minimum). *Sainteks.* 16(2):101–108.
- Gharaghani M, Halvaezadeh M, Jalaei GA, Taghipour S, Kiasat N, Mahmoudabadi AZ. 2020. Antifungal susceptibility profiles of otomycosis etiological agents in Ahvaz, Iran. *Curr. Med. Mycol.* 6(2):18–22.
- Ghorbel D, Hadrich I, Neji S, Trabelsi H, Belaaj H, Sellami H, Cheikhrouhou F, Makni F, Ayadi A. 2019. Detection of virulence factors and antifungal susceptibility of human and avian *Aspergillus flavus* isolates. *J. Mycol. Med.* 29(4):292–302.

- Gonzalez-jimenez I, Keniya M V, Aptekmann AA, Quinteros C, Wilkerson A, Arastehfar A, Daneshnia F, Perlin DS, Shor E. 2025. at both transcriptional and post-transcriptional levels. 69(8).
- Hafifah H, Widyanti T, Rauf D, Basarang M. 2021. Uji Daya Hambat Perasan Bawang Putih (*Allium sativum* L) Terhadap Pertumbuhan *Aspergillus niger*. *J. Med.* 6(1):10–15.
- Huang Y, Su Y, Chen X, Xiao M, Xu Y. 2024. Insight into Virulence and Mechanisms of Amphotericin B Resistance in the *Candida haemulonii* Complex. *J. Fungi.* 10(9).
- Janik S, Luchowski R, Grela E, Grudzinski W, Gruszecki WI. 2024. How Does the Antibiotic Amphotericin B Enter Membranes and What Does It Do There? *J. Phys. Chem. Lett.* 15(18):4823–4827.
- Jospe-Kaufman M, Ben-Zeev E, Mottola A, Dukhovny A, Berman J, Carmeli S, Fridman M. 2024. Reshaping Echinocandin Antifungal Drugs To Circumvent Glucan Synthase Point-Mutation-Mediated Resistance. *Angew. Chemie - Int. Ed.* 63(9).
- Julianto ST. 2019. *Fitokimia: Tinjauan Metabolit Sekunder dan Skrining Fitokimia*. Yogyakarta: Universitas Islam Indonesia.
- Kainz K, Bauer MA, Madeo F, Carmona-Gutierrez D. 2020. Fungal infections in humans: The silent crisis. *Microb. Cell.* 7(6):143–145.
- Kanaujia R, Singh S, Rudramurthy SM. 2023. Aspergillosis: an Update on Clinical Spectrum, Diagnostic Schemes, and Management. *Curr. Fungal Infect. Rep.* 17(2):144–155.
- Krisniawati N, Darmawan AB, Widhi APKN, Hestiyani RAN, Rujito L. 2023. Exploring Antibiotic Susceptibility in Otomycosis: Uncovering Mixed Infections of Fungal and Bacterial Origin in Indonesia. *Infect. Epidemiol. Microbiol.* 9(3):229–238.
- Kristiananda D, Allo JL, Widjarahma VA, Lusiana L, Noverita JM, Octa Riswanto FD, Setyaningsih D. 2022. AKTIVITAS BAWANG PUTIH (*Allium sativum* L.) SEBAGAI AGEN ANTIBAKTERI. *J. Ilmu Farm. dan Farm. Klin.* 19(1):46.
- Kusmiyati, Agustini NWS. 2006. Antibacterial activity assay from *Porphyridium cruentum* microalgae. *Biodiversitas J. Biol. Divers.* 8(1):48–53.
- Lass-Flörl C, Cuenca-Estrella M, Denning DW, Rodriguez-Tudela JL. 2006. Antifungal susceptibility testing in *Aspergillus* spp. according to EUCAST methodology. *Med. Mycol.* 44(SUPPL. 1):319–325.
- Lee Y, Robbins N, Cowen LE. 2023. Molecular mechanisms governing antifungal drug resistance. *npj Antimicrob. Resist.* 1(1):1–9.

