

DAFTAR PUSTAKA

- Achdian, E. M., Mahalli, Y., dan Siahaan, D. 2022. Pola serangan penggerek batang *Chilo saccharipagus* Bojer. (Lepidoptera: Pyralidae) pada ruas tebu, *Indonesia Sugar Research Journal*, 2(2): 79-85.
- Anur, R. M., Mufithah, N., Sawitri, D. W., Sakakibara, H., & Sugiharto, B. 2020. Overexpression of sucrose phosphate synthase enhanced sucrose content and biomass production in transgenic sugarcane. *Plants*, 9(2): 200.
- Amaral, J., Ana K. M. L., and Elizabete C. Silva. 2023. Regulation of rubisco activity in crops. *New Phytologist*, 241: 35-51.
- Anjum, N. A., Sharma, P., Gill, S. S., Hasanuzzaman, M., Khan, E. A., Kachhap, K., et al. .2016. Catalase and ascorbate peroxidase–representative detoxifyin heme enzymes in plants *Environ. Sci. pollut. Res*, 23 (19): 19002-19029
- Baitha, A., Ram, J. L., Maurya, & Rashmi, N. 2016. Bio-intensive management of internode borer (*Chilo saccharipagus* indicus Kapur) and stalk borer (*Chilo auriciliu* Dudgeon). *International Journal of Agricultural Invention*, 1(1): 80-83.
- Bhar A, Chakraborty A, Roy A. 2022. Plant responses to biotic stress: old memories matter. *Plants*, 11(1):84.
- Bilska-Kos, A., Mytych, J., Suski, S., Magon, J., Ochodzki, P., & Zebrowski, J. 2020. Sucrose phosphate synthase (SPS), sucrose synthase (SUS) and their products in the leaves of *Miscanthus × giganteus* and *Zea mays* at low temperature. *Planta*, 252(2): 23
- Chavez, B. A. T., J. J. Valdez-Alarco'n., M. Marti'nez-Trujillo., L. Chen., B. Xoconostle-Ca'zares., W. J. Lucas., & L. Herrera-Estrella. 2000. Tissue-spesific and development pattern of expression of the rice SPS1 gene. *Plant Physiology*, 124: 641-653.
- Colbert J.B. and Heather D.C. 2023. Function diversification and the plant secondary cell wall. *Journal Molecular Ecvolution*, 91:761-772
- Gao, S., Yang, Y., Wnag, C., Guo, J., Zhou, D., Wu, Q., Su, Y., and Que Y. 2016. Transgenic sugarcane with a cry1Ac gene exhibited better phenotypic trait and enhanced resistance against sugarcane borer. *PlusOne*, 11(4): 1-16.
- Geetha, M.V., Kalyanasundaram, J Jayaraj, M Shanti, VA Vijayashanti, D Hemalatha, K Karhtic. 2018. Pest of sugarcane: pest and their management. Singapore (SG): *Springer*, 241-330.
- Gruszka, J & Szymon M. 2021. Insect rearing protocols in forensic entomology: Benefits from collective rearing of larvae in a carrion beetle *Necrodes littoralis* L. (Silphidae). *Plos One*, 16(12): 1-11

