

- Acharya R, Shrestha YK, Khatun MF, Lee KY. 2021. Identification of begomoviruses from three cryptic species of *bemisia tabaci* (Gennadius) (hemiptera: Aleyrodidae) in Nepal. *Agronomy*. 11(10). doi:10.3390/agronomy11102032.
- Ajeng M, Putri K, Hartono S. 2021. Identifikasi Molekuler Mungbean yellow mosaic India virus dan Betasatelit yang Berasosiasi dengan Gejala Mosaik Kuning pada Kacang panjang di Sleman , Yogyakarta Molecular Identification of Mungbean yellow mosaic India virus and Its Betasatellite Associat. 17(1). doi:10.14692/jfi.17.6.
- Ali-Shtayeh MS, Jamous RM, Mallah OB, Abu-Zeitoun SY. 2014. Molecular characterization of watermelon chlorotic stunt virus (WmCSV) from palestine. *Viruses*. 6(6):2444–2462. doi:10.3390/v6062444.
- Amzeri A, Badami K, Pawana G, Syah MA, Daryono BS. 2021. Phenotypic and genetic diversity of watermelon (*Citrullus lanatus*) in East Java, Indonesia. *Biodiversitas*. 22(11):5223–5230. doi:10.13057/biodiv/d221161.
- Balol GB, Divya BL, Basavaraj S, Sundaresha S, Mahesh YS, Erayya, Huchannanavar SD. 2010. Sources of genetic variation in plant virus populations. *J Pure Appl Microbiol*. 4(2):803–808.
- Briddon RW, Patil BL, Bagewadi B, Nawaz-UI-Rehman MS, Fauquet CM. 2010. Distinct evolutionary histories of the DNA-A and DNA-B components of bipartite begomoviruses. *BMC Evol Biol*. 10(1). doi:10.1186/1471-2148-10-97.
- Brown JK, Idris AM, Alteri C, Stenger DC. 2002. Emergence of a new Cucurbit-infecting begomovirus species capable of forming viable reassortants with related viruses in the Squash leaf curl virus cluster. *Phytopathology*. 92(7):734–742. doi:10.1094/PHYTO.2002.92.7.734.
- Brown JK, Zerbini FM, Navas-Castillo J, Moriones E, Ramos-Sobrinho R, Silva JCF, Fiallo-Olivé E, Briddon RW, Hernández-Zepeda C, Idris A, et al. 2015. Revision of Begomovirus taxonomy based on pairwise sequence comparisons. *Arch Virol*. 160(6):1593–1619. doi:10.1007/s00705-015-2398-y.
- Bujarski JJ. 2013. Genetic recombination in plant-infecting messenger-sense RNA viruses: Overview and research perspectives. *Front Plant Sci*. 4(MAR):1–9. doi:10.3389/fpls.2013.00068.
- Chen YJ, Lai HC, Lin CC, Neoh ZY, Tsai WS. 2021. Genetic diversity, pathogenicity and pseudorecombination of cucurbit-infecting begomoviruses in Malaysia. *Plants*. 10(11):1–14. doi:10.3390/plants10112396.
- Chomicki G, Schaefer H, Renner SS. 2020. Origin and domestication of Cucurbitaceae crops: insights from phylogenies, genomics and archaeology. *New Phytol*. 226(5):1240–1255. doi:10.1111/nph.16015.
- Crossley MS, Snyder WE. What Is the Spatial Extent of a Bemisia tabaci Population? *Insects*. 2020. 11(11):813. <https://doi.org/10.3390/insects11110813>
- Czosnek H, Hariton-Shalev A, Sobol I, Gorovits R, Ghanim M. 2017. The incredible journey of Begomoviruses in their whitefly vector. *Viruses*. 9(10). doi:10.3390/v9100273.
- Damicone J, Brandenberger L. 2020. Watermelon Diseases. *Oklahoma Coop Ext Serv EPP-7679*.(June):1–8.

