

DAFTAR PUSTAKA

- Aguilera, Y., Estrella, I., Benitez, V., Esteban, R. M., and Martín-Cabrejas, M. A. 2011. Bioactive Phenolic Compounds and Functional Properties of Dehydrated Bean Flours. *Food Research International*. 44(3): 774-780.
- Akhda, D.K.N. 2009. Pengaruh Dosis dan Waktu Aplikasi Kompos *Azolla sp.* terhadap Pertumbuhan Tanaman Bayam Merah (*Alternanthera amoena* Voss). *Jurnal Agrivita*. 7(4): 36-39.
- Anonim, 2018. Analisis Ketersediaan Pangan: Neraca Bahan Makanan Indonesia 2014-2018. Kementerian Pertanian. Jakarta.
- Arinanti, M. 2018. Potensi Senyawa Antioksidan Alami pada Berbagai Jenis Kacang. *Ilmu Gizi Indonesia*. 1(2): 134-143.
- Athman, A., S.K. Tanz, V.M. Conn, C. Jordans, G.M. Mayo, R.A. Burton, S.J. Conn and M. Gilliam. 2014. Protocol: A Fast and Simple in Situ PCR Method for Localising Gene Expression in Plant Tissue. *Plant methods*. 10(1): 1-20.
- Attree, R., Du, B., and Xu, B. 2015. Distribution of Phenolic Compounds in Seed Coat and Cotyledon, and Their Contribution to Antioxidant Capacities of Red and Black Seed Coat Peanuts (*Arachis hypogaea* L.). *Industrial Crops and Products*. 67: 448-456.
- Bustin, S.A., Benes, V., Nolan, T., and Pfaffl, M. W. 2005. Review: Quantitative real-time RT-PCR – A Prespective. *Journal of Molecular Endocrinology*. (34): 597 – 601.
- Chukwumah, 2009. Peanut Skin Color: A Biomarker for Total Polyphenolic Content and Antioxidative Capacities of Peanut Cultivars. *Int. J. Mol. Sci*. 10 (1): 4941-4952.
- Comai, L. 2000. Genetic and Epigenetic Interactions in Allopolyploid Plants. *Plant Gene Silencing*. 43: 387–399.
- Daryono, B. S., Purnomo, I. N. Rosyidi, A. Novianto, dan A. Hafidz. 2019. Deskripsi Kacang Tanah Varietas Lurik. Kementerian Pertanian: Pusat Perlindungan Varietas Tanaman dan Perizinan Pertanian. Jakarta.
- Daryono, B.S., Koeswardani, C.A., dan Sunarti, S. 2012. Karakter Kromosom Ekaliptus (*Eucalyptus pellita* F. Muell.) Hasil Induksi Ekstrak Etanolik Daun Tapak Dara (*Catharanthus Roseus* (L.) G. Don.). *Seminar Nasional Agroforestri*. 3: 195-199.
- Deng, B., Du, W., Liu, C., Sun, W., Tian, S., and Dong, H. 2012. Antioxidant Response to Drought, Cold and Nutrient Stress in Two Ploidy Levels of Tobacco Plants: Low Resource Requirement Confers Polytolerance in Polyploids?. *Plant Growth Regulation*. 66(1): 37-47.

- Dewantari, R.P., Suminarti, N. E., dan Tyasmoro, S.Y. 2015. Pengaruh Mulsa Jerami Padi dan Frekuensi Waktu Penyiangan Gulma pada Pertumbuhan dan Hasil Tanaman Kedelai (*Glycine max* (L.) Merril). *Jurnal Produksi Tanaman*. 3(6): 487 – 495.
- Diniyah, N., and Lee, S. H. 2020. Komposisi Senyawa Fenol dan Potensi Antioksidan dari Kacang-Kacangan. *Jurnal Agroteknologi*. 14(01): 91-102.
- Fatchiyah., Arumingtyas, E. L., Widyarti, S., dan Rahayu, S. 2011. *Biologi Molekular: Prinsip Dasar Analisis*. Penerbit Erlangga. Jakarta. Hal: 20-22.
- Gantait S., Panigrahi J., Patel I. C., Labrooy C., Rathnakumar A. L., Yasin J. K. 2019. *Peanut (Arachis hypogaea L.) Breeding. Advances in Plant Breeding Strategies: Nut and Beverage Crops*. Springer, Cham. pp: 253-256.
- Garibyan, L and Avashia, N. 2013. Polymerase Chain Reaction. *Journal of Investigative Dermatology*. 133: 1-4.
