

## DAFTAR PUSTAKA

- Abbot, W.S. 1925. A method of computing the effectiveness of an insecticide. *J. Econ. Entomol.* 18: 265- 267. DOI: 10.1093/jee/18.2.265a.
- Alavo, T.B.C., H. Sermann dan H. Bochow. 2010. Virulence of strains of the entomopathogenic fungus *Lecanicillium lecanii* to aphids: strain improvement. *Arc. Phytophatol. Plant Prot.* 34 (6): 379- 398. DOI: 10.1080/716061669.
- Avila, A. L-. 1986. *Chapter 1 Taxonomy and biology: Bemisia tabaci A Literature Survey on the Cotton Whitefly with an Annotated Bibliography*, Ed. Cock, M.J.W. International Institute of Biological Control, United Kingdom. Online at <https://www.researchgate.net/publication/260932314> diakses pada 9 Maret 2019.
- Badan Pusat Statistik. 2019. Produksi Cabai Merah Besar 2008- 2018. Online at [www.bps.go.id](http://www.bps.go.id) diakses pada 2 Juli 2019.
- Barro, P.J., S.-S. Liu, L.M. Boykin dan A.B. Dinsdale. 2011. *Bemisia tabaci*: A statement of species status. *Annu. Rev. Entomol.* 56: 1- 19. DOI: 10.1146/annurev-ento-112408-085504.
- Brunt, A.A. 1986. *Chapter 6 Transmision of Disease: Bemisia tabaci A Literature Survey on the Cotton Whitefly with an Annotated Bibliography*, Ed. Cock, M.J.W. International Institute of Biological Control, United Kingdom. Online at <https://www.researchgate.net/publication/260932314> diakses pada 9 Maret 2019.
- Cakrabawa, D.N., M.L. Hakim, dan M. Subehi. 2015. *Statistik iklim, organisme pengganggu tanaman dan dampak perubahan iklim 2012- 2015*. Pusat data dan sistem informasi pertanian, Kementerian Pertanian. Online at <http://epublikasi.setjen.pertanian.go.id/epublikasi/StatistikPertanian/2015/Statistik%20Iklim%20OPT%20DPI%202015/files/assets/basic-html/page3.html> diakses pada 9 Juli 2019.
- Castle, S.J., J.C. Palumbo, N. Prabhaker, A.R. Horowitz, dan I. Denholm. 2010. *Ecological determinants of Bemisia tabaci resistance to insecticides*. In: Stansly PA, Naranjo SE (Eds) *Bemisia: bionomics and management of a global pest*. Springer, Dordrecht, the Netherlands.

- Czosnek, H. dan M. Ghanim. 2011. Chapter 3 *Bemisia tabaci – Tomato Yellow Leaf Curl Virus* Interaction Causing Worldwide Epidemics: The Whitefly, *Bemisia tabaci* (Homoptera: Aleyrodidae) Interaction with Geminivirus-Infected Host Plants, Ed. Thompson, W.M.O. National Agricultural Research Intitute, USA. Online at <http://www.springer.com/10.1007/978-94-007-1524-0> diakses pada 9 Maret 2019.
- Deghairi, M.A.A-. 2008. Bioassay evaluation of the entomopathogenic fungi, *Beauveria bassiana* Vuillemin against eggs and nymphs of *Bemisia tabaci* Gennadius (Homoptera: Aleyrodidae). *Pakis. J. Bio. Sci.* 11 (12): 1551-1560.
- Djaenuddin, N. dan A. Muis. 2017. Efektivitas biopestisida *Bacillus subtilis* BNt 8 dan pestisida nabati untuk pengendalian penyakit hawar pelepas dan upih daun jagung. *J. HPT. Trop.* 17 (1): 53-61.
- El-bassiony, A.M., Z.F. Fawzy, E.H. Abd El-Samad dan G.S. Riad. 2010. Growth, yield and fruit quality of sweet pepper plants (*Capsicum annuum* L.) as affected by potassium fertilization. *J. Ame. Sci.* 6 (12): 722- 730.
- Freimoser, F.M., S. Screen, S. Bagga, G. Hu, dan R.J. St. Leger. 2003. Expressed sequence tag (EST) analysis of two subspecies of *Metarhizium anisopliae* reveals a plethora of secreted proteins with potential activity in insect hosts. *J. Microbiol.* 1 (149): 239- 247. DOI: 10.1099/mic.0.25761-0.
- Gerling, D., U. Motro dan R. Horowitz. 1980. Dynamics of *Bemisia tabaci* (Gennadius) (Homoptera: Aleyrodidae) attacking cotton in the coastal plain of Israel. *Bull. Entomol. Res.* 70: 213- 219. DOI: 10.1017/S000748530000746X.
- Haedar, N., H. Natsir, Fahruddin, dan W. Aryanti. 2017. Produksi dan karakterisasi enzim kitinase dari bakteri kitinolitik asal kerang *Anadara granosa*. *J. Ilm. Alam Ling.* 8 (15): 14- 21.
- Hakim, M.L. dan O. Wiratno. 2018. *Statistik iklim, organisme pengganggu tanaman dan dampak perubahan iklim 2015- 2018*. Pusat data dan sistem informasi pertanian, Kementerian Pertanian. Online at <http://epublikasi.setjen.pertanian.go.id/epublikasi/StatistikPertanian/2018/Statistik%20Iklim%20OPT%20DPI%202018/files/assets/basic-html/page3.html> diakses pada 9 Juli 2019.
- Han, J.H., B.R. Jin, J.J. Kim dan S.Y. Lee. 2014. Virulence of entomopathogenic fungi *Metarhizium anisopliae* and *Paecilomyces fumoroseus* for the microbial control of *Spodoptera exigua*. *Mycobiol.* 42 (4): 385- 390. DOI: 10.5941/MYCO.2014.42.4.385.

