



DAFTAR PUSTAKA

- Abadi, A.L. 2003. Ilmu Penyakit Tumbuhan. Bayumedia Publishing. Malang. p.145
- Aidawati, N. 2006. *Keanekaragaman Begomovirus pada Tomat dan Serangga Vektornya, Bemisia tabaci Gennadius (Hemiptera: Aleyrodidae). Serta Pengujian Ketahanan Genotipe Tomat terhadap Strain Begomovirus.* Disertasi. Institut Pertanian Bogor. Bogor.
- Alphey, L. 1997. *DNA Sequencing from Experimental Methods to Bioinformatics.* BIOS Scientific Publishers Ltd. New York.
- Bos, L. 1983. Introduction to Plant Virology. Triharso, penerjemah. Yogyakarta (ID): Gadjah Mada University Press. Terjemahan dari: *Introduction to Plant Virology.*
- Brown, JK., Idris, AM., Torrez-Jerez, I., Banks, GK. and Wyatt, SD. 2001. The core region of the coat protein gene is highly useful for establishing the provisional identification and classification of Begomoviruses. *Arch Virol* 146: 1581-1598.
- Brown JK., 2007. The *Bemisia tabaci* complex: genetic and phenotypic variability drives Begomovirus spread and virus diversification. *Plant Disease Feature*, January 2007. <http://www.apsnet.org/online/feature/btabaci/>. Accessed on 11 September 2018.
- Cahyono, B. 2003. *Cabai Rawit*. Penerbit Kanisius : Yogyakarta. pp. 11-13
- Chakraborty, S., Pandel, P.K., Banerjee, M.K., Kallo, G. and Faukuet, C.M. 2003. Tomato leaf curl Gujarat virus, a new Begomovirus species causing a severe leaf curl disease of tomato in Vanarisi, India. *Phytopathology* 93: 1485-1494.
- Daryono, B.S. and Natsuaki, K.T. 2002. Application of random amplified DNA markers for detection of resistant cultivars of melon (*Cucumis melo L.*) against cucurbit virus. *Acta Horticulturae*. 588:321-329
- Degen, H.J., Deufel, A., Eisel, D., Grunewald-Jahno, S. and Keesey, J. 2006. *PCR Application Manual*. 3rd edition. Roche Diagnostics GmbH: Mannheim. p. 9-10.
- Ehtisham, M., Wani, F., Wani, I., Kaur P. and Nissar, S. 2016. Polymerase Chain Reaction (PCR): Back To Basic. *Indian Journal of Contemporary Dentistry*. July-December 2016. Vol.4, No.2.
- Fatkurohman, I. 2012. *Analisis Variasi Genetik Melon (Cucumis melo L.) Kultivar Tacapa dengan Metode Random Amplified Polymorphic DNA*. Skripsi. Fakultas Biologi, Universitas Gadjah Mada.
- Flint, S.J., Enquist, L.W., Krug R.M., Racaniello, V.R. and Skalka, A.M. 2000. *Principles of Virology: Molecular biology pathogenesis, and control*. 1st ed. ASM Press: United Kingdom.



