

DAFTAR PUSTAKA

- Aditya, F., Gusmayanti, E., and Sudrajat, J. 2021. Pengaruh perubahan curah hujan terhadap produktivitas padi sawah di Kalimantan Barat. *Ilmu Lingkungan*, 19 (2), 237–246.
- Agirman, B. and Erten, H. 2020. Biocontrol ability and action mechanisms of *Aureobasidium pullulans* GE17 and *Meyerozyma guilliermondii* KL3 against *Penicillium digitatum* DSM2750 and *Penicillium expansum* DSM62841 causing post-harvest diseases. *Yeast*. 37(9-10), 437-448
- Alexopaulus, C.Y and Mims, C. 1996. Introductory mycology. In *Fourth Edition John Wiley and Sons, New York*.
- Arrarte, E., Garmendia, G., Rossini, C., Wisniewski, M., and Vero, S. 2017. Volatile organic compounds produced by Antarctic strains of *Candida* sake play a role in the control of postharvest pathogens of apples. *Biological Control*, 109, 14–20.
- Avis, T.J., Bélanger, R.R. 2002. Mechanisms and means of detection of biocontrol activity of *Pseudozyma* yeasts against plant-pathogenic fungi. *FEMS Yeast Res.* 2(1), 5-8.
- Basha, H. and Ramanujam, B. 2015. Growth promotion effect of *Pichia guilliermondii* in chilli and biocontrol potential of *Hanseniaspora uvarum* against *Colletotrichum capsici* causing fruit rot. *Biocontrol Science and Technology*. 25, 185-206
- Bashyal, B. M., Rawat, K., Sharma, S., Kulshreshtha, D., Gopala Krishnan, S., Singh, A. K., Dubey, H., Solanke, A. U., Sharma, T. R., and Aggarwal, R. 2017. Whole genome sequencing of *Fusarium fujikuroi* provides insight into the role of secretory proteins and cell wall degrading enzymes in causing bakanae disease of rice. *Frontiers in Plant Science*. 8, 1–12.
- Boekhout, T., and Robert, V. 2003. Yeasts in food beneficial and detrimental aspects. In *Woodhead Publishing Limited. Candida parapsilosis Virulence and Antifungal Resistance*.
- Branco, J., Miranda, I.M. and Rodrigues G.R. 2023. Mechanisms: A comprehensive review of key determinants. *J. Fungi*, 9, 80.
- Buxdorf, K., Rahat, I., Gafni, A. 2013. The epiphytic fungus *Pseudozyma aphidis* induces jasmonic acid- and salicylic acid/nonexpressor of PR1 independent local and systemic resistance. *Plant Physiol.* 161, 2014–22.
- BPS (Badan Pusat Statistik). 2023. *Produksi padi di Indonesia Tahun 2020-2023*. <https://www.bps.go.id/indicator/53/1498/1/luas-panen-produksi-dan-produktivitas-padi-menurut-provinsi.html>. diakses 10 November 2023.

- BPS Sumbar (Badan Pusat Statistik Sumatera Barat). 2023. *Data produktivitas padi di Sumatera Barat Tahun 2020-2022.*
<https://sumbar.bps.go.id/indicator/53/276/1/luas-panen-produksi-dan-produktivitas-padi-menurut-kabupaten-kota-hasil-kerangka-sampel-area-ksa-.html>. diakses 01 November 2023.
- Choi, Y., Jung, B., Li, T., and Lee, J. 2017. Identification of genes related to fungicide resistance in *Fusarium fujikuroi*. *Mycobiology*, 45(2), 101–104 oods 2024, 13, 1334.
- Cline, A.R., Paul, E., Skelley, Scott, A., Kinnee, Suzanne, R.L., Shaun, L. Winterton, Christopher, J., Borkent, Paolo. 2014. Interactions between a sap beetle, sabal palm, scale insect, filamentous fungi and yeast, with discovery of potential antifungal compounds. *PLOS ONE*. 9 (2), e89295.
