

## DAFTAR PUSTAKA

- Abbas, W., Riadi, M., & Ridwan, I. (2019). Respon Tiga Varietas Padi (*Oryza Sativa L.*) pada Berbagai Sistem Tanam Legowo. *Jurnal Penelitian dan Pengembangan Agrokompleks*, 1(2), 45-55.
- Adeleke, BS., & Babalola, OO. (2020). Oilseed Crop Sunflower (*Helianthus annuus*) as a Source of Food : Nutritional and Health Benefits. *Food Seifi Nurt*, 8(9), 4666-4684.
- Apriliyanti, N.F., Seotopo, L., & Respatijarti. (2016). Keragaman Genetik pada Generasi F3 Cabai (*Capsicum annuum L.*). *Jurnal Produksi Tanaman*, 4(3), 209-217.
- Badan Pusat Statistik. Statistik Perdagangan Luar Negeri. (2016). *Impor Jilid 1*. BPS-Statistics Indonesia.
- BioRad (2006). Real Time PCR Application Guide. BioRad Laboratories. Inc, USA.
- Chandrawijaya, Y., Tajuddin, T., Kusumaningrum, H.P., Budiharjo, A. (2013). Pelacakan Fragmen Gen Penyandi Enzim  $\beta$ -Ketoasil-ACP Sintase II (KAS II) dari Mesokarp Kelapa Sawit (*Elaeis guineensis* Jacq. L). *Jurnal Akademika Biologi*, 2(2), 45-56.
- Cholid, M. (2014). Optimasi Pembentukan Biji Bunga Matahari (*Helianthus annuus*) Melalui Aplikasi Zat Induksi Perkecambahan Serbuk Sari dan Polinator. *Warta Penelitian dan Pengembangan Tanaman Industri*, 20(2), 11-13.
- Do, T.D.T., Cozzolino, D., Muhlhausler, B., Amanda, B., & Able, A.J. (2015). Antioxidant Capacity and Vitamin E in Barley: Effect of Genotype and Storage. *Food Chemistry*, 187, 65-74.
- Effendi, S. (2012). *Metode Penelitian Survei*. LP3ES.
- Eitenmiller, R., & Lee, J. (2004). *Vitamin E Food Chemistry, Composition and Analysis*. New York. 540 hal.
- Ekawati. (2006). *Agronomi Pengantar*. Fakultas Pertanian Universitas Gadjah Mada.
- Farida, D.G. (2019). Fenologi dan Karakterisasi Morfo-agronomi Tanaman Bunga Matahari (*Helianthus annuus L.*) pada Kawasan Tropis. *Jurnal Produksi Tanaman*, 7(5), 792-800.
- Fatchiyah, E.L., Arumningtyas, S., Widjyarti, J., & Rahayu, S. (2011). *Biologi Molekuler Prinsip Dasar Analisis*. Erlangga. 191 hal.

