



DAFTAR PUSTAKA

- Abdallah Y., E., Y. 2012. Effect of plant traps and sowing dates on population density of major soybean pests. *The Journal of Basic Applied Zoology* (65) : 37-46.
- Abu-Nasser., B., S., & Samy, S., A. 2018. Rule-Based System For Watermelon Diseases Treatment. *IJAISR* 2 (7) : 1-7.
- Abudy, A., Sufrin-Ringwald, T., Dayan-Glick, C., Guenoene-Gelbart, D., Livneh., O., Zaccai, M., & Lapidot, M. 2010. Watermelon Clorotic Stunt and Squash Leaf Curl Begomoviruses-New Threats To Cucurbit Crops In Middle East. *Israel Journal of Plant Science* (58) : 33-42.
- Ali-Stayeh, M., S., Jamous, R., M., Mallah, O., B., & Abu-Zeitoun, S., Y. 2014. Article : Molecular Characterization of *Watermelon Chlorotic Stunt Virus* (WmCSV) from Palestine. *Viruses* (6): 2444-2462.
- Azis, A., Sumarji, S., & Agusdin, D. 2017. Uji Ketahanan Enam Galur Tanaman Tomat (*Lycopersicum esculentum* Mill.) . *Jurnal Hijau Cendekia* 2(2) : 1-7.
- Badan Pusat Statistik (BPS). 2018. Statistik Tanaman Sayur dan Buah Tahunan Indonesia 2018. [Badan Pusat Statistik \(bps.go.id\)](http://Badan Pusat Statistik (bps.go.id)). Diakses pada 28 September 2020.
- Badan Pusat Statistik (BPS). 2020. Statistik Tanaman Sayur dan Buah Tahunan Indonesia 2020. [Badan Pusat Statistik \(bps.go.id\)](http://Badan Pusat Statistik (bps.go.id)). Diakses pada 8 Juli 2021.
- Barbosa, M., F., C., Marcello, P. & Elaine, C., P. 2019. Functional response of *Amblyseius tamatavensis* Blommers (Mesostigmata: Phytoseiidae) to eggs of *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) on five host plants. Accepted Manuscript. *Biological control*: 1-27.
- Brown, J., K., Zerbini, F., M., Navas-Castillo, J., Moriones, E., Ramos-Sobrinho, R., Silva, J., C., F., Fiallo-Olive, R., Briddon, R., W., Hernandez-Zepeda, C., Idris, A., Malathi, V., G., Martin, D., P., Rivera-Bustamante, R., Ueda, S. & Varsani, A. 2015. Revision of Begomovirus taxonomy based on pairwise sequences comparasion. *Archives of Virology*, 160 (6) :1593-1619.
- Czosnek, H., Hariton-Shalev, A., Sobol, I., Gorovits, R. & Ganim, M. 2017. The Incredibile Journey of Begomoviruses in Their Whitefly Vector. *Viruses* 9(10) : 273.
- Collazo, C., Pedro, L., Osmany, C., Carlos, J., Yunior, L., Merardo, P., & Orlando, B. 2016. Phenotypical and molecular characterization of the Tomato mottle Taino. *Physiological and Molecular Plant Pathology* (67): 231-236.
- Costa, E., C., C., Marcela, C., Gessica., C., S., C., Marcio, F., P., Jaoa, B., F., Moacir, R., F., Karla, C., P., Fabiano, G., S. & Christiane, M., C. 2017. Essential oil repellent action of plants of the genus