He, Y., J. Zhao, Y. Zheng, Q. Weng, A. Biondi, N. Desneux, dan K. Wu. Assessment of potential sublethal effects of various insecticides on key biological traits of the tobacco whitefly, *Bemisia tabaci*. *Inter. J. Biol. Sci.* 9(3): 246- 255. DOI: 10.7150/ijbs.5762.

Herlinda, S., M.D.Utama, Y. Pujiastuti, dan Suwandi. 2006. Kerapatan dan viabilitas spora *Beauveria bassiana* (Bals.) akibat sub-kultur dan pengayaan media, serta virulensnya terhadap larva *Plutella xylostella* (Linn.). *J. HPT. Trop.* 6(2): 70- 78.

Horowitz, A.R., Y. Antignus dan D. Gerling. 2011. Chapter 11 Management of *Bemisia tabaci* Whiteflies: The Whitefly, *Bemisia tabaci* (Homoptera: Aleyrodidae) Interaction with Geminivirus-Infected Host Plants, Ed. Thompson, W.M.O. National Agricultural Research Intitute, USA. Online at <http://www.springer.com/10.1007/978-94-007-1524-0> diakses pada 9 Maret 2019.

Ilyas, A. dan F. Djufry. 2013. Analisis korelasi dan regresi dinamika populasi hama dan musuh alami pada beberapa varietas unggul padi setelah penerapan PHT di Kabupaten Bone Sulawesi Selatan. *Info. Pert.* 22 (1): 29- 37.

Islam, Md. T., S. J. Castle dan S. Ren. 2010. Compatibility of the insect pathogenic fungus *Beauveria bassiana* with nemm against sweetpotato whitefly, *B. tabaci*, on eggplant. *Entomol. Exp. et Appl.* 134 : 28-34. DOI: 10.1111/j.1570-7458.2009.00933.x.

Khaerati dan G. Indriati. 2015. *Lecanicillium lecanii* (Ascomycota: Hypocreales) sebagai agens hayati pengendali hama dan penyakit tanaman. *SIRINOV.* 3 (2): 93- 102).

Kim, J.J., G. Jeong, J.H. Han dan S. Lee. 2013. Biological control of aphid using fungal culture and culture filtrates of *Beauveria bassiana*. *Mycobiol.* 41 (4): 221- 224. DOI 10.5941/MYCO.2013.41.4.221.

Ladja, Fausiah T., T. Santoso dan E. Nurhayati. 2011. Potensi cendawan entomopatogen *Lecanicillium lecanii* dan *Beauveria bassiana* dalam mengendalikan wereng hijau dan menekan intensitas penyakit tungro. *Pen. Pert. Tan. Pang.* 30 (2): 114-120.

Legg, J.P., R. Shirima, L.S. Tajebé, D. Guastella, S. Boniface, S. Jeremiah, E. Nsami, P. Chikoti dan C. Rapisarda. 2014. Biology and management of bemsia whitefly vektors of cassava virus pandemics in Africa. *Pest Manag. Sci.* 1- 34. DOI: 10.1002/ps.3793.