- Food Agriculture Organisation. (2018). *Production Statistics, Food and Agriculture Organization of the United Nations*.
- Fritzsche, S. (2017). Recent Advances in our Understanding of Tocopherol Biosynthesis in Plants: An Overview of Key Genes, Functions, and Breeding of Vitamin E Improved Crops. *Antioxidants*, 6(4), 1-18.
- Gardner, F.P., Pearce, R.B., & Mitchell, R.L. (1991). *Physiology of Crop Plants*. Universitas Indonesia Press.
- Ghosh, S., Shengrui, Z., Muhammad, A., Berhane, S.G., Ahmed, M.A., Abdulwahab, S.S., Jie, Q., Yue, F., Kwadwo, G., Yitian, L., Huoyi, F., Yecheng L., Jing, L., Bin, L., & Junming, S. (2022). Natural Variation of Seed Tocopherol Composition in Diverse World Soybean Accessions from Maturity Group 0 to VI Grown in China. *Journal Plant (Basel)*, 11(2), 206.
- Gotor, A.A., Farkas, E., Berger, M., Labalette, F., Cantis, S., Dayde, J., & Calmon, A. (2007). Determination of Tocopherol and Phytosterols in Sunflower Seeds by NIR Spectrometry. *European Journal of Lipid Science and Technology*, 109(5), 525-530.
- Guenther, E. (1990). *Minyak Atsiri*. Jakarta.
- Gramegna, G., Rosado, D., Sanchez, C.A.P., Cruz, A.B., Simon-Moya, M., & Llorente, B. (2019). Phytochrome-Interacting Factor 3 Mediates Light-Dependent Induction of Tocopherol Biosynthesis During Tomato Fruit Ripening. *Plant Cell Environ*, 42, 1328–1339.
- Guilford, J.P. (1956). *Fundamental Statistics in Psychology and Education*. New York. Mc Graw-Hill Book Co. Inc
- Hapsari, N.R., & Herlina, N. (2018). Pengaruh Komposisi Media Tanam dan Dosis Pupuk NPK terhadap Pertumbuhan dan Hasil Bunga Matahari (*Helianthus annuus* L.) Varietas Little Leo. *Journal of Agricultural Science*, 3(1), 29-36.
- Hartati, S., Setiawan, A., Heliyanto, B., & Sudarsono. (2012). Keragaman Genetik, Heritabilitas dan Korelasi Antar Karakter 10 Genotipe Terpilih Jarak Pagar (*Jatropha curcas* L.). *J. Litri*, 8(2), 74-80.
- Hasanah, Y., Chairun Nisa, T., Armidin, H. & Hanum, H. (2015). Isoflavone Content of Soybean (*Glycine max* L.) Cultivars with Different Nitrogen Sources and Growing Season Under Dry Land Conditions. *Journal of Agriculture and Environment for International Development-JAEID*, 2015(1), 5– 17.
- Havaux, M., Eymery, F., Porfirova, S., Rey P., & Dormann, P. (2005). Vitamin E Protects Against PhotoInhibition and Photooxidative Stress in *Arabidopsis Thaliana*. *Plant Cell*, 17, 3451–3469.

- Herwati, A., Purwati, R.D., & Anggraeni, T.D.A. (2011). *Penampilan Karakter Kualitatif pada Plasma Nutfah Tanaman*. Puslitbang Perkebunan.
- Jamsari, Roza, Y., Firsta, N.R., Winda, P.S., Obel, F.N., & Nugraha, R. (2022). Aspek Biologi, Genetik, Budidaya, dan Pascaanen Tanaman Bunga Matahari (*Helianthus annuus*). Yogyakarta.
- Katja, D.G. (2012). Kualitas Minyak Bunga Matahari Komersial dan Minyak Hasil Ekstraksi Biji Bunga Matahari (*Helianthus annuus* L.). *Jurnal Ilmiah Sains*, 12(1), 59-64.
- Kaya. Y., Baltensperger, D., Nelson, L., & Miller, J. (2004). Maturity Grouping in Sunflower (*Helianthus annuus* L.). *Helia*, 27(40), 257 – 270.
- Khotimah, N. (2007). *Budidaya Tanaman Pangan*. Karya Mandiri Nusantara.
- Koetsier, G., & Cantor, E. (2019). *A Practicle Guide to Analysing Nucleic Acid Concentration and Purity with Microvolume Spectrophotometer*. New England Biolabs Inc.: 1-8.
- Laura, U.G., Maria, M.L., Cori H., & Dean, D. (2006). Genetic Basis for Natural Variation in Seed Vitamin E Levels in *Arabidopsis thaliana*. *Biological Sciences Journal*. 103(49), 18834-18841.
- Li, Y., Wang, G., Hou, R., Zhou, Y., Gong, R., Sun, X., & Tang, K. (2011). Engineering Tocopherol Biosynthetic Pathway in Lettuce. *Biology Plant*, 55, 453-460.
- Marneli, S.T. (2023). *Ekspresi Gen HPT1 dalam Merespon Perbedaan Dosis Pupuk N,P dan K pada Tanaman Bunga Matahari (*Helianthus annuus* L.)*. Skripsi. Fakultas Pertanian. Universitas Andalas.
- Martinsyah, R.H., Jamsari, & Nugraha, R. (2002). Karakterisasi Biji Lima Akses Bunga Matahari di Dataran Tinggi Alahan Panjang Sumatera Barat. *Jurnal Agrosida*, 8(1), 16-20.
- Minkema, D. (1987). *Dasar Genetika Dalam Pembudidayaan Ternak*. PT Bhratara Karya Aksara.
- Miryeganeh, M. (2022). Epigenetic Mechanisms of Senescence in Plants. *Cells*, 11(2), 251.
- Monikasari, I.N.S. (2017). *Keragaman MI Tanaman Hias Bunga Matahari (*Helianthus annuus* L.) Akibat Penyinaran Iridiasi Sinar Gama*. Universitas Diponegoro.
- Munne, B.S., & Alegre, L. (2000). Changes in Carotenoids, Tocopherols and Diterpenes During Drought and Recovery and The Biological Significane of Chlorophyll loss in Rosmarinus Officinalis plants. *Planta*. 210, 925-931.