- Dhillon NS, Gajjar S, Lenoir S, Bhuruchet A, Phuan P, Chatchawankanphanich O, Jom KN, Sae-Tan S, et al. 2021. Resistance to three distinct begomovirus species in the agronomical superior tropical pumpkin line avpu1426 developed at the world vegetable center. *Agronomy*. 11(6):1–11. doi:10.3390/agronomy11061256.
- Farooq T, Umar M, She X, Tang Y, He Z. 2021. Molecular phylogenetics and evolutionary analysis of a highly recombinant begomovirus, Cotton leaf curl Multan virus, and associated satellites. *Virus Evol.* 7(2):1–15. doi:10.1093/ve/veab054.
- Fiallo-Olivé E, Navas-Castillo J. 2020. Molecular and Biological Characterization of a New World Mono-/Bipartite Begomovirus/Deltasatellite Complex Infecting *Corchorus siliquosus*. *Front Microbiol.* 11(July):1–14. doi:10.3389/fmicb.2020.01755.
- Fontenele RS, Bhaskara A, Cobb IN, Majure LC, Salywon AM, Avalos-Calleros JA, Argüello-Astorga GR, Schmidlin K, Roumagnac P, Ribeiro SG, et al. 2021. Identification of the begomoviruses squash leaf curl virus and watermelon chlorotic stunt virus in various plant samples in North America. *Viruses*. 13(5). doi:10.3390/v13050810.
- Gambley C, Nimmo P, McDonald J, Campbell P. 2022. The Establishment and Spread of a Newly Introduced Begomovirus in a Dry Tropical Environment Using Tomato Yellow Leaf Curl Virus as a Case Study. *Plants*. 11(6). doi:10.3390/plants11060776.
- Gao H, Zhang K, Teng X, Li J. 2019. Rolling circle amplification for single cell analysis and in situ sequencing. *TrAC - Trends Anal Chem.* 121. doi:10.1016/j.trac.2019.115700.
- Gaswanto R, Syukur M, Hidayat SH, Gunaeni N. 2016. Identifikasi Gejala dan Kisaran Inang Enam Isolat Begomovirus Cabai di Indonesia. *J Hortik.* 26(2):223. doi:10.21082/jhort.v26n2.2016.p223-234.
- Goda M. 2018. resources of watermelon Matsum and Nakai , in Sudan. (May 2007). doi:10.13140/RG.2.2.16672.43520.
- Haerunisa R, Suastika G, Damayanti TA. 2016. Identifikasi Begomovirus yang Berasosiasi dengan Penyakit Kuning pada Mentimun di Jawa Barat dan Bali. *J Hortik Indones.* 7(1):9. doi:10.29244/jhi.7.1.9-20.
- He YZ, Wang YM, Yin TY, Fiallo-Olivé E, Liu YQ, Hanley-Bowdoin L, Wang XW. 2020. A plant DNA virus replicates in the salivary glands of its insect vector via recruitment of host DNA synthesis machinery. *Proc Natl Acad Sci U S A.* 117(29):16928–16937. doi:10.1073/pnas.1820132117.
- Hermawan E, Darda Efendi dan, Sumber Agung D, Plosoklaten K, Timur J. 2014. Analisis Genetik Sifat Ketahanan Melon (*Cucumis melo L.*) terhadap Virus Kuning Genetic Analysis on Resistance of Melon (*Cucumis melo L.*) to Yellow Virus. *J Agron Indones.* 42(2):142–149.
- Hong JS, Ju HJ. 2017. The plant cellular systems for plant virus movement. *Plant Pathol J.* 33(3):213–228. doi:10.5423/PPJ.RW.09.2016.0198.
- ICTV, 2023. <https://ictv.global/report>.
- Inoue-Nagata AK, Lima MF, Gilbertson RL. 2016. Uma revisão de geminiviruses (begomoviruses) em hortaliças e outras culturas: Situação atual e estratégias de manejo. *Hortic Bras.* 34(1):8–18. doi:10.1590/S0102-053620160000100002.