- Gennadius, P. 1889. Diseases of tobacco plantation in the Trikonia. The aleurodid of tobacco. (In Greek) *Ellenike Georgia* 5 : 1-3
- Handoyo, D. dan Rudiretna, A. 2000. Prinsip Umum dan Pelaksanaan Polymerase Chain Reaction (PCR). *Unitas*. Vol. 9 No.1 17-19.
- Hernandez-Zepeda C, Idris AM, Carnevali G, Brown JK and Moreno- Valenzuela OA. 2007. Preliminary identification and coat protein gene phylogenetic relationships of Begomoviruses associated with native flora and cultivated plants from the Yucatan Peninsula of Mexico. *Virus Genes* 25: 825-833
- Hidayat, S.H., Rusli, E.S. dan Nooraiwati. 1999. Penggunaan primer universal dalam *Polymerase Chain Reaction* untuk mendekripsi virus gemini pada cabe. *Kongres Nasional XV dan Seminar Ilmiah PFI, Purwokerto*, 16-18 September 1999.
- Hull. 2002. Matthews Plant Virology. San Diego: Academic Press.
- Kenyon L, Tsai W, Shih S and Lee L. 2014. Emergence and diversity of Begomoviruses infecting solanaceous crops in East and Southeast Asia. *Virus Research*. 186: 104-13 Kirthi N, Maiya SP, Murthy MRN, Savitri HS. 2002. Evidence of recombination among the tomato leaf curl virus strains/species from Bangalore. *India. Arch Virol* 147: 255-272.
- Kon T, Hidayat SH, Hase S, Takahashi H and Ikegami M. 2006. The natural occurrence of two distinct Begomoviruses associated with DNA⁻ and a recombinant DNA in a tomato plant from Indonesia. *Phytopathology* 96 (5): 517-525.
- Kumar V., Palmer C., McKenzie C.L. and Osborne L.S. 2017. Whitefly (Bemisia tabaci) Management Program for Ornamental Plants. <http://edis.ifas.ufl.edu>. Accessed on April 28th 2019.
- Liana, A. 2010. *Karakterisasi Biologi dan Analisis Sekuen Gen Coat Protein Cucumber Green Mottle Mosaic Virus (CGMMV) Isolat Indonesia*. Tesis. Pascasarjana Program Studi Biologi UGM. Yogyakarta
- Loebenstein, G and Hottappilly, G. 2003. *Virus and Virus Like Disease of Major Crops in Developing Countries*. Vol. 1. Springer Science + Business Media. Dordrecht. pp. 124, 676.
- Magdeldin, S. 2012. *Gel Electrophoresis – Principles and Basics*. InTech : Croatia. p. 3-4.
- Matthews, R.E.F. 1992. *Foundamentals of Plant Virology*. California: Academic Press, Inc.
- Mayo, M.A and Pringle, C.R. 1998. Virus taxonomy 1997. *Journal of General Virology*. 79: 649–657.
- Metzker, M. L. and Caskey, C. T. 2009. *Polymerase Chain Reaction (PCR)*. *Encyclopedia of Life Sciences (ELS)*. John Wiley & Sons, Ltd: Chichester.
- Munshi, A. 2012. *DNA Sequencing – Methods and Application*. InTech : Croatia. p. 3-4.
- Nugroho, ED dan D.A, Rahayu . 2018. *Pengantar Bioteknologi (Teori dan*



Aplikasi) Cetakan 1. Deepublish : Yogyakarta. hal: 64

- Padidam, M., Beachy, R.N. and Fauquet, C.M. 1995. Tomato leaf curl virus from India has a bipartite genome and coat protein is not essential for infectivity. *J. Gen Virol* 76: 25-35.
- Polston, J.E. and Anderson, P.K. 1997. The emergence of whitefly-transmitted geminiviruses in tomato in the western Hemisphere. *J. Plant Dis.* 81: 1358-1369.
- Revill, P.A., Ha C.V., Porchun, S.C., Vu, M.T., and Dale, J.L. 2003. The Complete Nucleotide Sequence of Two Distinct Geminiviruses Infecting Cucurbits in Vietnam. *Archives of Virology*. 148: 1523–1541.
- Rusli, E.S., Hidayat, S.H., Suseno, R. dan Tjahjono, B. 2000. Virus gemini pada cabai : Variasi dan studi cara penularan. *Bul. HPT.* 11(1): 126-31
- Sakamoto, Kon T, Hidayat SH, Ito K, Hase S, Takahashi H and Ikegami M. 2005. Begomoviruses associated with leaf curl disease of tomato in Java. *Indonesia. J Phytopathol* 153 (9): 562-566.
- Sakata, J., Shibuya, Y. and Sharma, P. 2008. Strains of a new bipartite Begomovirus, pepper yellow leaf curl Indonesia virus, in leaf-curl-diseased tomato and yellow-vein-diseased ageratum in Indonesia. *Arch Virol.* 153:2307-2313
- Sambrook, J. and Russel, D.W.. 2001. *Molecular cloning a laboratory manual*. Third edition. Cold Spring Harbor Laboratory Press. 12: 3-9.
- Sanger, F., Nicklen, S. and Coulson, A.R. 1977. DNA Sequencing with chain terminating inhibitors. *Proc. Natl. Acad. Sci. USA.* 74: 5463-5467.
- Sastry, S.K. 2013. *Plant Virus and Viroid Diseases in The Tropics: Volume I: Introduction of Plant Viruses and Sub Viral Agent, Classification, Assessment of lost, Transmission and Diagnosis*. Springer. Andhra Pradesh. India.
- Sattar, M.N. 2012. *Diversity and Interaction of Begomovirus and Their Associated DNA-Satellites*. Doctoral Thesis Swedish University of Agricultural Science Uppsala. p. 15-21.
- Semangun, H. 2001. Pengantar Ilmu Penyakit Tumbuhan. Gadjah Mada University Press: Yogyakarta. p. 754.
- Setiawati, W. 2003. *Pengendalian Kutu Kebul (B.tabaci) pada Tanaman Cabai*. Seminar Sehari mengenai Pengenalan dan Pengendalian Virus Kuning pada Tanaman Cabai. Jakarta, 20 Februari 2003.
- Simpson, M. G.2010. *Plant Systematic, Second Edition*. Elsevier : California. p. 416
- Snehi, S. K., Khan, M. S., Raj, S. K., and Prasad, V. 2011. Complete nucleotide sequence of Croton yellow vein mosaic virus and DNA-β associated with yellow vein mosaic disease of *Jatropha gossypifolia* in India. *Virus Genes* 43: 93-101.