- Muthulakshmi, M.V., Srinivasan, A., & Srivastava, S. (2023). Antioxidant Green Factories: Toward Sustainable Production of Vitamin E in Plant *In Vitro* Cultures. *ACS Omega*, 8(4), 3586-3605.
- Natsidis, P., Schifer, P. H., Martínez, I. S., & Telford, M. J. (2019). Computational discovery of hidden breaks in 28S ribosomal RNAs across eukaryotes and consequences for RNA Integrity Numbers. *Nature Research*, 9, 1-10.
- NDSU Extension. (2020). *Sunflower Production Guide*. North Dakota Agriculture Experiment Station and North Dakota State University Extensi.
- Noor, R.R. (1996). *Genetika Ternak*. PT Penebar Swadaya.
- Novogene. (2017). *RNA-seq Quantification with Reference Genome Demo Report*. 39 hal.
- Obel, F.N., Rosadi, Jamsari, Rahmat, A., & Seswita. (2022). Pertumbuhan dan Hasil Bunga Matahari pada Lahan Pantai Kabupaten Pesisir Selatan. *Jurnal Galung Tropika*, 11(1), 23-30.
- Ochogavia, A.C., Novello, L. M. A., Picardi, A., & Nestares, G. M. (2017). Identification of suitable reference genes by quantitative real-time PCR for gene expression normalization in sunflower. *Plant Omics Journal*, 10 (04), 10-218.
- Pfaffl, M.W. (2001). A New Mathematical Model For Relative Quantification In Real-Time RT-PCR. *Nucl Acids Res*, 29, 2002-2007.
- Pratiwi, H. (2017). Pengaruh Intensitas Penyinaran di Lahan Pasir Pantai Terhadap Hasil dan Kadar Minyak Bijji Bunga Matahari (*Helianthus annuus* L.). Fakultas Pertanian Universitas Muhammadiyah Yogyakarta.
- Rey, F., Zacarias, L., & Rodrigo, M.J. (2021). Regulation of Tocopherol Biosynthesis During Fruit Maturation of Different *Citrus* Species. *Front Plant*, 12, 743993.
- Rohayana, D., & Asnawi, R. (2012). Keragaan Hasil Varietas Unggul Inpari 7, Inpari 10 dan Inpari 13 Melalui Pendekatan Pengelolaan Tanaman Terpadu (PTT) di Kabupaten Pesawaran. *Prosiding Inovasi Hasil Penelitian dan Pengkajian Teknologi Pertanian*. BPTP Lampung.
- Saputra, M., Idwar, & Deviona. (2014). Evaluasi Keragaan Tujuh Genotipe Cabai (*Capsicum annum* L.) di Lahan Gambut. *Jom Faperta*, 1(1).
- Sattler, S.E., Gilliland, L.U., Magallanes-Lundback, M., Pollard, M., & DellaPenna, D. (2004). Vitamin E is Essential for Seed Longevity and for Preventing Lipid Peroxidation During Germination. *Plant Cell*, 16(6), 1419-32.