- Kamalial TL, Hidayat P, Maharijaya A, Syukur M. 2022. Preferensi Bemisia tabaci Genn . dan Kaitannya dengan Karakter Anatomi dan Morfologi Daun pada Cabai ( Capsicum annum L .) Preference Bemisia tabaci Genn . and Its Relation to Leaf Anatomical and Morphological Characters of Chili ( Capsicum annum L .). 50(3):291–298.
- Kandito A, Hartono S, Sulandari S, Somowiyarjo S. 2019. Molecular Characterization of Betasatellite Associated with Begomovirus on Ageratum conyzoides in Magelang, Central Java. J Perlindungan Tanam Indones. 23(2):292. doi:10.22146/jpti.46579.
- Kandito A, Hartono S, Sulandari SRI, Somowiyarjo S, Widyasari YA. 2020. First report of naturally occurring recombinant non-coding dna satellite associated with tomato yellow leaf curl kanchanaburi virus on eggplant in Indonesia. Biodiversitas. 21(1):129–136. doi:10.13057/biodiv/d210117.
- Kemendag. 2020. Siaran Pers Siaran Pers. Surpl Neraca Perdagangan Semakin Menguat, Ekspor Agustus 2021 Catatkan Rekor Tertinggi.(5):6–8.
- Krake LR, Rezaian MA, Dry IB. 1998. Expression of the tomato leaf curl geminivirus C4 gene produces viruslike symptoms in transgenic plants. Mol Plant-Microbe Interact. 11(5):413–417. doi:10.1094/MPMI.1998.11.5.413.
- Kumar RV. 2019. Geminiviruses. Geminiviruses.(October). doi:10.1007/978-3-030-18248-9.
- Kusumaningrum F, Hartono S, Sulandari S, Somowiyarjo S. 2015. Infeksi Ganda Begomovirus Dan Crinivirus Pada Tanaman Tomat Di Kabupaten Magelang, Jawa Tengah. J Perlindungan Tanam Indones. 19(2):60–64.
- Lee C, Chan YZC, Ku H, Jan CCF. 2020. A single amino acid substitution in the movement protein enables the mechanical transmission of a geminivirus. (July 2019):571–588. doi:10.1111/mpp.12917.
- Lefevre P, Moriones E. 2015. Recombination as a motor of host switches and virus emergence: Geminiviruses as case studies. Curr Opin Virol. 10:14–19. doi:10.1016/j.coviro.2014.12.005. <http://dx.doi.org/10.1016/j.coviro.2014.12.005>.
- Legarrea S, Barman A, Marchant W, Diffie S. 2015. Temporal Effects of a Begomovirus Infection and Host Plant Resistance on the Preference and Development of an Insect Vector , Bemisia tabaci , and Implications for Epidemics. :1–19. doi:10.1371/journal.pone.0142114.
- Leke W, Ndindeng SA, Woin N. 2013. Begomovirus Disease: The most devastating disease of cultivated tomato. (May).
- Lu S, Li J, Wang X, Song D, Bai R, Shi Y, Gu Q, Kuo YW, Falk BW, Yan F. 2017. A semipersistent plant virus differentially manipulates feeding behaviors of different sexes and biotypes of its whitefly vector. Viruses. 9(1):1–15. doi:10.3390/v9010004.
- Martín-Hernández I, Pagán I. 2022. Gene Overlapping as a Modulator of Begomovirus Evolution. Microorganisms. 10(2):1–15. doi:10.3390/microorganisms10020366.
- Maruthi MN, Rekha AR, Muniyappa V. 2007. Pumpkin yellow vein mosaic disease is caused by two distinct begomoviruses: Complete viral sequences and comparative transmission by an indigenous Bemisia tabaci and the introduced B-biotype. EPPO Bull. 37(2):412–419. doi:10.1111/j.1365-