- Contarino, R., Brighina, S., Fallico, B., Cirvilleri, G., Parafati, L., Restuccia, C. 2019. Volatile organic compounds (VOCs) produced by biocontrol yeasts. *Food Microbiol.* 82, 70–74.
- Darnetty, D., and Sulyanti, E. 2014. Distribusi dan Mating Populasi (MPs) *Fusarium* yang berasosiasi dengan penyakit bakanae pada tanaman padi di Sumatera Barat. *Distribusi dan Mating Populasi (MPs) Fusarium Yang Berasosiasi Dengan Penyakit Bakanae Pada Tanaman Padi Di Sumatera Barat*, 768–773.
- Darnetty, D., and Sulyanti, E. 2017. Respon beberapa varietas padi terhadap serangan *Fusarium fujikuroi* penyebab penyakit bakanae. *Jpt : Jurnal Proteksi Tanaman (Journal of Plant Protection)*, 1(1), 18.
- Deska, A. 2018. Potensi *Trichoderma* spp. dalam menekan pertumbuhan jamur *Fusarium fujikuroi* penyebab penyakit bakanae pada tanaman padi secara *in vitro*. *Skripsi*. <http://scholar.unand.ac.id/37336/>. diakses 01 September 2023.
- Fallah, B., Zaini, F., Daei, G. R., Kachuei, R., Kordbacheh, P., Safara, M., Mahmoudi, S. 2016. The antagonistic effects of *Candida parapsilosis* on the growth of *Fusarium* species and fumonisin production. *Curr Med Mycol.* 2(1),1-6.
- Fredericks, L. R., Lee, M. D., Crabtree, A. M., Boyer, J. M., Kizer, E. A., Taggart, N. T., Roslund, C. R., Hunter, S. S., Kennedy, C. B., Willmore, C. G., Tebbe, N. M., Harris, J. S., Brocke, S. N., and Rowley, P. A. 2021. The species-specific acquisition and diversification of a K1-like family of killer toxins in budding yeasts of the saccharomycotina. *PLoS Genetics*, 17(2), 1–24.
- Fu, S. F., Wei, J. Y., Chen, H. W., Liu, Y. Y., Lu, H. Y., and Chou, J. Y. 2015. Indole-3-acetic acid: A widespread physiological code in interactions of fungi with other organisms. *Plant signaling & behavior*. 10(8), 1048052.

- Gafni, A., Calderon, C.E., Harris, R. 2015. Biological control of the cucurbit powdery mildew pathogen *Podosphaera xanthii* by means of the epiphytic fungus *Pseudozyma aphidis* and parasitism as a mode of action. *Front Plant Sci.* 6,132.
- Gupta S. 2015. Temporal expression profiling identifies pathways mediating effect of causal variant on phenotype. *PLoS Genet.* 11(6), 1005195
- Han, sang min, Hyun, se hee, Lee, hyang burm, Lee, hye won, Kim, ha kun, and Lee, jong soo. 2015. Isolation and identification of yeasts from Wild Flowers collected around Jangseong Lake in Jeollanam-do, Republik of Korea, and characterization of the unrecorded Yeast Bullera coprosmeansis. *Mycobiology*, 43(3), 266–271.
- Harris, W., Choi, G., Lee, K.K, Kim, H., Lee, Y.H. 2024. High-quality genome resource of a basidiomycetous yeast, *Moesziomyces antarcticus* isolate RS1, isolated from rice seed. *Genome Sequences*. 13(2), 847-23.
- Hartati, S. 2016. Khamir sebagai agens biokontrol antraknosa (*Colletotrichum acutatum* Simmonds, J.H.) pada cabai pascapanen. *Disertasi. Fakultas Pertanian. Bogor: Sekolah Pascasarjana Institut Pertanian Bogor.* diakses 10 Oktober 2023.
- Hartati, S., Wiyono, S., Hidayat, S., and Sinaga, M. 2014. Seleksi khamir epifit sebagai agens antagonis penyakit antraknosa pada cabai. *J. Hort*, 24(3), 258–265.
