



## DAFTAR PUSTAKA

- Arendse, E., Fawole, O. A., Magwaza, L. S., & Opara, U. L. (2016). Non-destructive characterization and volume estimation of pomegranate fruit external and internal morphological fractions using X-ray computed tomography. *Journal of Food Engineering*, 186, 42–49. <https://doi.org/10.1016/j.jfoodeng.2016.04.011>
- Azhar, K. S. (2007). *Pengkajian bahan pelapis, kemasan dan suhu penyimpanan untuk memperpanjang masa simpan buah manggis*. Institut Pertanian Bogor. Bogor.
- Badan Pusat Statistik. (2022). *Produksi Tanaman Sayuran 2022*. Bps.Go.Id. <https://www.bps.go.id/indicator/55/61/1/produksi-tanaman-sayuran.html>
- Bajer, M. T., & Gajewski, M. (2012). The effect of CA storage on quality parameters of shallot (*Allium ascalonicum* L.) Bulbs. *Acta Horticulturae*, (934), 1335–1340. doi:10.17660/actahortic.2012.934.
- Bessemans, N., Verboven, P., Verlinden, B. E., & Nicolaï, B. M. (2016). A novel type of dynamic controlled atmosphere storage based on the respiratory quotient (RQ-DCA). *Postharvest Biology and Technology*, 115, 91–102. <https://doi.org/10.1016/j.postharvbio.2015.12.019>
- Boeckx, J., Pols, S., Hertog, M. L. A. T. M., & Nicolaï, B. M. (2019). Regulation of the Central Carbon Metabolism in Apple Fruit Exposed to Postharvest Low-Oxygen Stress. *Frontiers in Plant Science*, 10(October), 1–17. <https://doi.org/10.3389/fpls.2019.01384>
- Both, V., Thewes, F. R., Brackmann, A., Ferreira, D. de F., Pavanello, E. P., & Wagner, R. (2016). Effect of low oxygen conditioning and ultralow oxygen storage on the volatile profile, ethylene production and respiration rate of 'Royal Gala' apples. *Scientia Horticulturae*, 209, 156–164. <https://doi.org/10.1016/j.scienta.2016.06.028>
- Campbell Neil A, Jane B. Reece, L. G. M. (2003). *BIOLOGI* (A. Safitri (ed.); 5th ed.). Erlangga.
- Cantré, D., Herremans, E., Verboven, P., Ampofo-Asiama, J., Hertog, M. L. A. T. M., & Nicolaï, B. M. (2017). Tissue breakdown of mango (*Mangifera indica* L. cv. Carabao) due to chilling injury. *Postharvest Biology and Technology*, 125, 99–111. <https://doi.org/10.1016/j.postharvbio.2016.11.009>
- Castleman KR. (1996). *Digital image processing* (2nd ed.). Prentice-Hall, Englewood Cliff.
- Chigwaya, K., Karuppanapandian, T., Schoeman, L., Viljoen, D. W., Crouch, I. J., Nugraha, B., Verboven, P., Nicolaï, B. M., & Crouch, E. M. (2021). X-ray CT and porosity mapping to determine the effect of 'Fuji' apple morphological and microstructural properties on the incidence of CO<sub>2</sub> induced internal browning. *Postharvest Biology and Technology*, 174(January). <https://doi.org/10.1016/j.postharvbio.2021.111464>
- De Manson, D. . (1990). Morphology and Anatomy of Allium. In: Rabinowitch, H. D. and Brewester. J.L. (eds) Onion and Allied Corps. *Bolary. Physiology, and Genetic*, 1, 27–51.
- Diah Aryulina, Choirul Muslim, Syalfinaf, E. W. W. (2004). *Biologi Jilid 2* (Eny Wijiyanti (ed.); 2nd ed.). Esis.
- Elliott JC, D. S. (1982). X-ray microtomography. *Journal of Microscopy*, 126(2),