- Mumford RA, Macarthur R, Boonham N. 2016. The role and challenges of new diagnostic technology in plant biosecurity. *Food Secur.* 8(1):103–109. doi:10.1007/s12571-015-0533-y.
- Ouattara A, Tiendrébéogo F, Becker N, Urbino C, Thébaud G, Hoareau M, Allibert A, Chiroleu F, Vernerey MS, Traoré EV, et al. 2022. Synergy between an emerging monopartite begomovirus and a DNA-B component. *Sci Rep.* 12(1):1–11. doi:10.1038/s41598-021-03957-7. <https://doi.org/10.1038/s41598-021-03957-7>.
- Patil BL, Fauquet CM. 2009. Cassava mosaic geminiviruses : actual knowledge and perspectives. 10:685–701. doi:10.1111/J.1364-3703.2009.00559.X.
- Peng JC, Yeh SD, Huang LH, Li JT, Cheng YF, Chen TC. 2011. Emerging threat of thrips-borne Melon yellow spot virus on melon and watermelon in Taiwan. *Eur J Plant Pathol.* 130(2):205–214. doi:10.1007/s10658-011-9746-x.
- Pérez-losada M, Arenas M, Carlos J, Palero F. 2020. Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ' s public news and information . (January).
- Pokhrel B. 2021. Effects of Environmental Factors on Crop Diseases Development. *J Plant Pathol Microbiol.* 12(5):553. doi:10.35248/2157-7471.21.12.553.
- Qureshi MA, Lal A, Nawaz-ul-Rehman MS, Vo TTB, Sanjaya GNPW, Ho PT, Nattanong B, Kil EJ, Jahan SMH, Lee KY, et al. 2022. Emergence of Asian endemic begomoviruses as a pandemic threat. *Front Plant Sci.* 13(September):1–16. doi:10.3389/fpls.2022.970941.
- Rais A, Jabeen Z, Shair F, Hafeez FY, Hassan MN (2017) *Bacillus* spp., a bio-control agent enhances the activity of antioxidant defense enzymes in rice against *Pyricularia oryzae*. *PLoS ONE* 12(11): e0187412. <https://doi.org/10.1371/journal.pone.0187412>
- Reddy MS, Kanakala S, Srinivas KP, Hema M, Malathi VG, Sreenivasulu P. 2014. Complete genome sequence of a new begomovirus associated with yellow mosaic disease of *Hemidesmus indicus* in India. *Arch Virol.* 159(5):1223–1228. doi:10.1007/s00705-013-1811-7.
- Revell PA, Ha C V, Porschun SC, Vu MT, Dale JL. 2003. The complete nucleotide sequence of two distinct geminiviruses infecting cucurbits in Vietnam \*. :1523–1541. doi:10.1007/s00705-003-0109-6.
- Robinson BH and D. 1999. Natural Genomic and Antigenic Variation in Whitefly-Transmitted Geminiviruses (Begomoviruses). (11).
- Roossinck, MJ. 2008. Plant virus evolution. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-75763-4>
- Roshan P, Kulshreshtha A, Kumar S, Purohit R, Hallan V. 2018. AV2 protein of tomato leaf curl Palampur virus promotes systemic necrosis in *Nicotiana benthamiana* and interacts with host Catalase2. *Sci Rep.* 8(1):1–15. doi:10.1038/s41598-018-19292-3. <http://dx.doi.org/10.1038/s41598-018-19292-3>.
- Rubio L, Galipienso L, Ferriol I. 2020. Detection of Plant Viruses and Disease Management: Relevance of Genetic Diversity and Evolution. *Front Plant Sci.* 11(July):1–23. doi:10.3389/fpls.2020.01092.

Saeulimart, A, Alwidi, O, Riansari, S, Tandita, S, A, Saifuddin S, Indarsyih Y, Astuti RW. 2020. Comparative profitability of melon and watermelon production in south konawe district of southeast sulawesi. WSEAS Trans Bus Econ. 17:933–939. doi:10.37394/23207.2020.17.91.

Saunders K, Bedford ID, Stanley J. 2002. Adaptation from whitefly to leafhopper transmission of an autonomously replicating nanovirus-like DNA component associated with ageratum yellow vein disease. (March 2016). doi:10.1099/0022-1317-83-4-907.

Sawangjit S. 2009. The complete nucleotide sequence of Squash leaf curl China virus-[Wax gourd] and its phylogenetic relationship to other geminiviruses. ScienceAsia. 35(2):131–136. doi:10.2306/scienceasia1513-1874.2009.35'.131.

Selangga DGW, Listihani L. 2022. Squash Leaf Curl Virus: Species of Begomovirus as the Cause of Butternut Squash Yield Losses in Indonesia. HAYATI J Biosci. 29(6):806–813. doi:10.4308/hjb.29.6.806-813.

Sharma M, Tarafdar A, Chandran S, Chobe DR, Ghosh R. 2018. Molecular markers as tools for identification and introgression of virus-resistant genes. Genes, Genet Transgenics Virus Resist Plants.(September 2019). doi:10.21775/9781910190814.04.

Simmonds P, Aiewsakun P, Katzourakis A. 2019. and its constraints on virus evolution. Nat Rev Microbiol. 17(May):321–328. doi:10.1038/s41579-018-0120-2. <http://dx.doi.org/10.1038/s41579-018-0120-2>.

Snehi SK, Purvia AS, Parihar SS, Gupta G, Singh V, Raj SK. 2017. Overview of Begomovirus Genomic Organization and Its Impact. Int J Curr Res. 9(11):61368–61380.

