

## DAFTAR PUSTAKA

- Allard, R.W. dan A.D. Bradshaw. 1964. Implications of Genotype-Environmental Interactions in Applied Plant Breeding. *Crop Sci.* 4: 503-508.
- Aronen, T., dan L. Rynnänen. 2011. Variation in telomeric repeats of Scots pine (*Pinus sylvestris* L.). *Tree Genet Genomes* 8:267–275.
- \_\_\_\_\_. 2014. Silver birch telomeres shorten in tissue culture. *Tree Genet Genomes* 10:67–74.
- Ayoola P.B dan A. Adeyeye, 2010. Phytochemical and Nutrient Evaluation of *Carica papaya* (Pawpaw) Leaves. *IJRRAS* (5): 325-328.
- Bernadotte, A., M.M. Victor, dan M.S. Irina. 2016. Markers of cellular senescence. Telomere shortening as a marker of cellular senescence. *Aging* 8 (1): 1-11.
- Blackburn, E. 2005. Telomerase and Cancer. *Mol Cancer Res* 3: 9.
- Broun, P., M.W. Ganai, dan S.D. Tanksley. 1992. Telomeric Arrays Display High Levels of Heritable Polymorphism Among Closely Related Plant Varieties. *Proc. Natl. Acad. Sci. USA* 89: 1354–1357.
- Brown, T.A. 2002. DNA in Genomes. 2nd ed. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=genomes.section.5234>. (Diakses 5 Januari 2018).
- Chen Q., A. Fischer, J.D. Reagan, L.J. Yan, dan B.N. Ames. 1995. Oxidative DNA damage and senescence of human diploid fibroblast cells. *Proc Natl Acad Sci* 92: 4337-4341.
- Dale, J. W. dan M. Von Schantz. 2002. *From Genes to Genomes: Concepts and Applications of DNA Technology*. John Wiley and Sons, Inggris.
- Dalimartha, S. 2009. *Atlas Tumbuhan Obat*. Pustaka Bunda, Jakarta.
- Erlich, H.A. 1989. Polymerase Chain Reaction. *Journal of Clinical Immunology* 9: 437–447.
- Fajkus J., A. Kovarik, dan R. Kralovics. 1996. Telomerase activity in plant cells. *FEBS Lett* 391:307-309.
- Fajkus J., J. Fulnečková, dan M. Hulaňová. 1998. Plant cells express telomerase activity upon transfer to callus culture, without extensively changing telomere lengths. *Mol Gen Genet* 260:470-474.
- Flanary, B. E. dan W.J. Streit. 2003. Telomeres shorten with age in rat *cerebellum* and cortex in vivo. *J Anti Aging Med* 6:299–308.

- Flanary, B.E., dan Kletetschka. 2005. Analysis of telomere length and telomerase activity in tree species of various life-spans, and with age in the bristlecone pine *Pinus longaeva*. *Biogerontology* 6:101–111.
- Furumoto, K., E. Inoue, dan N. Nagao. 1998. Age-dependent telomere shortening is slowed down by enrichment of intracellular vitamin C via suppression of oxidative stress. *Life Sci* 63: 935-948.
- Glick B.R dan J.J. Pasternak. 2003. *Molekuler Biotechnology, Principles and applications of Recombinan DNA*. ASM Press, Washinton D.C.
- Granato T., Muscoli, dan A. Sgura. 2009. Apoptosis and telomere shortening related to HIV-1 induced oxidative stress in an astrocytoma cell line. *BMC Neuroscience* 10: 51.
- Greenaway, T. 1997. *Pohon*. (Terjemahan: Hadisunarso, 2002). Penerbit Erlangga, Jakarta.
- Greider, C.W. and E.W. Blackburn. 1996. Telomeres, Telomerase and Cancer. *Scientific American*, <http://www.genethik.de/telomerase.htm>. (Diakses 5 Januari 2018).
- Kalie, M. B. 1996. *Bertanam Pepaya*. Edisi Revisi. Penerbit Swadaya, Jakarta.
- Khoury, S., P. Latini, F. Fabbrini, L. Proietti-De-Santis, R. Meschini, M.Sabatti, G. Scarascia-Mugnozza, dan A. Harfouche. 2015. June. Measuring telomere length in forest trees and its relevance to tree breeding. Poster session presented at UFRO Tree Biotechnology conference. Florence.
- Kilian A., C. Stiff, dan A. Kleinhofs. 1995. Barley telomeres shorten during differentiation but grow in callus culture. *Proc Natl Acad Sci USA* 92:9555–9559.
- Kilian A., K. Heller, dan A. Kleinhofs. 1998. Development patterns of telomerase activity in barley and maize. *Plant Mol Biol* 37:621-628.
- Klingelhutz, A.J. 1997. Telomerase activation and cancer. *J Mol Med* 75 (1): 45 -49.
- Kusdianti, 2010. *Morfologi Tumbuhan*. UPI.
- Kwon, C dan I. K. Chung. 2006. Recent progress in plant telomere biology. *JNBT* 3 (2): 61-65.
- Liang, J., C. Jiang, H. Peng, Q. Shi, X. Guo, Y. Yuan, dan L. Huang. 2015. Analysis of the age of *Panax ginseng* based on telomere length and telomerase activity. *Scientific Reports* 5:79-85.
- Liu, D., N. Qiao, H. Song, X. Hua, J. Du, H. Lu, dan F. Li. 2007. Comparative analysis of telomeric restriction fragment lengths in different tissues of *Ginkgo biloba* trees of different age. *J Plant Res* 120:523–528.