- Goldworthy, P. R. and Fisher. 1996. *Fisiologi Tanaman Budidaya Tropik*. Diterjemahkan oleh Tohari. Universitas Gadjah Mada. Yogyakarta. Hal: 594-627.
- Gowda, M. V. C., Bhat, R.S., Sujay, V., Kusuma, P., Bhat, S., and Varshney, R. K. 2011. Characterization of AhMITE1 Transposition and Its Association with the Mutational and Evolutionary Origin of Botanical Types in Peanut (*Arachis* spp.). *Plant Systematics and Evolution*. 291(3): 153-158.
- Grouh, M. S. H., Meftahizade, H., Lotfi, N., Rahimi, V. and Baniasadi, B. 2011. Doubling the Chromosome Number of *Salvia Hians* Using Colchicine: Evaluation of Morphological Traits of Recovered Plants. *Journal Med Plants Res*. 5(19): 4892-4898.
- Gutiérrez, R. A., Ewing, R. M., Cherry, J. M., & Green, P. J. 2002. Identification of Unstable Transcripts in *Arabidopsis* by cDNA Microarray Analysis: Rapid Decay is Associated with A Group of Touch-and Specific Clock-controlled Genes. *Proceedings of the National Academy of Sciences*. 99(17): 11513-11518.
- Hirsch, A.M. 1992. *Development Biology of Legume Nodulation*. Departement of Biologi, University of California. Los Angeles. pp: 211-218.
- Huang, W., Zhu, Y., Li, C., Sui, Z., and Min, W. 2016. Effect of Blueberry Anthocyanins Malvidin and Glycosides on the Antioxidant Properties in Endothelial Cells. *Oxidative Medicine and Cellular Longevity*. 15: 1-10.
- USDA. 2022. United States Department of Agriculture. *Arachis hypogaea* L. <https://plants.sc.egov.usda.gov/home/plantProfile?symbol=ARHY>. [Diakses pada tanggal 13 Oktober 2022].
- Jaakola, L. 2013. New Insights into the Regulation of Anthocyanin Biosynthesis in Fruits. *Trends in Plant Science*. 18(9): 477–483.
- Jackman, R. L. dan Smith, J. L. 1996. Anthocyanins and Betalains. *Natural Food Colorants, Second Edition*. Springer. Boston. pp: 244-246.

- Khusnutdinov, E., Sukhareva, A., Panfilova, M., & Mikhaylova, E. 2021. Anthocyanin Biosynthesis Genes as Model Genes for Genome Editing in Plants. *International Journal of Molecular Sciences*. 22(16): 8752.
- Khoo, H. E., Azlan, A., Tang, S. T., and Lim, S. M. 2017. Anthocyanidins and Anthocyanins: Colored Pigments as Food, Pharmaceutical Ingredients, and the Potential Health Benefits. *Food & Nutrition Research*. 61(1): 136-179.
- Kim, C. K., Cho, M. A., Choi, Y. H., Kim, J. A., Kim, Y. H., Kim, Y. K., and Park, S. H. 2011. Identification and Characterization of Seed-Specific Transcription Factors Regulating Anthocyanin Biosynthesis in Black Rice. *Journal of Applied Genetics*. 52(2): 161-169.
- Kohler, H. A. 1887. *Kohler's Medizinal Pflanzen*. Missouri Botanical Garden. Germany. pp: 81-85.
- Kramer, M. F and Coen, D. M. 2001. Enzymatic Amplification of DNA by PCR: Standard Procedures and Optimization. *Current Protocols in Molecular Biology*. 56(1): 15-1.
- Kumar, D., Sarmah, B. K., and Das, P. K. 2019. Ethylene Mediates Repression of Anthocyanin Accumulation in Black Rice Pericarps in The Absence of Light. *Journal of Plant Physiology*. 236: 34–38.
- Kusmiadi, R., Prayoga, G. I., Apendi, F. dan Alfiansyah, A. 2018. Karakterisasi Plasma Nutfah Kacang Tanah (*Arachis hypogaea* L.) Lokal Asal Bangsa Berdasarkan Karakter Morfologi. *Agrosaintek: Jurnal Ilmu dan Teknologi Pertanian*. 2(2): 61-66.
- Kusnuriyanti, E., Fatikasari, S., Fitriyanti, I., dan Shofi, M. 2018. Karakter Fenotip Tanaman Kedelai (*Glycine max* (L.) Merr) Hasil Mutasi Genetik dengan Ekstrak Etanolik Daun Tapak Dara (*Catharanthus roseus* (L.) D. Don). *Jurnal Wiyata: Penelitian Sains dan Kesehatan*. 4(2): 121-127.