- 211–213. <https://doi.org/doi:10.1111/j.1365-2818.1982.tb00376.x>
- Falagán, N., & Terry, L. A. (2018). Recent advances in controlled and modified atmosphere of fresh produce. *Johnson Matthey Technology Review*, 62(1), 107–117. <https://doi.org/10.1595/205651318X696684>
- Fonseca, S. C., Oliveira, F. A. R., Frias, J. M., Brecht, J. K., & Chau, K. V. (2002). <Modelrespiracion.Pdf>. *Journal of Food Engineering*, 54, 299–307.
- Franck, C., Lammertyn, J., Ho, Q. T., Verboven, P., Verlinden, B., & Nicolaï, B. M. (2007). Browning disorders in pear fruit. *Postharvest Biology and Technology*, 43(1), 1–13. <https://doi.org/10.1016/j.postharvbio.2006.08.008>
- Frisullo, P., Barnabà, M., Navarini, L., & Del Nobile, M. A. (2012). Coffea arabica beans microstructural changes induced by roasting: An X-ray microtomographic investigation. *Journal of Food Engineering*, 108(1), 232–237. <https://doi.org/10.1016/j.jfoodeng.2011.07.036>
- Furqoni, A. H. A., Haryono, D., & Gitosaputro, S. (2021). Analisis Biaya Pasca Panen Dan Nilai Tambah Penggilingan Padi Di Kota Terpadu Mandiri Kabupaten Mesuji. *Jurnal Ilmu-Ilmu Agribisnis*, 9(2), 161. <https://doi.org/10.23960/jiia.v9i1.4981>
- Gardjito, Murdjito, Putri, R. . (2017). *Profil Struktur, Bumbu, dan Bahan dalam Kuliner Indonesia*. Gadjah Mada University Press.
- Gardjito, M., Handayani, W., & Salfarino, R. (2015). *Penanganan segar Hortikultura untuk penyimpanan dan pemasaran* (1st ed.). Prenadamedia Group.
- Guelpa, A., du Plessis, A., Kidd, M., & Manley, M. (2015). Non-destructive Estimation of Maize (*Zea mays* L.) Kernel Hardness by Means of an X-ray Micro-computed Tomography ( $\mu$ CT) Density Calibration. *Food and Bioprocess Technology*, 8(7), 1419–1429. <https://doi.org/10.1007/s11947-015-1502-3>
- Gueven, A., & Hicsasmaz, Z. (2011). Geometric network simulation of high porosity foods. *Applied Mathematical Modelling*, 35(10), 4824–4840. <https://doi.org/10.1016/j.apm.2011.03.047>
- Gunawan, S. R. (2007). *Biologi SMA* (1st ed.). Grasindo. <http://katalogdispusipbanyuwangi.perpusnas.go.id/detail-opac?id=2827>
- He, K., Sun, J., & Tang, X. (2013). Guided image filtering. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 35(6), 1397–1409. <https://doi.org/10.1109/TPAMI.2012.213>
- Heinzl, Cristoph., Amirkhanov, Alexander., and Kastner, J. (2018). Processing, Analysis and Visualization of CT Data. In *Industrial X-Ray Computed Tomography* (pp. 99–142). Springer International Publishing. <https://doi.org/https://doi.org/10.1007/978-3-319-59573-3>
- Hermanek, P., & Carmignato, S. (2016). Reference object for evaluating the accuracy of porosity measurements by X-ray computed tomography. *Case Studies in Nondestructive Testing and Evaluation*, 6, 122–127. <https://doi.org/10.1016/j.csndt.2016.05.003>
- Herremans, E., Melado-Herreros, A., Defraeye, T., Verlinden, B., Hertog, M., Verboven, P., Val, J., Fernández-Valle, M. E., Bongaers, E., Estrade, P., Wevers, M., Barreiro, P., & Nicolaï, B. M. (2014). Comparison of X-ray CT and MRI of watercore disorder of different apple cultivars. *Postharvest Biology and Technology*, 87, 42–50.