- Schaad, N.W & Frederick R.D. (2002). Real-time PCR and Its Application for Rapid Plant Disease Diagnostics. *Canadian Journal of Plant Pathology*, 24(3), 250-258.
- Spicher, L., Almeida, J., Gutbrod, K., Pipitone, R., Dormann, P., & Glauser, G. (2017). Essential Role for Phytol Kinase and Tocopherol in Tolerance to Combined Light and Temperature Stress in Tomato. *J. Exp*, 68, 5845–5856.
- Suciati, Y., Prijanti, A. R., & Sadikin, M. (2012). Pola mRNA Hypoxia Inducible Factor-1a (HIF-1a) dan Ekspresi Protein HIF-1a Ginjal Tikus pada Hipoksia Sistemik Kronik. *Jurnal Kedokteran YARSI*, 20(1), 01-13
- Suprapto & Supanjani. (2009). Analisis Genetik Ciri-ciri Kuantitatif dan Kompatibilitas Sendiri Bunga Matahari di Lahan Ultisol. *Akta Agrosia*, 12(1) : 89-9.
- Suprihatno, B., Daradjat, A.A, Satoto, Baehaki, S.E., Suprihatno, Setyono, A.S, D., & Sembiring, H. (2010). *Deskripsi Varietas Padi*. Badan Penelitian dan Pengembangan Pertanian Departemen Pertanian.
- Traber, G. (2006). Vitamin E. In: Modern Nutrition in Health and Disease. Philadelphia: Lippincott Williams & Wilkins, 296-409.
- USDA. Foreign Agriculture Service. (2017). *Oilseeds: World Market and Trade*. USDA.
- Valentin, H E., Lincoln, K., Moshiri, F., Jensen, P.K., Qi, Q., & Venkatesh, T.V. (2006). The Arabidopsis vitamin E pathway gene5-1 Mutant Reveals a Critical Role for Phytol Kinase in Seed Tocopherol Biosynthesis. *Plant Cell*, 18, 212–224.
- Wagner, E.M. (2013). Monitoring Gene Expression: Quantitative Real-Time RT-PCR. *Lipoproteins and Cardiovascular Diseases*, 1027, 19-45.
- Wahyudi. A., Rahmasari,M., Nazirwan, & Miranda, F.S. (2022). Keragaman Empat Aksesi Bunga Matahari (*Helianthus annuus* L.) Menggunakan Penanda Morfologi. *Jurnal Agrotek Tropika*, 10(1), 103-109.
- Widiastuti, E., & Latifah, E. (2016). Keragaan Pertumbuhan dan Biomassa Varietas Kedelai (*Glycine max* L) di Lahan Sawah dengan Aplikasi Pupuk Organik Cair. *Ilmu Pertanian Indonesia*, 21(2), 90–97.
- Widyasari, S.T.I. (2022). *Evaluasi Keragaan Dua Genotipe Bunga Matahari (Helianthus annuus L.)*. Universitas IPB.
- Wong, M.L., & Medrano, J.F. (2018). Real-time PCR for mRNA quantitation. *Biotechniques*, 39(1), 75-85.
- Yusuf, Z. K. 2010. Polymerase Chain Reaction (PCR). *Saintek*, 5(6), 1-6.

Zainal, M., Nugroho, A., & Suminarti, N.E. (2014). Respon Pertumbuhan dan Hasil Tanaman Kedelai (*Glycine max* (L.) Merill) pada Berbagai Tingkat Pemupukan dan Pupuk Kandang Ayam. *Jurnal Produksi Tanaman*, 2(6), 484- 490.