- Lahare, R. P., Bisen, Y. K., Yadav, H. S., and Dashahre, A. K. 2021. Estimation of Total Phenol, Flavonoid, Tannin and Alkaloid Content in Different Extracts of *Catharanthus roseus* from Durg District, Chhattisgarh, India. *Scholars Middle East Publishers Dubai*. 7(1): 1-6.
- Lee, J. M., Roche, J. R., Donaghy, D. J., Thrush, A., and Sathish, P. 2010. Validation of Reference Genes for Quantitative RT-PCR Studies of Gene Expression in Perennial Ryegrass (*Lolium perenne* L.). *BMC Molecular Biology*. 11 (8): 1471-2199.
- Listiawan, D. A., Indraningsih, E., Septantri, A. P., Wibowo, A. J., Darajat, U. W. J., dan Daryono, B. S. 2009. Potensi Ekstrak Etanolik Daun Tapak Dara (*Catharanthus roseus* (L.) D. Don) sebagai Alternatif Pengganti Kolkhisin Poliploidisasi Tanaman. *Jurnal Biologi Indonesia*. 5: 423-430.
- Liu, Y., Zhao, S., Wang, J., Zhao, C., Guan, C., Hou, L., Li, C., Xia, H., and Wang, X. 2015. Molecular Cloning, Expression, and Evolution Analysis of Type II CHI Gene from Peanut (*Arachis hypogaea* L.). *Development Genes and Evolution*. 225(1): 1-10.

- Ma, Y. J., Duan, H. R., Feng, Z., Yi, L., Yang, H. S., Tian, F. P., Zhou, X. H., Wang, C. M., and Rui, M. 2018. Transcriptomic Analysis of *Lycium ruthenicum* Murr. during Fruit Ripening Provides Insight into Structural and Regulatory Genes in the Anthocyanin Biosynthetic Pathway. *PloS One*. 13(12): 1-22.
- Maggioni, L., Giergiev, S., and Lipman. 2003. *Arachis Genetic Resources in Europe. European Cooperative Programme for Crop Genetic Resources Network s ECPGR*. Bulgaria. pp: 8-11.
- Marlina, N., Aminah, R. I. S., dan Setel, L. R. 2015. Aplikasi Pupuk Kandang Kotoran Ayam pada Tanaman Kacang Tanah (*Arachis hypogaea* L.). *Biosaintifika: Journal of Biology & Biology Education*. 7(2): 137-141.
- Martens, S., Preuß, A., and Matern, U. 2010. Multifunctional Flavonoid Dioxygenases: Flavonol and Anthocyanin Biosynthesis in *Arabidopsis thaliana* L. *Phytochemistry*. 71(10): 1040-1049.
- Martino, E., Casamassima, G., Castiglione, S., Cellupica, E., Pantalone, S., Papagni, F., Rui, M., Sicilian, A.M., and Collina, S. 2018. Vinca Alkaloids and Analogues as Anti-Cancer Agents: Looking Back, Peering Ahead. *Bioorganic & Medicinal Chemistry Letters*. 28(17): 2816-2826.
- Mashudi, 2007. *Bercocok Tanam Kacang Tanah dan Manfaatnya*. Azka Press. Jakarta. Hal: 1-15.
- Molyneux, P. 2004. The Use of the Stable Free Radical DPPH for Estimating Antioxydant Activity. *Songklanakarin Journal of Science and Technology*. 26: 211-219
- Moriwaki, S., Suzuki, K., Muramatsu, M., Nomura, A., Inoue, F., Into, T., Yoshiko, Y., and Niida, S. 2014. Delphinidin, One of the Major Anthocyanidins, Prevents Bone Loss Through the Inhibition of Excessive Osteoclastogenesis in Osteoporosis Model Mice. *PLoS One*. 9(5): 1-11.
- Muir, S. R., Collins, G. J., Robinson, S., Hughes, S., Bovy, A., De Vos, C. H. R., van Tunen, A. J., and Verhoeyen, M. E. 2001. Overexpression of Petunia Chalcone Isomerase in Tomato Results in Fruit Containing Increased Levels of Flavonols. *Nature Biotechnology*. 19: 470-474.
- Osborn, Thomas, C., Chris, P., Birchler, J. A., Auger, D. L., Chen, Z. J., Lee, H. S., and Comai, L. 2003. Understanding Mechanisms of Novel Gene Expression in Polyploids. *Trends in Genetics*. 19(3): 141-147.