- MacFayden, S., C. Paull, L.M. Boykin, P.De Barro, M.N. Naruthi, M. Otim, A. Kelyebi, D.G. Vassao, P. Sseruwangi, W.T. Tay, H. Delatte, Z. Seguni, J. Colvin dan C.A. Omongo. 2017. Cassava whitefly, *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) in East African farming landscapes: a review of the factors determining abundance. *Bull. Entomol. Res.* 1- 18. DOI: 10.1017/S0007485318000032.
- Malsam, O., M. Kilian, E.-C. Oerke, dan H.-W. Dehne. 2002. Oils for increased efficacy of *Metarhizium anisopliae* to control whiteflies. *Biocont. Sci. Tech.* 12: 337- 348. DOI: 10.1080/09583150220128121.
- Matthews, G.A. 1986. *Chapter 8 Overview of chemical control with special reference to cotton crops: Bemisia tabaci A Literature Survey on the Cotton Whitefly with an Annotated Bibliography*, Ed. Cock, M.J.W. International Institute of Biological Control, United Kingdom. Online at <https://www.researchgate.net/publication/260932314> diakses pada 9 Maret 2019.
- McDonald, J., D.J. Rooks dan A.J. Carthy. 2012. Chapter Nineteen: Methods for isolation of cellulose-degrading microorganisms. *Meth Enzymol.* 510: 349- 375. DOI: 10.1016/B978-0-12-415931-0.00019-7
- Moreau, T.L. 2010. Manipulating Whitefly Behaviour Using Plant Resistance, Reduced-Risk Sprays, Trap Crops and Yellow Sticky Traps for Improved Control for Sweet Pepper Greenhouse Crops. *Thesis*. Faculty of Plant Science, University of British Columbia. Online at <https://www.researchgate.net/publication/277764302> diakses pada 9 Maret 2019.
- Mubarik, N.R., I. Mahagiani, A. Anindyaputri, S. Santoso, dan I. Rusmana. 2010. Chitinolytic bacteria isolated from chili rhizosphere: Chitinase characterization and its application as biocontrol for whitefly (*Bemisia tabaci* Genn.). *American J. Agric. Biol. Sci.* 5(4):430-435.
- Nasr, H.M.D., R.O.Abd.Ghany, S.A.S. Mousa, M. Alasmaey, dan A.A. Atalla. 2018. Biological activity of crude extracts of endophytic *Fusarium oxysporum* and its chemical composition by gas chromatography-mass spectrometry. *Elixir org.chem.* 117: 50565- 50568.
- Olawale, A., B.O. Samuel, A.S.O. Solomon dan P.L. Kumar. 2015. Surveys of virus diseases on pepper (*Capsicum* spp.) in south-west Nigeria. *Afri. J. Biotech.* 14 (48): 3198- 3205. DOI: 10.5897/AJB2015.14803.