- Lorenz, M., G. Saretzki, dan N. Sitte. 2001. BJ fibroblasts display high antioxidant capacity and slow telomere shortening independent of hTERT transfection. *Free Radic Biol Med* 31: 824-831.
- Mayer, S., S.Bruderlein, S. Perner, I. Waibel, A. Holdenried, N. Ciloglu, C. Hasel, T. Mattfeldt, K.V. Nielsen, dan P. Moller. 2006. Sex-specific telomere length profiles and age-dependent erosion dynamics of individual chromosome arms in humans. *Cytogenet Genome Res* 112:194–201.
- Mu, Y., L. Ren, Z. Xun, D. Zhang, H. Song, H. Lu, F. Li dan D. Liu. 2014. Sex- and season-dependent differences in telomere length and telomerase activity in the leaves of ash and willow. *Springer Plus* 3:163.
- Muladno. 2002. *Seputar Teknologi Rekayasa Genetika*. Pustaka Wirausaha Muda dan USESE Foundation, Bogor.
- Mullis, K.B. dan F.A. Faloona. 1987. Specific synthesis of DNA in vitro polymerase catalyzed chain reaction. *Meth. of Enz.* 155: 335-350.
- Na, M. K., K. H. Bae, S.S. Kang, B.S. Min, J.K. Yoo, Y. Kamiryo, Y. Senoo, S. Yokoo, dan N. Miwa. 2004. Cytoprotective effect on oxidative stress and inhibitory effect on cellular aging of *Terminalia chebula* fruit. *Phytother. Res.* 18: 737-741.
- Nazaruddin dan Kristiawati. 1997. *Varietas Salak*. Penebar Swadaya, Jakarta.
- Nelson, A.D.L., E. S. Forsythe, X. Gan, M. Tsiantis, dan M. A. Beilstein. 2014. Extending the model of Arabidopsis telomere length and composition across *Brassicaceae*. *Chromosome Res* 22:153–166.
- Novriani, E. 2014. *Karakterisasi dan Skrining Fitokimia Serta Uji Aktivitas Antioksidan Ekstrak Etanol dan Jus Buah Salak (*Salacca Sumatrana*) dengan Metode Dpph*. Fakultas Farmasi Universitas Sumatera Utara.
- Ong, S.P dan C.L. Law. 2009. Mathematical modelling of thin layer drying of snakefruit. *Journal of Applied Sciences* 9: 3048-3054.
- Pandey, S.N. dan B.X. Sinha. 1979. *Plant Physiology*. Vikas Publishing House FVT Ltd., New Delhi.
- Purwaningsih, E. 2010. Telomer, aging dan karsinogenesis. *Jurnal Kedokteran Yarsi* 18 (2): 137-143.
- Ramirez, R., J. Carracedo, dan Jimenez. 2003. Massive Telomere loss is an early event of DNA damage-induced apoptosis. *J Bio Chem* 272: 836-842.
- Rasmussen, R. dan G. Reed. 1992. Optimizing rapid cycle DNA amplification reaction. <http://biofiredefense.com/pdfs/ATC1605/ATCManual.pdf#page=75>. (Diakses 5 Januari 2018).