- Zanthoxylum against *Bemisia tabaci* biotype B (Homoptera: Aleyrodidae). *Sci. Horticulturae* (226) : 327-332.
- Dane, F., Lang, O. & Bakhtiyarova, R. 2004. Comparative Analysis of Chloroplast DNA Variability in Wild and Cultivated Species. *Theoretical and Applied Genetics* (108) : 958-966.
- Dane, F. & Liu, J. 2006. Diversity and Origin of Cultivated and Citron Type Watermelon (*Citrullus lanatus*). *Genet Resour Crop Evol* (54) :1255-1265.
- Daryono, B. & S., Natsuaki, K., T. 2002. Application or Random Amplified DNA Markers for Detection of Resistant Cultivars of Melon (*Cucumis melo* L.) Against Cucurbit Virus. *Acta Horticulturae* (588): 321-329.
- ECGPR. 2018. *Minimum Descriptors for Cucurbita spp. Cucumber, melon. Watermelon*. Rome : ECGPR Secretariat. pp: 11-13.
- Feher, T. 1993. *Watermelon. Genetic Improvement of Vegetable Crops*: 295–311.
- Friedmann, M., Lapidot, M., & Pillowsky, M. 1998. A Novel Source of Resistance to Tomato Yellow Leaf Curl Virus Exhibiting a Symptomless Reaction to Viral Infection. *J.Amer. Soc. Hort. Sci.* 123(6): 1004-1007.
- Gunaeni, N., Duriat, A. S., Sulastriini, I., Wulandari, A & Purwati, E. 2002. Pengaruh Perbedaan Struktur Jaringan Tanaman Tomat terhadap Infeksi CMV dan TYLCV. Laporan Hasil Penelitian T.A. 2001, Balitsa Lembang. Bandung.
- Hagen, C., Rojas, M., Xoconostle-Cazares, B., Natwick, E., Turini, T., & Gilbertson, R. 2008. Biology and Molecular Characterization of Cucurbit leaf crumple virus, an Emergent Cucurbit-Infecting Begomovirus in the Imperial Valley of California. *Plant Dis.* 92 : 781-793.
- Hanini, H. 2018. Karakterisasi Fenotip dan Ploidi Semangka (*Citrullus lanatus* (Thunberg.) Matsum. & Nakai) Hibrida Oranye Tetraploid Hasil Induksi Kolkhisin. Skripsi. Fakultas Biologi. Universitas Gadjah Mada. hal: 9.
- Haq, I. Q. M., & Sohrab, S. S. 2020. Begomovirus research in Oman: a critical appraisal and the way ahead. *Applied Plant Virology* : 455–460.
- Hasyim, A., Wiwin, S. & Liferdi, L. 2016. Kutu Kebul *Bemisia tabaci* Gennadius (Hemiptera: Aleyrodidae) Penyebar Penyakit Virus Mosaik Kuning pada Tanaman Terun. Balai Penelitian Tanaman Sayuran. Bandung. Indonesia. hal: 50-56.
- Inayati, A. & Marwoto, M. 2015. Kultur Teknis Sebagai Dasar Pengendalian Hama Kutu Kebul *Bemisia tabaci* Genn. Pada Tanaman Keledai. *Buletin Palawija* (29): 14-25
- Inoue-Agata, A., K., Gilbertson, R., L., & Lima, M. 2016. A Review of Geminivirus Disease in Vegetables and Other Crops in Brazil: Current Status and Approach for Management. *Horticultura Brasileira* 34: 008-018.



- ITIS. 2011. *Citrullus lanatus* var. *lanatus* (Thunb.) Matsum. & Nakai. Taxonomic Serial No.: 527396. Cucurbitaceae of North America Update database (version 2011). Updated for ITIS by the Flora of North America Expertise Network, in connection with an update for USDA PLANTS.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic.
Diakses tanggal 18 Agustus 2020.
- Juprin, F. 2016. Analisis Pendapatan dan Kelayakan Usahatani Semangka di Desa Maranatha Kecamatan Sigi Biromaru Kabupaten Sigi. *J. Agrotekbis* 4(3): 343-349.
- Kalie, M., B. 2001. *Bertanam Semangka*. Penebar Swadaya. Jakarta, hal : 75.
- Karman, J. 2021. Faktor Lingkungan dan Produktivitas Tanaman. BPTP Sumatera Selatan. [FAKTOR LINGKUNGAN DAN PRODUKTIVITAS TANAMAN](#) (pertanian.go.id). Diakses pada 8 Juli 2021.
- Kenn, N. 1990. Gene-For-Gene Complementary in Plant-Pathogen Interactions. *Annu. Rev. Genet.* (24): 447-460.
- Khan, A., J., Akhtar, S., Briddon, R., W., Ammara, U., Al-Matrooshi, A., M. & Mansoor, S. 2012. Complete Nucleotide Sequence of Watermelon Chlorotic Stunt Virus Organating from Oman. *Viruses* (4):1169-1181.
- Kollenberg, M., Stephan, W., & Monika, G. 2014. Quantification and Localization of Watermelon Chlorotic Stunt Virus and Tomato Yellow Leaf Curl Virus (Geminiviridae) in Populations of *Bemisia tabaci* (Hemiptera, Aleyrodidae) with Differential Virus Transmission Characteristics. *PLoS ONE* 9(11) : 1-12.
- Kuwornu, J., K., M., Ditchfield, P., K., A., & Charles, E., W. 2012. Producticity and Resource Use Effeciency in Tomato and Watermelon Farm : Evidence from Ghana. *Developing Country Studies* 2(2) : 23-37.
- Langga, I., Restu, M. R., & Tutik, K. 2012. Optimalisasi Suhu Dan Lama Inkubasi Dalam Ekstraksi DNA Tanaman Bitti (*Vitex cofassus* Reinw) Serta Analisis Keragaman Genetik Dengan Teknik RAPD-PCR. *J. Sains & Teknologi J. Sains & Teknologi* : 265 – 276.
- Lopez, C., Maria, F., & Maria, B. 2015. Mechanical transmission of Tomato leaf curl New Delhi virus to cucurbit germplasm : selection of tolerance sources in *Cucumis melo* . *Euphytica* (204) : 679-691.
- Mahatma, L., Mahatma, M., Pandya, J., Solanki, R., & Solanki, V. 2016. Epidemiology of Begomoviruses: A Global Perspective. *Plant Viruses: Evolution and Management* : 171-187.
- Manzano, S., Martinez, C., Garcia, J., M., Megias, Z. & Jamilena, M. 2014. Involvement of Ethylene in Sex Expression and Female Flower Development in Watermelon (*Citrullus lanatus*). *Plant Phy. & Biochem* (85): 96-104.
- Revill, P., A., Ha, C., V., Porchun, S., C., Vu, M., T. & Dale, J., L. 2003. The Complete Nucleotide Sequence of Two Distinct Geminiviruses