- Li N, Zhang J, Yu F, Ye F, Tan W, Hao L, Li S, Deng J, Hu X. 2024. Garlic-Derived Quorum Sensing Inhibitors: A Novel Strategy Against Fungal Resistance. *Drug Des. Devel. Ther.* 18(December):6413–6426.
- Li Zhun, Li Zhengtu, Yang Jun, Lu C, Li Y, Luo Y, Cong F, Shi R, Wang Z, Chen H, *et al.* 2022. Allicin shows antifungal efficacy against *Cryptococcus neoformans* by blocking the fungal cell membrane. *Front. Microbiol.* 13(November):1–13.
- Liao Y, Li Z, Zhou Q, Sheng M, Qu Q, Shi Y, Yang J, Lv L, Dai X, Shi X. 2021. Saponin surfactants used in drug delivery systems: A new application for natural medicine components. *Int. J. Pharm.* 603(February):120709.
- Lima MAS, De Oliveira MDCF, Pimenta ATÁ, Uchôa PKS. 2019. *Aspergillus Niger*: A hundred years of contribution to the natural products chemistry. *J. Braz. Chem. Soc.* 30(10):2029–2059.
- Marr KA, Platt A, Tornheim JA, Zhang SX, Datta K, Cardozo C, Garcia-Vidal C. 2021. Aspergillosis Complicating Severe Coronavirus Disease - Volume 27, Number 1—January 2021 - Emerging Infectious Diseases journal - CDC. *Emerg. Infect. Dis.* 27(1):18–25.
- Merad Y, Derrar H, Belmokhtar Z, Belkacemi M. 2021. *Aspergillus* genus and its various human superficial and cutaneous features. *Pathogens.* 10(6):1–17.
- Morales-González JA, Madrigal-Bujaidar E, Sánchez-Gutiérrez M, Izquierdo-Vega JA, Carmen Valadez-Vega M Del, Álvarez-González I, Morales-González A, Madrigal-Santillán E. 2019. Garlic (*Allium sativum* L.): A brief review of its antigenotoxic effects. *Foods.* 8(8):1–17.
- Mousavi B, Hedayati MT, Hedayati N, Ilkit M, Syedmousavi S. 2016. *Aspergillus* species in indoor environments and their possible occupational and public health hazards. *Curr. Med. Mycol.* 2(1):36–42.
- Natasya C, Miftahullaila M, Sinamo S, Nurul N, Griselda J. 2020. Pengaruh Waktu Perendaman Plat Resin Akrilik Dalam Perasan Murni Bawang Putih Terhadap Jumlah Koloni *Candida Albicans*. *J. Kedokt. dan Kesehat. Publ. Ilm. Fak. Kedokt. Univ. Sriwij.* 7(3):25–30.
- Nguyen XH, Nguyen TMN, Nguyen DH, Nguyen QC, Cao TT, Pham TTH, Nguyen TTT. 2023. Identification and characterization of *Aspergillus niger* causing collar rot of groundnut (*Arachis hypogaea*). *Biodiversitas.* 24(5):2556–2562.
- Novrianti V, Harahap I, Elsie E. 2019. Antifungal Activity Test of Cinnamon Extract (*Cinnamomum burmanni*) on Growth of *Aspergillus flavus* and *Fusarium moniliforme*. *Bioscience.* 3(2):106.
- Nugroho LH, Hartini YS. 2020. *Farmakognisi Tumbuhan Obat : Kajian Spesifik Genus Piper*. Yogyakarta: Gadjah Mada University Press.
- Nurhayati LS, Yahdiyani N, Hidayatulloh A. 2020. Perbandingan Pengujian Aktivitas

- Antibakteri Starter Yogurt dengan Metode Difusi Sumuran dan Metode Difusi Cakram. *J. Teknol. Has. Peternak*. 1(2):41.
- Nurkhaliza F, Zulfa Risana M, Pubasari A, Priatmoko S, Eka Prastya M, Sus Andreani A. 2024. Comparative study of well diffusion and disc diffusion method to investigate the antibacterial properties of silver nanoparticles synthesized from *Curcuma longa* extracts. *E3S Web Conf*. 503.
- Premnath SM, Zubair M. 2024. No Title. *Starpearls*.
- Puspitasari A, Kawilarang AP, Ervianti E, Rohiman A. 2019. Profil Pasien Baru Kandidiasis (Profile of New Patients of Candidiasis). *Berk. Ilmu Kesehat. Kulit dan Kelamin*. 31(1):24–34.
- Putra A., Sukohar A. 2018. Pengaruh Allicin pada Bawang Putih (*Allium sativum* L .) terhadap Aktivitas *Candida albicans* sebagai Terapi Kandidiasis The Effect of Allicin from Garlic (*Allium sativum* L .) Against *Candida albicans* Activity as Candidiasis Theraphy. *J Agromedicine Unila*. 5(2):601–605.
- Putra GW, Ramona Y, Proborini MW. 2020. Eksplorasi Dan Identifikasi Mikroba Pada Rhizosfer Tanaman Stroberi (*Fragaria x ananassa* Dutch.) Di Kawasan Pancasari Bedugul. *Metamorf. J. Biol. Sci*. 7(2):62.
- Putri MC, Erina E, Abrar M, AK MD. 2021. Isolasi dan Identifikasi *Aspergillus* Sp. pada Kantong Hawa Puyuh (*Cortunix Japonica*). *Acta Vet. Indones*. 9(2):134–142.
- Rachmawati F, Nursidika P, Fitrianingsih P. 2022. Identifikasi Jamur *Trichophyton* sp. Penyebab Tinea Unguium Pada Petani Desa Mekarluhyu Kabupaten Garut. *J. Penelit. Saintek*. 2(27):112–118.
- Rafsanjani MA, Trimulyono G. 2023. Pengaruh Penambahan Ekstrak Bawang Putih terhadap Pertumbuhan Fungi *Aspergillus niger* pada Media Murashige dan Skoog Effect of Garlic Extract on the Growth of *Aspergillus niger* in Murashige and Skoog Media. *LenteraBio*. 12(3):7–13.
- Rais N, Ved A, Ahmad R, Kumar M, Deepak Barbhai M, Radha, Chandran D, Dey A, Dhumal S, Senapathy M, *et al*. 2023. S-Allyl-L-Cysteine — A garlic Bioactive: Physicochemical Nature, Mechanism, Pharmacokinetics, and health promoting activities. *J. Funct. Foods*. 107(June):105657.
- Rozaliyani A, Abdullah A, Setianingrum F, Sjamsuridzal W, Wahyuningsih R, Bowolaksono A, Fatril AE, Adawiyah R, Tugiran M, Syam R, *et al*. 2022. Unravelling the Molecular Identification and Antifungal Susceptibility Profiles of *Aspergillus* spp. Isolated from Chronic Pulmonary Aspergillosis Patients in Jakarta, Indonesia: The Emergence of Cryptic Species. *J. Fungi*. 8(4):1–14.
- Salahuddin M, Rahim MA, Alam SMJ Bin, Rahman MM, Rahman J. 2019. Morphological characterization of garlic (*Allium sativum* L.) germplasm.