- Hartati, S., Wiyono, S., Hidayat, S. H., and Sinaga, M. S. 2021. Identifikasi isolat khamir berpotensi sebagai agens antagonis dan uji produksi toksin hemolisin. *Agrikultura*, 32(2), 190.
- Hermaleni, U., Darnetty, Yunisman. 2022. Potensi khamir epifit indigenus untuk mengendalikan *Colletotrichum capsici*, penyebab penyakit antraknosa pada buah cabai merah. *Jurnal Proteksi Tanaman*, 6(2), 55–65.
- Hrp, R. F. 2022. Uji Efektivitas nanoemulsi serai wangi (*Cymbopogon nardus* L.) untuk pengendalian jamur patogen terbawa benih padi (*Oryzae sativa* L.). *Skripsi. Fakultas Pertanian. Universitas Andalas.* diakses 21 Oktober 2023.
- Huang, R., Li, G. Q., Zhang, J., Yang, L., Che, H. J., Jiang, D. H., and Huang, H. C. 2011. Control of postharvest Botrytis fruit rot of strawberry by volatile organic compounds of *Candida intermedia*. *Phytopathology*. 101(7), 859–869.
- Inacio, J., Ludwig, W., Spencer-Martins, I., Fonseca, A. 2010. Assessment of phylloplane yeasts on selected Mediterranean plants by FISH with group and species-speciec oligonucleotide probes. *FEMS Microbiol Ecol.* 71, 61–72.

- Irtwange, S. V. 2006. Application of Biological Control Agents in Pre- and Postharvest Operations. *Biological Control*. 8,(3), 1–12.
- Kachalkin, A.V., Glushakova, A.M., Yurkov, A.M., Chernov, I. 2008. Characterization of yeast groupings in the phyllosphere of Sphagnum mosse. *Microbiol*. 77,474-81.
- Karov, Ilija K., Mitrev, Sasa K., and Kostadinovska, Emilija, D. 2009. *Gibberella fujikuroi* (Sawada) Wollenweber, the new parasitical fungus on rice in The Republic Of Macedonia. *Krste Misirkov*. 175–181.
- Khoiruddin, M., Junaidi, A., and Saputra, W. A. 2022. Klasifikasi penyakit daun padi menggunakan convolutional neural network. *Journal of Dinda : Data Science, Information Technology, and Data Analytics*, 2(1), 37–45.
- Khunnamwong, Pannida, Lertwattanasakul, N., Jindamorakot, S., Suwannarach, N. 2019. Evaluation of antagonistic activity and mechanisms of endophytic yeasts against pathogenic fungi causing economic crop diseases. *Mol Plant Pathol*. 65, 573-590.
- Kurtzman, C. P., Fell, J., and Boekhout, T. 2011. *The yeast a taxonomic study . book fifth edit.*
- Lee, S. B., Lee, J. Y., Kang, J. W., Mang, H., Kabange, N. R., Seong, G. U., Kwon, Y., Lee, S. M., Shin, D., Lee, J. H., Cho, J. H., Oh, K. W., and Park, D. S. 2022. A novel locus for bakanae disease resistance, qbk4t, identified in rice. *Agronomy*, 12(10).
- Leslie, J. F., and Brett A. Summerell. 2006. *The Fusarium laboratory manual*. Blackwell Publishing.
- Li, J. Yang, T., Yuan, F., Lv, X. and Zhou, Y. 2024. Inhibitory effect and potential antagonistic mechanism of isolated epiphytic yeasts against *Botrytis cinerea* and *Alternaria alternata* in postharvest Blueberry fruits. *Foods*. 13, 1334.
- Limtong, S. and Koowadjanakul, N. 2012. Yeasts from phylloplane and their capability to produce indole-3-acetic acid. *World J Microbiol Biotechnol*, 28,3323–3335.