- Grof, C. P. L., Albertson, P. L., Bursle, J., Perroux, J. M., Bonnett, G. D., & Manners, J. M. 2007. Sucrose-phosphate synthase, a biochemical marker of high sucrose accumulation in sugarcane. *Crop Science*, 47(4): 1530–1539.
- Haighler, C.H., Singh, B., Zhang, D., Hwang, S., Wu, C., Cai, W.X., Hozain, M., Kang, W., Kiedaisch, B., Strauss, R.E., Hequet, E.F., Wyatt, B.G., Jividen, G.M., dan Holaday, A.S. 2007. Transgenic cotton over-producing spinach sucrose phosphate synthase enhanced leaf sucrose synthesis and improved fiber quality under controlled environmental conditions. *Plant Molecular Bio*, 63: 815-832.
- Indrawanto, C., Purwono, Siswanto, M. Syakir, dan W. Rumini. 2010. Budidaya dan Pasca Panen Tebu. Eska Media, Jakarta
- Kementerian Pertanian. 2021. Rencana strategis kementerian pertanian tahun 2020–2024. In: Book Rencana Strategis Kementerian Pertanian Tahun, 2020-2024. Kementerian Pertanian Republik Indonesia, Jakarta.
- Lee, T. R.C., Stacey J. A., Lucy T.T.T., Nader S., Bruno P. L., Desomnd C., Kevin P., Andrew W., and Andrew M. 2018. Towards a global DNA barcode reference library for quarantine identification of lepo=idopteran stemborers, with an emphasis on sugarcane pest. *Scientific Report*, 9(10) 1-12.
- Lin KH, Huang H. C., and Lin C.Y. Cloning. 2010. Expression and physiological analysis of broccoli catalase gene and Chinese cabbage ascorbate peroxidase gene under heat stress. *Plant Cell Rep*, 29(6):575-93.
- Lunn, J.E., Gillespie, V.J., and Furbank, R.T. 2003. Expression of a cyanobacterial sucrose- phosphate synthase from *Synechocystis* sp. PCC 6803 in transgenic plants. *Jurnal Exp. Bot*, 381: 223-237.
- Luo, Z., Wang, X., Yin, J., Huang, Y., Li, W., Zhang, R., Shan, H., Cang, X., and Li, J. 2021. Resistant to borer damage in seedling of new varieties of sugarcane. *Pakistan J. Zool*, 53(6): 2485-2488.
- Luo, H., Huiwen Z., Junxin L., Jing L., Cang, X., and Li, J. 2023. Large-scale RNAseq analysis provide a new insight into the critical genes and regulatory network of tiller development mediated by giberelin in sugarcane. *Industrial Crop & Product*, 117470(25): 1-14.
- Mcgregor, C. J., Pocock M. J. O., Fox, R., and Evans, D. M. 2014. Pollination by nocturnal Lepidoptera, and the effects of light pollution: a review. *Ecological Entomology*, 40: 1-12.
- Maulidia, Z. R., Maulidya, A. U. K., Handoyo, T., Sugiharto, B. 2022. Transformasi gen SoSPS1 dengan menggunakan enhancer OsADH dan eksplan kalus somatik embryogenesis pada tanaman tebu. *Journal of Applied Agricultural Sciences*, 6(2): 98-110.

- Miswar, Sugiharto, B., Soedarsono, J., Moeljapawiro S. 2007. Transformasi gen sucrose phosphate synthase (SoSPS1) menggunakan *Agrobacterium tumefaciens* untuk meningkatkan sintesis sukrosa pada tanaman tebu (*Saccharum officinarum* L.). *Berkas Penelitian Hayati*, 12: 137-143.
- Miller, G., Suzuki, N., Ciftci-Yilmaz, S., & Mittler, R. 2010. Reactive oxygen species homeostasis and signalling during drought and salinity stresses. *Plant, Cell & Environment*, 33(4): 453-467.
- Mulyatama, R. A., Neliana, I. R., Sawitri, W. D., Sakakibara, H., Kim, K.-M., & Sugiharto, B. 2022. Increasing the activity of sugarcane sucrose phosphate synthase enhanced growth and grain yields in transgenic *Indica* rice. *Agronomy*, 12(12): 2949.
- Priya, Kumar, R., Bhatt, R., Kashyap, L., and Shera, P. S. 2023. Silicon retention in soil and sugarcane cultivar and its impact on stalk borer (*Chilo auricilius* Dudgeon), yield and quality indices in Northwest India. *Springer Nature*, 15: 6551-6566.
- Sawitri, D. W. dan Sugiharto B. 2018. Rekayasa sucrose phosphate synthase untuk meningkatkan sukrosa sebagai sumber karbon dan energi bagi pertumbuhan tanaman. *Bunga Rampai Forum Peneliti Muda Indonesia*, 173-180.
- Savira, R. dan N. Zalmita. 2022. Analisis kesesuaian lahan perkebunan tebu di Kabupaten Bener Meriah dengan menggunakan sistem informasi geografi. *Jurnal Pendidikan Geosfer*, 7(1): 95-104.
- Sahu, P.K., K. Jayalaskshmi, Tyotsana T., Amrita G., Yalavarthi N., Adarsh K., Saima H., Harsh V. S. Tiantiana M. Vishu D. R., and Mahendra V.S.R. 2022. ROS generated from biotic stress: Effect on plants and alleviation by endophytic microbes. *Plant Science*, 13: 1042936
- Sharma, P. And Tsuyoshi K. 2014. Are "universal" DNA primer are real?. *Journal Apple Genetic*, 55:485-496
- Subiyakto. 2016. Hama penggerek tebu dan perkembangan teknik pengendaliannya. *Jurnal Litbang Pertanian*, 35(4): 179-186.
- Sugiharto, B., H. Sakakibara., Sumadi., T. Sugiyama. 1997. Differential expression of two genes for sucrose phosphat synthase in sugarcane: molecular cloning of two cDNAs and comparative analysis of gene expression. *Plant Cell Physiol*, 38: 961-965.
- Sujak, Dwi A. S., dan Subiyakto. 2021. Uji toleransi lapangan galur-galur tebu terhadap hama penggerek pucuk (*Scirpophaga excerptalis* Walker) dan penggerek batang (*Chilo* sp.) *Jurnal Agroteknologi*, 14(1): 41-46.