Infecting Cucurbits in Vietnam. *Archives of Virology* (148): 1523-1541.

- Reuveni, M., Assaf, D., Yaarit, K., Dana, G., Hanita, Z., Eduard, B. & Moshe, L. 2015. Tomato yellow leaf curl virus effects on chloroplast biogenesis and cellular structure. *Physiological and Molecular Plant Pathology* (92), 51-58.
- Rukmana, R. 2006. Budidaya semangka hibrida. Kanisius. Yogyakarta.
- Rojas, M., R., Hagen, C., Lucas, W., J. & Gilbertson, R., L. 2005. Exploiting Chinks in the Plants Armor: Evolution and Emergence of Geminiviruses. *Annual Review of Phytopathology* (43): 361-394.
- Santoso, T., J., Sri, H., H., Ati, S., D., Muhammad, H. & Sudarsono, S. 2008. Assosiated with Yellow Leaf Curl Disease of Tomato in Indonesia. *Microbiol. Ind.* 2(1) : 1-7.
- Setiyobudi, R., Aprilia, S., & Budi, S. 2020. The effect of Begomovirus infection on phenotypic characters of *Cucumis melo* L. 'Melona'. *AIP Conference Proceedings* (2260): 1-7.
- Shaik, R., S., Burrows, G., E., Urwin, N., A., R., Gopurenko, D., Lepschi, B., D., Weston, L., A. 2017. The Biology, Phenology and Management of Australian Weed-Camel Melon (*Citrullus lanatus* (Thunb.) Matsum. & Nakai). *Crop Protection* (98): 222-235.
- Singh, S., Vinod, K., & Awasthi, L. 2020. Recent advances in begomovirus research in India . *Applied Plant Virology* : 493-511.
- Snehi, S., K., Khan, M., S., Raj, S., K. & Prasad, V. 2011. Complete Nucleotide Sequence of Croton Yellow Vein Mosaic Virus and DNA- β Assiosiated With Yellow Vein Mosaic Disease of *Jatropha gossypifolia* in India. *Virus Genes* (43): 93-101.
- Srivastava, S., Hema, B., Sidhu, O., Ashish, S., Singh, P., Pandey, R., & Nautiyal, C. 2012. Changes in the metabolome and histopathology of Amaranthus hypochondriacus L. in response to Ageratum enation virus infection . *Phytochemistry* (80): 8-16.
- Sobir & Siregar, F.D. 2010 Budidaya Semangka Panen 60 hari, Penebar Swadaya. Jakarta.
- Subekti, D., Sri, H., Endang, N., & Sriani, S. 2006. Infeksi *Cucumber Mosaic Virus* dan *Chili Veinal Mottle Virus* terhadap Pertumbuhan dan Hasil Tanaman Cabai. *Hayati* : 53-57.
- Subiastuti, A. S., Hartono, S. & Daryono, B. S. 2019. Detection and Identification of Begomovirus Infecting Cucurbitaceae and Solanaceae in Yogyakarta, Indonesia. *Biodiversitas* (20): 738-744.
- Subiastuti, A., Ulinnuha, E., & Budi, S. 2017. Detection of Resistance Against Begomovirus Using a SCAR Marker in Melon (*Cucumis melo* L. cv. Hikapel). *Proceeding of the 1st International* : 13-23.
- Sufrin-Ringwald, T. and Lapidot, M. 2010. Characterization of A Synergistic Interaction Between Two Cucurbit-Infecting Begomoviruses: *Squash Leaf Curl Virus* and *Watermelon Chlorotic Stunt Virus*. *The American Phytopathology Society* 101(2): 281-289.