- Raven, P.H., R.F. Evert, dan S.E. Eichhorn. 1991. *Biology of Plants*. Wort Publisher, New York.
- Rescalvo-Morales A., K. M. Monja-Mio, G. Herrera-Herrera, M. L. Robert, dan L. F. Sa´nchez-Teyer. 2016. Analysis of telomere length during the organogenesis induction of *Agave fourcroydes* Lem and *Agave tequilana* Weber. *Plant Cell Tiss Organ Cult* 127:135-143.
- Richards, E.J. dan F.M. Ausubel. 1988. Isolation of a higher eukaryotic telomere from *Arabidopsis thaliana*. *Cell* 53: 127–136.
- Riha K., J. Fajkus, J. Siroky, dan B. Vyskot. 1998. Developmental Control of Telomere Lengths and Telomerase Activity in Plants. *The Plant Cell* 10: 1691-1698.
- Rukmana, R. 2003. *Pepaya Budidaya dan Pasca Panen*. Penerbit Kanisius, Yogyakarta.
- Salisbury, F. B. dan C. W. Ross. 1995. *Fisiologi Tumbuhan*. Jilid I. Edisi IV. ITB, Bandung.
- Sambrook, J., E.F. Fritsch, dan T. Maniatis. 1989. *Molecular Cloning: A Laboratory Manual*. 2nd edition. Cold Spring Harbor Laboratory Press, New York.
- Santoso, H.B. 1990. *Salak Pondoh*. Penerbit Kanisius, Yogyakarta.
- Saretzki, G. dan T. von Zglinicki. 2002. Replicative aging, telomeres, and oxidative stress. *Ann N Y Acad Sci* 959: 24-29.
- Sestak Z. 1981. *Leaf Ontogeny and Photosynthesis, Physiological Processes Limiting Plant Productivity*. Butterworths, London.
- Shakirov, E.V., S.L. Salzberg, M. Alam, dan D.E. Shippen. 2008. Analysis of *Carica papaya* telomeres and telomere-associated proteins: insights into the evolution of telomere maintenance in Brassicales. *Trop Plant Biol* 1:202–215.
- Shammas M.A., H. Koley, D.G. Beer, C. Li, A.K. Goyal, dan Munshi. 2004. Growth arrest, apoptosis, and telomere shortening of Barrett’s associated adenocarcinoma cells by a telomerase inhibitor. *Gastroenterology* 126: 1337-1346.
- Shay J.W., Y. Zou, E. Hiyama, dan W.E. Wright. 2001. Telomerase and Cancer. *Hum Mol Gen* 10 (7): 677-685.
- Soetomo, M. H.A. 2001. *Teknik Bertanam Salak*. Sinar Baru, Bandung.
- Song Y.S., B.Y. Lee, dan E.S. Hwang. 2005. Distinct ROS and biochemical profiles in cells undergoing DNA damage-induced senescence and apoptosis. *Mech. Ageing Dev.* 126: 580-590.

- Song, H., D. Liu, X. Chen, Z. Ying, B. Zhang, F. Li, H. Lu. 2010. Change of season-specific telomere lengths in *Ginkgo biloba* L. *Mol Biol Rep* 37:819–824.
- Steenis, C.G.G.J. van. 1975. *Flora Untuk Sekolah di Indonesia*. PT. Pradnya Paramita, Jakarta.
- Susanto, A. 2008. Kadar Klorofil pada Berbagai Tanaman yang Berbeda Umur. Jurusan Biologi Fakultas Matematika dan Ilmu Pengetahuan Alam. Universitas Negeri Surabaya, Surabaya.
- Suskendriyati, H., A. Wijayati, N. Hidayah, dan D. Cahyuningdari. 2000. Studi morfologi dan hubungan kekerabatan varietas salak pondoh (*Salacca zalacca* (Gaert.) Voss.) di Dataran Tinggi Sleman. *Biodiversitas* 1: 59-64.
- Suyatma, 2009. Diagram warna hunter (kajian pustaka). *Jurnal Penelitian Ilmiah Teknologi Pertanian*. Institut Pertanian Bogor: 8-9.
- Syukur, M., S. Sastrosumarjo, Y. Wahyu, S.I. Aisyah, S. Sujiprihati, dan R. Yunianti. 2013. *Sitogenetika Tanaman Edisi Kedua*. IPB Press, Bogor.
- Tjahjadi, N. 1995. *Bertanam Salak*. Penerbit Kanisius, Yogyakarta.
- Tjitrosoepomo, G. 1988. *Taksonomi Tumbuhan Spermatophyta*. Gadjah Mada University Press, Yogyakarta.
- \_\_\_\_\_. 2004. *Taksonomi Tumbuhan Spermatophyta*. Gadjah Mada University Press, Yogyakarta.
- Underwood, J.C.E. 2009. *General and Systematic Pathology*. Fifth Ed. Churchill Livingstone, New York- London.
- Vaquero-Sedas, M.I. dan M.A. Vega-Palas. 2014. Determination of *Arabidopsis thaliana* telomere length by PCR. *Sci. Rep.* 4: 1-7.
- Von Zglinicki, T. 2002. Oxidative stress shortens telomeres. *Trends Biochem Sci* 27: 339-344.
- Wahyuni, D.T. dan S.B. Widjanarko. 2015. Pengaruh jenis pelarut dan lama ekstraksi terhadap ekstrak karotenoid labu kuning dengan metode gelombang ultrasonic. *Jurnal Pangan dan Agroindustri* 3 (2): 390-401.
- Warisno, 2003. *Budi Daya Pepaya*. Penerbit Kanisius, Yogyakarta.
- Watson, J.M. dan K. Riha. 2011. Telomeres, aging, and plants: from weeds to Methuselah: a mini-review. *Gerontology* 57: 129-136.
- Widyastuti, Y.E. 1996. *Mengenal Buah Unggul Indonesia*. Penebar Swadaya, Jakarta.

- Williams, B., and A.J. Lustig. 2003. The paradoxical relationship between NHEJ and telomeric fusion. *Mol. Cell* 11: 1125–1126.
- Wolf, J. dan L. Price. 1960. The effect of sugars on chlorophyll biosynthesis in higher plants. *J. Biol. Chem.* 235: 1603-1608
- Wong, I.M. and K. Collins. 2003. Telomere maintenance and disease. *Lancet* 362: 983-988.
- Yuwono, T. 2006. Teori dan aplikasi *polymerase chain reaction*. Penerbit Andi, Yogyakarta.