- Sulaiman, A. A., Sulaeman, Y., Mustikasari, N., Nursyamsi, D., Syakir, A. M. 2019. Increasing sugar production in Indonesia through land suitability analysis and sugar mill restructuring, *Land* 8, (4): 61.
- Vrijenhoek R. 1994. DNA primers for amplification of mitochondrial cytochrome oxidase subunit I from diverse metazoan invertebrates. *Mol Mar Biol Biotechnol*, 3:294–299
- Wang, Y., Mostafa S., Zeng W., & Jin B. 2021. Function and mechanism of jasmonic acid in plant responses to abiotic and biotic stresses. *International Journal of Molecular Sciences*. 22(16):8568.
- Wei, J., Pan, X., Shang, X., Huang, C., and Ma, Y. 2023. Screening of artificial diet formulation for sugarcane stalk borer *Chilo sacchariphagus* Bojer. *Sugar Tech*, 23(3): 727-734.
- Widiastuti, R. P., Bambang, T. R., dan Hagus T. 2014. Ketahanan beberapa varietas tebu komersial terhadap serangan hama penggerek batang berkilat *Chilo auricilius* Dudgeon (Lepidoptera: Pyralidae) di rumah kaca. *Jurnal HPT*, 2(2): 38-46.
- Widyasari, W. B., Putra, L. K., Ranomahera, M. R. R., and Puspitasari, A. R. 2022. Historical notes germplasm development, and molecular approaches to support sugarcane breeding program in Indonesia. *Sugar Tech*, 24 (1): 30–47.
- Windiyani, I. P, Mahfut, Purnomo, and Daryono, B. S. 2022. Morphological variations of superior sugarcane cultivars (*Saccharum officinarum*) from Lampung, Indonesia. *BIODIVERSITAS*, 23(8): 4109-4116.
- Wirioatmodjo, B. 1970. Hama Tebu. Balai Penelitian Pasuruan Perkebunan Gula. Pasuruan.
- Worrell, A.C., Bruneau, J.M., Summerfelt, K., Boersig, M., dan Voelker, T.A. 1991. Expression of maize sucrose phosphate synthase in tomato alters leaf carbohydrate partitioning. *Plant Cell*, 3: 1121-1130
- Zhu, J., Qi, J., Fang, Y., Xiao, X., Li, J., Lan, J., & Tang, C. 2018. Characterization of Sugar Contents and Sucrose Metabolizing Enzymes in Developing Leaves of *Hevea brasiliensis*. *Frontiers in Plant Science*, 9:58.