- Sukamto, S., Kon, T., Hidayat, S., Ito, K., Takahashi, H., & Ikegami, M. 2015. Begomoviruses Associated with Leaf Curl Disease of Tomato in Java, Indonesia. *J. Phytopathology* (153) : 562-566.
- Sulandari, S., Suseno, R., Sri, H., Jumanto, H., & Soemartono, S. 2005. Deteksi dan Kajian Kisaran Inang Virus Penyebab Penyakit Daun Keriting Kuning Cabai. *Hayati* 13(1) : 1-6.
- Suryaningsih, E., 2008. Pengendalian penyakit sayuran yang ditanam dengan sistem budidaya pada pertanian periurban. *J. Hort.* 18(2) : 200-211.
- Trisno, J., Sri, H., H., Trimukti, H., Ishak, M. & Jamsari, J. 2009. Detection and Sequence Diversity of *Begomovirus* Assosiated with Yellow Leaf Curl Disease of Pepper (*Capsicum annuum*) in West Sumatra, Indonesia. *Microbiol. Ind.* 3(2) : 56-61.
- Peng, Z., Huixin, Z., Wen, X., Shaoli, W., Qingjun, W. & Youjun, Z. 2017. Field resistance monitoring of the immature stages of the whitefly *Bemisia tabaci* to spirotetramat in China. *Crop protection* (98): 243-247.
- Putri, A., C. 2019. Deteksi Molekuler Begomovirus Penyebab Penyakit Daun Keriting Kuning Pada Tanaman Cabai Rawit (*Capsicum frutescens* L. ‘Cempluk’). Skripsi. Fakultas Biologi Universitas Gadjah Mada. hal: 30.
- Vafaie, E., K., Brent, P., Mengmeng, G., David, K., Micky, D., E. & Kevin, M., H. 2020. A comparison of repetitive releases of single or multiple natural enemy species on the suppression of *Bemisia tabaci* infesting poinsettias. *Biological control* (151): 1-8.
- Wahyudi, A. 2013. Peningkatan Produksi Buah Semangka Menggunakan Inovasi Teknologi Budidaya Sistem “ToPAS”. *Jurnal Kelitbangan*. 2 (02): 94-97.
- Vinutha, T., Om, P., Rama, P., Veda, K., & Sharma, P. 2014. Molecular mechanism of Begomovirus evolution and plant defense response. *Plant Virus-Host Interaction* : 345-357.
- von Arnim, A., & John, S. 1992. Determinants of Tomato Golden Mosaic Virus Symptom Development Located on DNA B. *Virology* (186) : 286-293.
- Wahyudi, A., & Ratna, D. 2017. Upaya Perbaikan Kualitas dan Produksi Buah Menggunakan Teknologi Budidaya Sistem Topas “ToPAS” pada 12 Varietas Semangka Hibrida. *Jurnal Penelitian Pertanian Terapan* 17(1) : 17-25
- Wang, X., Ping, L., & Shu-Sheng, L. 2017. Whitefly interactions with plants. *Curr Opin Insect Sci* (19) : 1-6.
- Wijayanto, T., Yani, W. R., & Arsana, M. W. 2012. Respon Hasil dan Jumlah Biji Buah Semangka (*Citrullus vulgaris*) Dengan Aplikasi Hormon Hiberelin (GA3). *Jurnal Agroteknos* 2(1): 57-62.
- Wilisiani, F., Susamto, S., & Sedyo, H. 2014. Identifikasi Molekuler Virus Penyebab Penyakit Daun Keriting Isolat Bantul Pada Melon. *Jurnal Perlindungan Tanaman Indonesia* 18(1): 47-54.



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Ketahanan Semangka (*Citrullus lanatus* (Thunb.) Matsum & Nakai) Terhadap Infeksi Begomovirus

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Wiratama, I, D., P., Gusti, N., A, W., Ni-Nengah, P., A., Dewa, N., N., & Gede, S. 2015. Temuan Penyakit Baru Laporan Pertama Infeksi *Begomovirus* pada Tanaman Mentimun di Bali. *Jur. Fitopatologi. Ind.* 11(5) : 175-178

Yang, N., W., Ai-Lian, L., Fang-Hao, W., Wan-Xue, L. & Dan, J. 2010. Effects of plant essential oils on immature and adult sweetpotato whitefly, *Bemisia tabaci* biotype B. *Crop protection* (29): 1200-1207.