- Padamani, E., Ngginak, J., and Lema, A. T. 2020. Analisis Kandungan Polifenol pada Ekstrak Tunas Bambo Betung (*Dendrocalamus asper*). *Bioma: Jurnal Biologi dan Pembelajaran Biologi*. 5(1): 52-65.
- Pebrianti, C., Ainurrasjid, A., dan Purnamaningsih, S.L. 2015. Uji Kadar Antosianin dan Hasil Enam Varietas Tanaman Bayam Merah (*Alternanthera amoena* Voss) pada Musim Hujan. *Jurnal Produksi Tanaman*. 3(1): 27-33.

- Pietta, P. G. 1999. Flavonoid as Antioxidants. *Journal of Natural Product*. 63: 1035- 1042.
- Powo. 2022. Royal Botanic Garden. *Arachis hypogaea* L. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:318562-2>. [Diakses pada tanggal 13 Oktober 2022].
- Priska, M., Peni, N., Carvallo, L., dan Ngapa, Y. D. 2018. Antosianin dan Pemanfaatannya. *Cakra Kimia (Indonesian E-Journal of Applied Chemistry)*. 6(2): 79-97.
- Purnomo, P and Khotimah, N. 2019. Variations and Phenetic Analysis of Peanut Kultivars (*Arachis hypogaea* L.) Based on Morphological Characteristics. *Journal Tropical Biodiversity Biotech*. 4(1): 24-31.
- Purnomo, J. 2013. Deskripsi Varietas Kacang Tanah Unggul Garuda 5. *Balai Penelitian Tanaman Aneka Kacang dan Umbi, Badan Penelitian dan Pengembangan Pertanian*. Jakarta. Hal: 41.
- Celis, J. E., Mogens, K., Irina, G., Casper, F., Morten, O., Thomas, T., Pavel, G. 2000. Gene Expression Profiling: Monitoring Transcription and Translation Products Using DNA Microarrays and Proteomics. *FEBS letters*, 480(1): 2-16.
- Rieu, I and Powers, S. J. 2009. Real-time Quantitative RT-PCR: Design, Calculations, and Statistics. *The Plant Cell*. 21(4): 1031-1033.
- Rosyidi, I and Daryono, S. B. 2020. Phenotypic Characters and Genetic Variations of Lurik Peanuts (*Arachis hypogaea* L. var. Lurikensis) with Inter Simple Sequence Repeat. *Biodiversitas*. 21(2): 629-635.
- Rout, E., Nanda, S., Nayak, S., and Josi, R.K. 2014. Molecular Characterization of NBS Encoding Resistance Genes and Induction Analysis of Putative Candidate Gene Linked to Fusarium Basal Rot Resistance in *Allium sativum*. *Physiological and Molecular Plant Pathology*. 85: 15 - 24
- Sari, R., dan Retno, P. 2015. Rhizobium: Pemanfaatannya sebagai Bakteri Penambat Nitrogen. *Buletin Eboni*. 12(1): 51-64.
- Seeram, N. P., Momin, R. A., Nair, M. G., and Bourquin, L. D. 2001. Cyclooxygenase Inhibitory and Antioxidant Cyanidin Glycosides in Cherries and Berries. *Phytomedicine*. 8(5): 362–369.
- Segev, A., Badani, H., Kapulnik, Y., Shomer, I., Oren-Shamir, M., and Galili, S. 2010. Determination of Polyphenols, Flavonoids, and Antioxidant Capacity in Colored Chickpea (*Cicer arietinum* L.). *Journal of Food Science*. 75(2): 115-119.
- Shinta, S., dan Minarno, E. B. 2018. Karakter Fenotipik Tanaman Padi Beras Hitam (*Oryza sativa* L.) Varietas Wojalaka Hasil Induksi dengan Kolkisin. *Prosiding Seminar Nasional Sains dan Teknologi Terapan*. 1(1): 43 – 52.

- Slimestad, R., and Solheim, H. 2002. Anthocyanins from Black Currants (*Ribes nigrum* L.). *Journal of Agricultural and Food Chemistry*. 50(11): 3228-3231.
- Sun, H., Zhang, P., Zhu, Y., Lou, Q., and He, S. 2018. Antioxidant and Prebiotic Activity of Five Peonidin-Based Anthocyanins Extracted from Purple Sweet Potato (*Ipomoea batatas* (L.) Lam.). *Scientific Reports*. 8(1): 1–12.
- Susanti, H. 2012. Produksi Protein dan Antosianin Pucuk Kolesom (*Talinum triangulare* (Jacq) Willd) dengan Pemupukan Nitrogen dan Interval Panen. *Jurnal Agrivita*. 7(2): 5-6.