<https://doi.org/10.1016/j.postharvbio.2013.08.008>

- Herremans, E., Verboven, P., Defraeye, T., Rogge, S., Ho, Q. T., Hertog, M. L. A. T. M., Verlinden, B. E., Bongaers, E., Wevers, M., & Nicolai, B. M. (2014). X-ray CT for quantitative food microstructure engineering: The apple case. *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 324, 88–94. <https://doi.org/10.1016/j.nimb.2013.07.035>
- Ho, Q. T., Hertog, M. L. A. T. M., Verboven, P., Ambaw, A., Rogge, S., Verlinden, B. E., & Nicolaï, B. M. (2018). Down-regulation of respiration in pear fruit depends on temperature. *Journal of Experimental Botany*, 69(8), 2049–2060. <https://doi.org/10.1093/jxb/ery031>
- Ho, Q. T., Verboven, P., Verlinden, B. E., Schenk, A., Delele, M. A., Rolletschek, H., Vercammen, J., & Nicolaï, B. M. (2010). Genotype effects on internal gas gradients in apple fruit. *Journal of Experimental Botany*, 61(10), 2745–2755. <https://doi.org/10.1093/jxb/erq108>
- Ho, Q. T., Verboven, P., Verlinden, B. E., Schenk, A., & Nicolaï, B. M. (2013). Controlled atmosphere storage may lead to local ATP deficiency in apple. *Postharvest Biology and Technology*, 78, 103–112. <https://doi.org/10.1016/j.postharvbio.2012.12.014>
- Jasmi, Sulistyaningsih E, I. D. (2013). 1 , 2 , 2 . 16(1), 42–57.
- Julianti, E., Yusraini, E., & Ismed Suhaidi, D. (2013). Pengaruh Penyimpanan dengan Atmosfer Terkendali terhadap Effect of Controlled Atmosphere Storage on the Quality of Rambutan “Binjai.” *J. Hort. Indonesia*, 4(2), 63–69.
- Jung, H. (2021). Basic Physical Principles and Clinical Applications of Computed Tomography. *Progress in Medical Physics*, 32(1), 1–17. <https://doi.org/10.14316/pmp.2021.32.1.1>
- Khosravani, M. R., & Reinicke, T. (2020). On the Use of X-ray Computed Tomography in Assessment of 3D-Printed Components. *Journal of Nondestructive Evaluation*, 39(4). <https://doi.org/10.1007/s10921-020-00721-1>
- Kruth, J. P., Bartscher, M., Carmignato, S., Schmitt, R., De Chiffre, L., & Weckenmann, A. (2011). Computed tomography for dimensional metrology. *CIRP Annals - Manufacturing Technology*, 60(2), 821–842. <https://doi.org/10.1016/j.cirp.2011.05.006>
- Libyawati, W., Eka Lesmana, I. G., Raynold, A., Agustian, H., & Mahardhika, L. (2017). Modified atmosphere storage (mas) buah pisang. *Dinamika Teknik Mesin*, 7(2), 92–99. <https://doi.org/10.29303/d.v7i2.159>
- Lyra, M., & Ploussi, A. (2011). Filtering in SPECT image reconstruction. *International Journal of Biomedical Imaging*, 2011. <https://doi.org/10.1155/2011/693795>
- Mathooko, F. M. (1996). Regulation of respiratory metabolism in fruits and vegetables by carbon dioxide. *Postharvest Biology and Technology*, 9(3), 247–264. [https://doi.org/10.1016/S0925-5214\(96\)00019-1](https://doi.org/10.1016/S0925-5214(96)00019-1)
- Mellidou, I., Buts, K., Hatoum, D., Ho, Q. T., Johnston, J. W., Watkins, C. B., Schaffer, R. J., Gapper, N. E., Giovannoni, J. J., Rudell, D. R., Hertog, M. L. A. T. M., & Nicolai, B. M. (2014). Transcriptomic events associated with internal browning of apple during postharvest storage. *BMC Plant Biology*, 14(1), 1–17. <https://doi.org/10.1186/s12870-014-0328-x>



- Mutia, A. K., Purwanto, Y. A., & Pujantoro, L. (2014). Penyimpanan Pada Tingkat Kadar Air dan Suhu yang Berbeda. *J. Pascapanen*, 11(2), 108–115.
- Naik, R., Ambrose, D. C. P., Raghavan, G. S. V., & Annamalai, S. J. K. (2014). *Enhancing shelf life of minimally processed multiplier onion using silicone membrane*. 51(December), 3963–3969. <https://doi.org/10.1007/s13197-012-0898-2>
- Nugraha, B., Verboven, P., Janssen, S., Wang, Z., & Nicolaï, B. M. (2019). Non-destructive porosity mapping of fruit and vegetables using X-ray CT. *Postharvest Biology and Technology*, 150(November 2018), 80–88. <https://doi.org/10.1016/j.postharvbio.2018.12.016>
- Nurjanah, S. (2002). Study on Respiration Rate and Ethylene Production of Fruit and Vegetables To Predict Their Storage Time. *Bionatura*, 4(3), 148–156. <https://www.neliti.com/publications/218031/kajian-laju-respirasi-dan-produksi-etilen-sebagai-dasar-penentuan-waktu-simpan-s>
- Panji Tok. (2015). *Penampang selaput bawang merah*. [Www.Edubio.Info](https://www.edubio.info/2015/02/penampang-selaput-bawang-merah.html). <https://www.edubio.info/2015/02/penampang-selaput-bawang-merah.html>
- Pedreschi, R., Franck, C., Lammertyn, J., Erban, A., Kopka, J., Hertog, M., Verlinden, B., & Nicolaï, B. (2009). Metabolic profiling of “Conference” pears under low oxygen stress. *Postharvest Biology and Technology*, 51(2), 123–130. <https://doi.org/10.1016/j.postharvbio.2008.05.019>
- Priyantonoa, E., Purwanto, Y. A., & Sobir. (2016). Penyimpanan Dingin Bawang Merah ( Allium ascalonicum L .). *Journal of Agro-Based Industry*, 33 (No. 1), 32–38.
- Rachman, A. (2015). Aplikasi Teknik Computed Tomography (CT) Scan dalam Penelitian Porositas Tanah dan Perkembangan Akar. *Jurnal Sumberdaya Lahan*, 9, 85–96.
- Rahardjo, B dan Rejo, A. (1994). Simulasi Pengemasan Tomat dalam Atmosfir Termodifikasi dengan Plastik Lembaran. *Simposium Nasional Holtikultura UNIBRAW*.
- Rahayu, D., Bintoro, N., & Saputro, A. D. (2021). Pemodelan Laju Respirasi Buah Klimakterik Selama Penyimpanan Pada Suhu Yang Bervariasi. *Agrointek*, 15(1), 80–91.
- Ramadhani, A., Darsono, D., Budianto, A., & Suhartono, S. (2017). Penentuan Sphericity Dan Distribusi Intensitas Berkas Elektron Dari Sumber Elektron Tipe Pierce Berbasis Matlab. *Jurnal Forum Nuklir*, 10(2), 53. <https://doi.org/10.17146/jfn.2016.10.2.3495>
- Rasban Supardji. (2021). *Gudang SRG Bawang Merah Teknologi CAS, Upaya Stabilitasi Harga*. [Mediaindonesia.Com](https://mediaindonesia.com/nusantara/380061/gudang-srg-bawang-merah-teknologi-cas-upaya-stabilitasi-harga). <https://mediaindonesia.com/nusantara/380061/gudang-srg-bawang-merah-teknologi-cas-upaya-stabilitasi-harga>
- Rubatzky, V. E., Herison, C., Niksolihin, S., & Yamaguchi, M. (1998). *Sayuran dunia 2: prinsip, produksi, dan gizi* (2nd ed.). ITB.
- Seeram E. (2015). *Computed tomography: physical principles, clinical applications, and quality control*.
- Sharma, K., & Lee, Y. R. (2016). Effect of different storage temperature on chemical composition of onion ( Allium cepa L .) and its enzymes. *Journal of Food Science and Technology*, 53(March), 1620–1632. <https://doi.org/10.1007/s13197-015-2076-9>