Malaysian J. Halal Res. 2(2):46–52.

- Sen DB, Parmar DK, Sen AK, Maheshwari RA, Zanzwar AS, Joshi K, Koradia SK. 2025. Extraction and Quantification of Allicin: A Bioactive Component of *Allium sativum*. *Pharmacognosy Res.* 17(3):728–739.
- Senawong T, Khaopha S, Misuna S, Bunyatratchata W, Sattayasai N, Senawong G, Surapaitoon A, Sripa B. 2014. Histone deacetylase inhibitory activity and antiproliferative activity of the cultured medium of *aspergillus niger* strain TS1. *Chiang Mai J. Sci.* 41(5–1):981–991.
- Shuaib Kayode A, Kayode Rasaq A, Tayo I. 2020. A Prospective Analysis of Otomycosis in a Tertiary Care Hospital. *Int. J. Trop. Dis.* 3(1):1–8.
- Song L, Wang S, Zou H, Yi X, Jia S, Li R, Song J. 2025. Regulation of Ergosterol Biosynthesis in Pathogenic Fungi: Opportunities for Therapeutic Development. *Microorganisms.* 13(4).
- Suleria HAR, Barro C. 2020. *Bioactive Compounds from Plant Origin*. Canada: Apple Academic Press.
- Susan V, Lang M, Sabou M, Bourel-Bonnet L. 2025. Antifungal Drugs for the Treatment of Invasive Fungal Infections—A Limited Therapeutic Toolbox Facing Growing Resistances. *Pharmaceuticals.* 18(8):1–24.
- Susilawati S, Anwar C, Saleh I, Salni S. 2023. Flavonoid as Anti-Candida Agents. *Indones. J. Fundam. Appl. Chem.* 8(2):88–97.
- Tesfaye A. 2021. Revealing the Therapeutic Uses of Garlic (*Allium sativum*) and Its. *Sci. World J.* 2021:1–7.
- Torres-Palazzolo C, Ramirez D, Locatelli D, Manucha W, Castro C, Camargo A. 2018. Bioaccessibility and permeability of bioactive compounds in raw and cooked garlic. *J. Food Compos. Anal.* 70:49–53.
- Vuong MF, Hollingshead CM, Waymack JR. 2023. *Aspergillosis*. Treasure Island: Starpearls.
- Wakeel A, Jan SA, Ullah I, Shinwari ZK. 2019. Solvent polarity mediates phytochemical yield and antioxidant capacity of *Isatis tinctoria*. :1–19.
- Wakhidah L, Anggarani MA. 2021. ANALISIS SENYAWA BIOAKTIF DAN AKTIVITAS ANTIOKSIDAN EKSTRAK BAWANG PUTIH (*Allium Sativum* L.) PROBOLINGGO. *Unesa J. Chem.* 10(3):356–366.
- Yasmeen R, Mazhar S. 2021. Antifungal Activity of Onion and Garlic Extract for The Control of *Aspergillus niger* Isolated from Ghurki Village Antifungal Activity of Onion and Garlic Extract for The Control of *Aspergillus niger* Isolated from Ghurki Village. *LGU J. LIFE Sci.* 2(October):258–270.

Zuchrullah M, Nurdin E, Puni R. 2023. MEDIA ALTERNATIF EKSTRAK UBI JALAR SEBAGAI MEDIA TUMBUH JAMUR *Aspergillus* sp dan *Candida* sp PADA SERUMEN TELINGA PETANI DI KELURAHAN DORPEDU KOTA TERNATE. *Celeb. BIODIVERSITAS J. Sains dan Pendidik. Biol.* 6.