- Limtong, S., Koowadjanakul, N., Jindamorakot. S., Yongmanitchai, W., Nakase, T. 2012. *Candida sirachaensis* sp. nov. and *Candida sakaeoensis* sp. nov. two anamorphic yeast species from phylloplane in Thailand. *Antonie van Leeuwenhoek*. doi:10.1007/s10482-012-9728-9
- Limtong, S., Into, P., and Attarat, P. 2020. Biocontrol of rice seedling rot disease caused by *Curvularia lunata* and *Helminthosporium oryzae* by epiphytic yeasts from plant leaves. *Microorganisms*, 8(5).

- Liu, Y., Zou, Z., Hu, Z., Wang, W., Xiong, J. 2019. Morphology and molecular analysis of *Moesziomyces antarcticus* isolated from the blood samples of a Chinese patient. *Front Microbiol*, 10, 254.
- Masih, E.I., Paul, B. 2002. Secretion of β -1,3 glucanases by the yeast and its possible role in biocontrol of causing grey mold disease of the grapevine. *Curr Microbiol*. 44:391-395.
- Matić, S., Spadaro, D., Garibaldi, A., and Gullino, M. L. 2014. Antagonistic yeasts and thermotherapy as seed treatments to control *Fusarium fujikuroi* on rice. *Biological Control*. 73, 59–67.
- Mew, T. W., and Gonzales, P. 2002. *A Handbook of rice seedborne fungi*. http://books.irri.org/9712201740_content.
- Morita, T., Ogura, Y., Takashima, H.K., Hirose, N., Fukuoka, T. Imura, T., Kondo, Y., Kitamoto, D. 2011. Isolation of *Pseudozyma churashimaensis* sp. nov., a novel ustilaginomycetous yeast species as a producer of glycolipid biosurfactants, mannosylerythritol lipids. *Journal of Bioscience and Bioengineering*. 112 (2), 137 – 144.
- Nutaratat, P., Srisuk, N. Arunrattiyakorn, P. Limtong, S. 2014. Plant growth-promoting traits of epiphytic and endophytic yeasts isolated from rice and sugar cane leaves in Thailand. *Fungal Biol*. 118, 683–694.
- Mulyasari, H. 2018. Eksplorasi Jamur endofit dan khamir pada tanaman padi serta uji potensi antagonismenya terhadap jamur *Pyricularia* sp. penyebab penyakit blast. In *fakultas pertanian, universitas brawijaya, malang*. <http://search.ebscohost.com/login.aspx?direct=true&db=sph&AN=119374333&site=ehost-live&scope=site%0Ahttps://doi.org/10.1016/j.neuron.2018.07.032%0Ahttps://dx.doi.org/10.1016/j.tics.2017.03.010%0Ahttps://doi.org/10.1016/j.neuron.2018.07.032>. diakses 23 September 2023.
- Naeem, M., Iqbal, M., Parveen, N., Abbas, Q., Rehman, A., and Sad, M. 2016. An over view of bakanae disease of rice. & *Environ. Sci.* 16(2), 270–277.
- Nakayan, P., Hameed, A., Singh, S., Young, L.S., Hung, M.H., Young, C.C. 2013 Phosphate-solubilizing soil yeast *Meyerozyma guilliermondii* CC1 improves maize (*Zea mays* L.) productivity and minimizes requisite chemical fertilization. *Plant Soil*.
- Nunes, C. A. 2012. Biological control of postharvest diseases of fruit. *European Journal of Plant Pathology*. 133(1), 181–196.
- Rahmawati, A. A. N. 2022. Patogen tular benih pada praktik penyimpanan dan uji mutu benihnya. *Biofarm : Jurnal Ilmiah Pertanian*. 18(1), 16.

- Oca, M. D., R., Salem, A. Z. M., Kholif, A. E., Monroy, H., Pérez, L. S., Zamora, J. L., and Gutiérrez, A. 2016. Yeast: Description and structure. In A. Z. M. Salem, A. E. Kholif, and A. K. Puniya (Eds.), *Yeast additive and animal production*, 4–13.
- Ou, S.H. 1985. *Rice disease - Book to find Watanabe Broth.pdf* (pp. 262–269).