Subiastuti SA, Hartono S, Daryono BS. 2019. Detection and identification of begomovirus infecting cucurbitaceae and solanaceae in yogyakarta, indonesia. Biodiversitas. 20(3):738–744. doi:10.13057/biodiv/d200318.

Sukal AC, Kidanemariam DB, Dale JL, Harding RM, James AP. 2019. Assessment and optimization of rolling circle amplification protocols for the detection and characterization of badnaviruses. Virology. 529(October 2018):73–80. doi:10.1016/j.virol.2019.01.013. <https://doi.org/10.1016/j.virol.2019.01.013>.

Sulandari Sri, Suseno R, Hidayat Sh, Harjosudarmo J, Sosromarsono S. 2006. Deteksi dan Kajian Kisaran Inang Virus Penyebab Penyakit Daun Keriting Kuning Cabai. HAYATI J Biosci. 13(1):1–6. doi:10.1016/S1978-3019(16)30371-0.

Sunyoto, Makful, Ni Luh Putu I, Setyowati, T. 2010. Petunjuk Teknis Produksi dan Pengelolaan Benih Semangka.

Szpara ML, States U. 2019. Mechanisms of DNA Virus Evolution. :1–8. doi:10.1016/B978-0-12-809633-8.20993-X.

Wahyudi A. 2015. Interaksi Antara Daya Tumbuh Benih dengan Pertumbuhan Tanaman Semangka ( Citrullus lanatus ( Thunb .) Matsum dan Nakai ) Pada Pemupukan Organik dan Anorganik Interaction Between The Ability of Seed to Grow with Plant Growth of Watermelon ( Citrullus lanat. 15(3):208–213.

Wilisiani F, Mashiko T, Wang WQ, Suzuki T, Hartono S, Neriya Y, Nishigawa H, Natsuaki T. 2019. New recombinant of Tomato leaf curl New Delhi virus infecting melon in Indonesia. J Gen Plant Pathol. 85(4):306–310. doi:10.1007/s10327-019-00849-7. <http://dx.doi.org/10.1007/s10327-019-00849-7>.

- Wu H Jie, Li M, Hong N, Peng B, Gu Q Sheng. 2020. Molecular and biological characterization of melon-infecting squash leaf curl China virus in China. *J Integr Agric.* 19(2):570–577. doi:10.1016/S2095-3119(19)62642-0. [http://dx.doi.org/10.1016/S2095-3119\(19\)62642-0](http://dx.doi.org/10.1016/S2095-3119(19)62642-0).
- Wyant PS. 2011. The use of rolling circle amplification ( RCA ) for diagnosis and characterization of geminiviruses.
- Xie Y, Zhou XP. 2003. Molecular characterization of squash leaf curl Yunnan virus, a new begomovirus and evidence for recombination. *Arch Virol.* 148(10):2047–2054. doi:10.1007/s00705-003-0153-2.
- Yadava P, Suyal G, Mukherjee SK. 2010. Begomovirus DNA replication and pathogenicity. *Curr Sci.* 98(3):360–368.
- Zaidi SSEA, Martin DP, Amin I, Farooq M, Mansoor S. 2017. Tomato leaf curl New Delhi virus: a widespread bipartite begomovirus in the territory of monopartite begomoviruses. *Mol Plant Pathol.* 18(7):901–911. doi:10.1111/mpp.12481.
- Zhao J, Chi Y, Zhang XJ, Wang XW, Liu SS. 2019. Implication of whitefly vesicle associated membrane protein-associated protein B in the transmission of Tomato yellow leaf curl virus. *Virology.* 535(May):210–217. doi:10.1016/j.virol.2019.07.007. <https://doi.org/10.1016/j.virol.2019.07.007>.
- Zhao K, Liu SS, Wang XW, Yang JG, Pan LL. 2022. Manipulation of Whitefly Behavior by Plant Viruses. *Microorganisms.* 10(12):1–13. doi:10.3390/microorganisms10122410.
- Zubair M, Zaidi SSEA, Shakir S, Farooq M, Amin I, Scheffler JA, Scheffler BE, Mansoor S. 2017. Multiple begomoviruses found associated with cotton leaf curl disease in Pakistan in early 1990 are back in cultivated cotton. *Sci Rep.* 7(1):1–11. doi:10.1038/s41598-017-00727-2.