- Susianti, A., Aristya, G. R., Sutikno, S., dan Kasiamdari, R. S. 2015. Karakterisasi Morfologi dan Anatomi Stroberi (*Fragaria x ananassa* D. cv. Festival) Hasil Induksi Kolkisin. *Biogenesis: Jurnal Ilmiah Biologi*. 3(2): 66-75.
- Syarifuddin, M. U. 2011. *Kapasitas Antioksidan dan Stabilitas Ekstrak Pigmen Antosianin Kulit Kacang Gude Hitam (Cajanus Cajan [linn. Millsp.] dengan Variasi Pelarut*. Skripsi. Universitas Sebelas Maret. Surakarta. Hal: 5-8.
- Taluta, H.E., Rampe, H.L., dan Rumondor, M. J. 2017. Pengukuran Panjang dan Lebar Pori Stomata Daun Beberapa Varietas Tanaman Kacang Tanah (*Arachis hypogaea* L.). *Jurnal MIPA*. 6(2): 1-5.
- Thermo fisher. (n.d.). 2019. *5 Steps to Fast RT-PCR* / *Thermo Fisher Scientific - NL*. www.thermofisher.com. Retrieved August 1, 2022, from <https://www.thermofisher.com/nl/en/home/lifescience/pcr/reversetranscription/superscript-iv-one-step-rt-pcr-system/5-steps-rt-pcr.html>
- Toomer, O.T. 2018. Nutritional Chemistry of the Peanut (*Arachis hypogaea*). *Critical Reviews in Food Science and Nutrition*. 58(17): 3042-3053.
- Trustinah. 2015. *Morfologi dan Pertumbuhan Kacang Tanah*. Balai Penelitian Tanaman Aneka Kacang dan Umbi. Malang. Hal: 60-66.
- Uheda, E., Daimon, H., and Yoshizako, F. 2001. Colonization and Invasion of Peanut (*Arachis hypogaea* L.) Roots by Gus-A Marked *Bradyrhizobium* ssp. *Journal Botanical*. 79: 733-738.
- Valonez, M.A.A., Guimaraes, R. L., Brandao, L.A.C., Carvalho, A.T., and Crovela, S. 2009. Principles and Applications of Polymerase Microbiology. *Cytologia*. 40(1): 1-11.
- Varma, A., Padh, H., and Shrivastava, N. 2007. Plant Genomic DNA isolation: An Art or a Science. *Biotechnology Journal*. 2(3): 386–392.
- Widayati, E. 2022. Oksidasi Biologi, Radikal Bebas, dan Antiosidan. *Majalah Ilmiah Sultan Agung*. 50(128): 26-32.
- Wulansari, D dan Chairul. 2011. Penapisan Aktivitas Antioksidan dan Beberapa Tumbuhan Obat Indonesia Menggunakan Radikal 2,2-diphenyl-1-picrylhydrazyl (DPPH). *Majalah Obat Tradisional*. 16(1): 22-25.

- Yang, Y., Cui, B., Tan, Z., Song, B., Cao, H., and Zong, C. 2018. RNA Sequencing and Anthocyanin Synthesis-Related Genes Expression Analyses in White-Fruited *Vaccinium uliginosum*. *BMC Genomics*. 19(1): 1–11.
- Youssef, M., Valdez-Ojeda, R., Ku-Cauich, J. R., and Medrano, R. M. E.-G. 2015. Enhanced Protocol for Isolation of Plant Genomic DNA. *Journal of Agriculture and Environmental Sciences*. 4(2): 172–180.
- Yu, J., Ahmedna, M., and Goktepe, I. 2005. Effects of Processing Methods and Extraction Solvents on Concentration and Antioxidant Activity of Peanut Skin Phenolics. *Food chemistry*. 90(1-2): 199-206.
- Zhang, Y., Xia, H., Yuan, M., Zhao, C., Li, A., and Wang, X. 2012. Cloning and Expression Analysis of Peanut (*Arachis hypogaea* L.) CHI Gene. *Electronic Journal of Biotechnology*. 15(1): 1-5.
- Zhao, Y., Ma, J., Li, M., Deng, L., Li, G., Xia, H., Zhao, S., Hou, L., Li, P., Ma, C., and Yuan, M. 2020. Whole-Genome Resequencing-Based QTL-seq Identified AhTcl Gene Encoding a R2R3-MYB Transcription Factor Controlling Peanut Purple Testa Colour. *Plant Biotechnology Journal*. 18(1): 96-105.