- Sumadi. (2003). *Intensifikasi Budidaya Bawang Merah*. Kanisius.
- Sumarni dan Hidayat. (2005). *Klasifikasi Tanaman Bawang Merah*.
- Sunarjono, A. (2003). *Budidaya Bawang Merah*. Sinar Baru.
- Susanto, H. (2018). *Pengaruh lapisan lidah buaya (Aloe vera L) dengan penambahan CMC (Carboxyl Methyl Cellulose) yang berbeda terhadap daya simpan buah tomat*.
- Tantamacharik, T., Leong, S. Y., Leus, M. J., Eyres, G. T., Burritt, D. J., & Oey, I. (2019). Structural changes induced by pulsed electric fields increase the concentration of volatiles released in red onion (*Allium cepa* L. Var. Red pearl) bulbs. *Foods*, 8(9). <https://doi.org/10.3390/foods8090368>
- Thompson, Adam dan Leach, R. (2018). Introduction to Industrial X-ray Computed Tomography. In *Industrial X-Ray Computed Tomography* (pp. 1–24). Springer International Publishing. <https://doi.org/https://doi.org/10.1007/978-3-319-59573-3>
- Tjitrosoepomo, G. (2004). *Taksonomi Tumbuhan. dengan Sistem Pengelolaan Terpadu (PTT) di Desa Aman Damai Kecamatan Kuala Kabupaten Langkat*. USU.
- Wahyuni, S., & Amalia, L. (2022). Perkembangan Dan Prinsip Kerja Computed Tomography (CT Scan). *GALENICAL : Jurnal Kedokteran Dan Kesehatan Mahasiswa Malikussaleh*, 1(2), 88. <https://doi.org/10.29103/jkkmm.v1i2.8097>
- Wang, J., Lu, Z., Xiao, X., Xu, M., Lin, Y., Dai, H., Liu, X., Pi, F., & Han, D. (2023). Non-destructive determination of internal defects in chestnut (*Castanea mollissima*) during postharvest storage using X-ray computed tomography. *Postharvest Biology and Technology*, 196(July 2022), 112185. <https://doi.org/10.1016/j.postharvbio.2022.112185>
- Wibisono, R. A., & Bintoro, N. (2022). Kinetika perubahan kualitas bawang merah (*Allium cepa* L.) varietas tajuk dibawah pengaruh edible coating dan suhu ruang penyimpanan. *Agrointek : Jurnal Teknologi Industri Pertanian*, 16(3), 439–445. <https://doi.org/10.21107/agrointek.v16i3.12752>
- Widiyanto, A. (2018). Teknik Penyimpanan Bawang Merah. *Jurnal Teknologi Pertanian*, 2, 1–5. <http://bbppbinuang.or.id/wp-content/uploads/2018/04/ARTIKEL-Penyimpanan-Bawang-Merah.pdf>
- Youngki, A., dan N. (2014). Aplikasi edible coating dari pektin jeruk songhi pontianan (*Citrus nobilis* Var Microcarpa) pada penyimpanan buah tomat. *JJK*, 3(4), 11–20.