- Subiastuti, A.S., Hartono, S. dan Daryono, B.S. 2019. Detection and identification of Begomovirus infecting Cucurbitaceae and Solanaceae in Yogyakarta, Indonesia. *BIODIVERSITAS*. Vol 20: 738-744.
- Sulandari, S., Hidayat, S.H., Suseno, R., Jumanto, H. dan Sosromarsono. 2001. Keberadaan virus gemini pada cabai di DIY. *Kongres Nasional dan Seminar Ilmiah PFI ke XVI Bogor*, Agustus 2001.
- Sulandari, S. 2004. *Kajian Biologi, Serologi dan Analisis Sidik Jari DNA Virus Penyebab Penyakit Daun Kuning Keriting pada Cabai*. Disertasi S3, Institut Pertanian Bogor.
- Sulandari, S., Hidayat, S.H., Suseno, R., Jumanto, H. dan Sosromarsono. 2006. Deteksi dan kajian kisaran inang virus penyebab penyakit daun keriting kuning cabai. *Hayati*. Maret 2006. p. 1-6.
- Sulandari, S., Hidayat, S.H., Suseno, R., Jumanto, H. dan Sosromarsono. 2007. Deteksi Begomovirus pada cabai secara cepat melalui isolasi genom DNA. *Jurnal Perlindungan Tanaman Indonesia*, Vol, 13, No.1, 2007 : 35-43.
- Stansfield, W., Cano, R. and Colome, J. 2003. *Molecular Cell Biology*. McGraw-Hill: New York. p.120.
- Trisno, J., Hidayat, S.H., Jamsari, Habazar, T. dan Manti, L. 2010. Identifikasi Molekuler Begomovirus Penyebab Penyakit Kuning Keriting pada Tanaman Cabai (*Capsicum annum L.*) di Sumatera Barat *Jurnal Natur Indonesia* 13(1) : 41-46.
- Tsai WS, Shih SL, Green SK, Akkermans D and Jan FJ. 2006. Molecular characterization of a distinct tomato-infecting Begomovirus associated with yellow leaf curl diseased tomato in Lembang, Java Island of Indonesia. *Plant Dis* 90 (6): 831
- Ukwubile, CA. 2013. Scientific concepts of polymerase chain reaction in forensic science and molecular biology. *Asian Journal of Research in Pharmaceutical Sciences and Biotechnology*. 1(2) : 80 - 91.
- Utama, A. 2003. *Aplikasi Bioinformatika dalam Virologi*. Artikel Populer IlmuKomputer.com. Diakses pada tanggal 19 April 2019.
- Xie, Y., Wu, P., Liu, P., Gong, H. and Zhou., X. 2010. Characterization of alphasatellites associated with monopartite Begomovirus/betasatellite complexes in Yunnan, China. *Virology Journal* 7: 178.
- Varma, A. and Malathi, V.G. 2003. Emerging geminivirus problems: A serious threat to crop production. *Annals of Applied Biology*. 142: 145-146.
- Walkey, DGA. 1991. *Applied plant virology*. London (UK): Chapman and Hall.
- Warisno dan Dahana. 2010. *Peluang Usaha & Budidaya Cabai*. Gramedia Pustaka Utama : Jakarta. p. 14-16.
- Wartig, L., Kheyr-pour, A., Noris, E., Kouchkovsky, F.D., Jouanneau, F., Gronenborn, B. and Jupin, I. 1997. Genetic analysis of the monopartite Tomato yellow leaf curl geminivirus: Roles of V1, V2 and C2 ORFs in viral pathogenesis. *Virology* 228: 132- 140.



DETEKSI MOLEKULER BEGOMOVIRUS PENYEBAB PENYAKIT DAUN KERITING KUNING PADA TANAMAN CABAI RAWIT

(*Capsicum frutescens L. 'Cempluk'*)

ANGGUN CINDITYA PUTRI, Prof. Dr. Budi Setiadi Daryono, M.Agr.Sc.

UNIVERSITAS
GADJAH MADA

Universitas Gadjah Mada, 2019 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Wilson, C.R. 2014. *Applied Plant Virology*. Tasmanian Institute of Agriculture, University of Tasmanian. Australia p. 62-65.

Yuwono, T. 2005. *Biologi Molekuler*. Penerbit Gramedia: Jakarta. p. 35-36.