- Saito, H., Sasaki, M., Nonaka, Y., Tanaka, J., Tokunaga, T., Kato, A., and Thu, T. 2021. Spray application of nonpathogenic fusaria onto rice flowers the next plant generation. 87(2), 1–14.
- Sakamoto, T., Miyura, K., Itoh, H., Tatsumi, T., Ueguchi-Tanaka, M., Ishiyama, K., Kobayashi, M., Agrawal, G. K., Takeda, S., Abe, K., Miyao, A., Hirochika, H., Kitano, H., Ahikari, M., and Matsuoka, M. 2004. Erratum: An overview of gibberellin metabolism enzyme genes and their related mutants in rice (Plant Physiology (2004) 134 (1642-1653)). *Plant Physiology*. 135(3), 1863.
- Satife, D. O., Rahmawati, A., dan Yazid, M. 2011. Potensi yeast pada pengurangan konsentrasi uranium dalam limbah organik tlp-kerosin yang mengandung uranium. *Prosiding Seminar Nasional*. <https://digilib.batan.go.id/e-prosiding/File>.
- Scarcella, A.S.A., Bizarria, J.R., Bastos, R.G., Magri, M.M.R. 2017. Temperature, pH and carbon source affect drastically indole acetic acid production of plant growth promoting yeasts. *Brazilian Journal of Chemical Engineering*. 34(2), 441-450.
- Semangun. 2008. Penyakit-Penyakit Tanaman Perkebunan di Indonesia. Gadjah Mada University Press, Yogyakarta.
- Sharma, R. R., Singh, D., and Singh, R. 2009. Biological control of postharvest diseases of fruits and vegetables by microbial antagonists: A review. *Biological Control*. 50(3), 205–221.
- Suciarti, R. 2022. Inventarisasi penyakit yang disebabkan oleh jamur pada tanaman padi (*Oryza sativa* L) di Kota Padang. <http://scholar.unand.ac.id/107577/> diakses 26 September 2023.
- Sucipto, I., Munif, A., Suryadi, Y., and Tondok, E. T. 2015. Eksplorasi cendawan endofit asal padi sawah sebagai agens pengendali penyakit blas pada padi sawah. *Jurnal Fitopatologi Indonesia*. 11(6), 211–218.
- Sunani, S. K., Bashyal, B. M., Kharayat, B. S., Prakash, G., Krishnan, S. G., and Aggarwal, R. 2020. Identification of rice seed infection routes of *Fusarium fujikuroi* inciting bakanae disease of rice. *Journal of Plant Pathology*. 102(1), 113–121.
- Thobunluepop, P. 2009. The inhibitory effect of thr various seed coating substances against rice seed borne fungi and their shelf-life during storage. *Pakistan Journal of Biological Sciences*. 12(16), 1102-1110.

- Trofa, D., Gacser, A., and Joshua, D. N. 2008. *Candida parapsilosis*, an emerging fungal pathogen. *Clinical Microbiology Reviews*. 21(4), 606–625.
- Walker, G.M., Mcleod, A.H., Hodgson, H.J. 2006. Interactions between killer yeasts and pathogenic fungi. *FEMS Microbiol Letters*. 127(3), 213-222. DOI: 10.1111/j.1574-6968.1995.tb07476.x
- Widiastutik, N., and Alami, N. H. 2014. Isolasi dan identifikasi yeast dari rhizosfer *Rhizophora mucronata* Wonorejo. *Jurnal Sains Dan Seni Pomits*. 3(1), 11–16.
- Zainudin, M. N. A. I., Razak, A. A., and Salleh, B. 2008. Bakanae disease of rice in malaysia and indonesia: Etiology of the causal agent based on morphological, physiological and pathogenicity characteristics. *Journal of Plant Protection Research*. 48(4), 475–485.
- Zhao, X., Zhou, J., Tian, R., Liu, Y. 2022. Microbial volatile organic compounds: Antifungal mechanisms, applications, and challenges. *Front Microbiol*. 13, 922450.