- Permatasari, O.S.I., E. Widajati, M. Syukur, dan Giyanto. 2016. Aplikasi bakteri probiotik *Pseudomonas* kelompok *fluorescens* untuk meningkatkan produksi dan mutu benih cabai. *J. Agron. Indo.* 44 (3): 292- 298.
- Putra, G.M., T. Hadiastono, A. Afandhi dan Y. Prayogo. 2013. Patogenesitas jamur entomopatogen *Lecanicillium lecanii* (Deuteromycotina: Hyphomycetes) terhadap *Bemisia tabaci* (G.) sebagai vektor virus *cowpea mild mottle virus* (CMMV) pada tanaman kedelai. *J. HPT Trop.* 1 (1): 27- 39.
- Rachmawaty. 2009. Komparasi enzim kitinase dari *Beauveria bassiana* galur lokal Sulawesi Selatan terhadap mortalitas ulat grayak (*Spodoptera litura*). *Bionatur.* 10 (2): 60-64.
- Rahayuwati, S., S.H. Hidayat dan P. Hidayat. 2016. Identitas genetik *B. tabaci* (Gennadius) (Hemiptera: Aleyrodidae) dari daerah endemik penyakit kuning cabai di Indonesia bagian barat berdasarkan fragmen mitokondria sitokrom oksidase I (mtCOI). *Indo. J. Entomol.* 13 (3): 156- 164. DOI: 10.5994/JEI.13.3.156.
- Raheem, M.A.A.- dan L. A. A-. Keridis.2017. Virulence of three entomopathogenic fungi against whitefly, *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) in tomato crop. *J. Entomol.* 14 (4): 155- 159. DOI: 10.3923/je.2017.155.159.
- Sabtharishi, S. dan N.C. Naveen. 2017. Bioassay for monitoring insecticide toxicity in *Bemisia tabaci* populations. *Protocol exchange*. On-line at <https://www.nature.com/protocolexchange/protocols/5517> diakses pada 9 Januari 2019. DOI: 10.1015/protex.2017.015.
- Singarimbun, M.A., M.I. Pinem dan S. Oemry. 2017. Hubungan antara populasi kutu kebul (*B. tabaci* Genn.) dan kejadian penyakit kuning pada tanaman cabai (*C. annuum* L.). *J. Agroekotek.FP. USU.*5 (4): 847- 854.
- Soesanto, L. 2017. *Pengantar Pestisida Hayati: Adendum Metabolit Sekunder Agensi Hayati*. PT Raja Grafindo Persada, Jakarta.
- Supriadi, D.R., A.D. Susila dan E. Sulistyono. 2018. Penetapan kebutuhan air tanaman cabai merah (*C. annuum* L.) dan cabai rawit (*C. frutescens* L.). *J.Hort. Indonesia.* 9 (1): 38- 46. DOI: 10.29244/jhi.9.1.38-46.
- Suryadi, Y., T.P. priyatno, I.M. Samudra, D.N. Susilowati, N. Lawati dan E. Kustaman. 2016. Pemurnian parsial dan karakterisasi kitinase asal jamur entomopatogen *Beauveria bassiana* isolat BB200109. *J. AgroBio.* 9 (2): 77- 84. DOI: 10.21082/jbio.v9n2.2013.p77-84.

Susetyo, H.P. 2017. Succes story dan strategic planning pengendalian OPT cabai merah di Indonesia secara ramah lingkungan. Direktorat Perlindungan Hortibiakana. Online at <http://hortibiakana.pertanian.go.id/wp-content/uploads/2017/01/Success-Story-Dal-OPT-Cabai-Ramli-di-Indonesia.pdf>. diakses pada 27 Juni 2019.

Thompson, W.M.O. 2011. Chapter 1 Introduction Whiteflies, Geminiviruses and Recent Events: The Whitefly, *Bemisia tabaci* (Homoptera: Aleyrodidae) Interaction with Geminivirus-Infected Host Plants, Ed. Thompson, W.M.O. National Agricultural Research Intitute, USA. Online at <http://www.springer.com/10.1007/978-94-007-1524-0> diakses pada 9 Maret 2019.

Wang, L., J. Huang, M. You dan B. Liu. 2004. Time-dose-mortality modelling and virulence indices for six strains of *Lecanicillium lecanii* against sweetpotato whitefly, *Bemisia tabaci* (Gennadius). *J.E.N.* 128 (7): 494- 500. DOI: 10.1111/j.1439-0418.2004.00879.

Wardani, N dan J.H. Purwanta. 2008. *Teknologi Budidaya Cabai Merah*. Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian, Bogor.

Widariyanto, R., M.I. Pinem, dan F. Zahara. 2017. Patogenesitas beberapa cendawan entomopatogen (*Lecanicillium lecanii*, *Metarrhizium anisopliae*, dan *Beauveria bassiana*) terhadap *Aphis glycines* pada tanaman kedelai. *J. Agrotek.* FP. USU. 5 (2): 8- 16.

Xiao, G., S.-H. Ying, P. Zheng, Z.-L. Wang, S. Zhang, X.-Q. Xie, Y. Shang, R.J.St. Leger, G.-P.Zhao, C. Wang dan M.-G. Feng. 2012. Genomics perspectives on the evolution of fungal entomopathogenicity in *Beauveria bassiana*. *Sci. Rep.* 2 (483): 1- 11. DOI: 10.1038/srep00483.

Yao, F.-L., Y. Zheng, X.-Y. Huang, X.-L. Ding, J.-W. Zhao, N. Desneux, Y.-X. He dan Q.-Y. Weng. 2017. Dynamics of *Bemisia tabaci* biotypes and insecticide resistance in Fujian province in China during 2005- 2014. *Sci.Rep.* 7 (40803): 1- 12. DOI: 10.1038/srep40803.

Yin, X., J. Gourdriaan, E.A. Lantinga, J. Vos dan H.J. Spiertz. A flexible sigmoid function of determinate growth. *Ann. Bot.* 91: 361- 371. DOI: 10.1093/aob/mcg029.