UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Abd-Rasyid, N.S., M.N. Naim, H. Che Man, N.F. Abu Bakar & M.N. Mokhtar. 2019. Evaluation of Surface Water Treated with Lotus Plant *Nelumbo nucifera*. *J. Environ. Chem. Eng*. 7: 1–7. https://doi.org/10.1016/j.jece.2019.103048.

Akram, N.A., F. Shafiq & M. Ashraf. 2017. Ascorbic Acid-A Potential Oxidant Scavenger and Its Role in Plant Development and Abiotic Stress Tolerance. *Front Plant Sci*. 8:613, https://doi:10.3389/fpls.2017.00613.

Alahuhta, J. A. Kanninen & K.M. Vuori. 2012. Response of Macrophyte Communities and Status Metrics to Natural Gradients and Land Use in Boreal Lakes. *Aquatic Botany* 103: 106–114. https://doi.org/10.1016/j.aquabot.2012.07.003.

Alahuhta, J., A. Kanninen, S. Hellsten, K.M. Vuori, M. Kuoppala & H. Hamalainen. 2014. Variable Response of Functional Macrophyte Groups to Lake Characteristics, Land Use, and Space: Implications for Bioassessment. *Hydrobiologia*. 737: 201–214. https://doi.org/10.1007/s10750-013-1722-3.

Albuquerque, A., P. Randerson & A. Bialowiec. 2020. *Oxygen Transfer Capacity as a Measure of Water Aeration by Floating Reed Plants: Initial Laboratory Studies*. Processes. 8, 1270. https://doi.org/10.3390/pr8101270.

Aliyu, M., M.K. Atiku, N. Abdullahi, A. Zaharaddeen & A.A. Imam. 2017. Comparative Evaluation of Qualities of *Nymphaea lotus* and *Nymphaea pubescens* Seeds. *International Journal of Biochemistry Research & Review*. 19(3): 1–10. https://doi:10.9734/IJBCRR/2017/36536.

Alwi, M. & C. Tapakrisnanto C., 2017. Potensi dan Karakteristik Lahan Rawa Lebak in: Fatah, L., Noor, M., Masganti, H., Subagio, Alwi, M., Simatupang, S., Ar–Riza I., 2017. *Lahan Rawa Lebak: Sistem Pertanian dan Pengembangannya*. IAARD Press 160 pp. ISBN/ISSN: 9786023441501.

Amelia, D.E. & F.Y. Kurniawan. 2021. Chlorophyll and Carotenoid Level Comparisons of Pigeon Orchid (*Dendrobium crumenatum*) in Water and Light Stress Treatment. *Indonesian Journal of Science and Education*. 5(01): 44–48. https://doi:10.31002/ijose.v5i1.2868.

Anderson, J.T. & C.A. Davis. 2013. *Wetland Techniques*, Volume 1. Springer Dordrecht Heidelberg, New York, London.https://10.1007/978-94-007-6860-4.

Angadi, K.K., R.K. Gundampati, V.M. Jagannadham & A. Kandru. 2013. In–vitro Biological Studies of Crude Extracts and Isolation of Novel Compound from *Nymphaea pubescens* Leaf. The Journal of Free Radicals and Antioxidants. *Photon* 139: 122–129. ISSN: 0975-6299.

Anthony, K.R.N., P.V. Ridd, A.R. Orpin, P. Larcombe & J. Lough. 2004. Temporal Variation of Light Availability in Coastal Benthic Habitats: Effects of Clouds, Turbidity, and Tides. *Limnol. Oceanogr*. 49: 2201–11. https://doi:10.4319/lo.2004.49.6.2201.

Anwar, K., A. Susilawati & M. Noor. 2012. *Laporan Hasil Penelitian Tahun Anggaran 2012-2013. Balai Penelitian Pertanian Rawa*. Balai Besar Sumberdaya Lahan Pertanian. Badan Penelitian dan Pengembangan Pertanian. https://balittra-litbang-ppid.pertanian.go.id (diakses 01 Oktober 2018).

Apostolava, N., D. Scarry & J.T.A. Verhoeven. 2016. *Studenchishte Marsh as an Integral Part of Ancient Lake Ohrid: Current Status and Need for Protection*.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Wetland Science & Practice. 35–45 pp. https://www.wetland.ecology.nl/sites/cwe.nioo. know.n/files/Apostolova-et-al.2016.pdf. (diakses 01 Oktober 2018).

Armstrong, J., W. Armstrong, P.M. Beckett, J.E. Halder, S. Lythe, R. Holt & A. Sinclair 1996. Pathways of Aeration and the Mechanisms and Beneficial Effects of Humidity-and Venturi-Induced Convections in Phragmites Australis (Cav.)Trin. ex Steud. *Aquatic Botany* 54: 177–197. https://doi.org/10.1016/ 0304-3770(96)01044-3.

Armstrong, W. 1978. *Root Aeration in the Wetland Condition*, *In*: *Plant Life in Anaerobic Environments*. Hook D.D. & R.M.M. Crawford, Eds. M.I. Ann Arbor Science Publishers, 269–297pp. ISBN: 0250401975, 9780250401970.

Armstrong, W. 1979. *Aeration in Higher Plants. In Advances in Botanic Research*. H.W. Woolhouse, Ed. Pp. 225–332. London. Academic Press. https://doi.org/10.1016/S0065-2296(08)60089-0.

Arnon, D.I., 1949. *Plant Physiology*. Copper Enzymes in Isolated Chloroplasts. Polyphenoloxidase in *Beta vulgaris*. 24(1): 1–15. https://doi.org/10.1104/pp.24.1.1.

Ar-Riza, I. 2000. Prospek Pengembangan Lahan Rawa Lebak Kalimantan Selatan dalam Mendukung Peningkatan Produksi Padi. *Jurnal Penelitian dan Pengembangan Pertanian* 19(3): 92-97. ISSN: 02164418.

Arsyad, M. 2016. *Kerapatan dan Pola Disribusi N. pubescens (Nymphaea* spp*.) di Padang Penggembalaan Kerbau Rawa Desa Pandak Daun Kabupaten Hulu Sungai Selatan*. Prosiding Seminar Nasional Lahan Basah. 1: 74–79. https://repo-dosen.ulm.ac.id/handle/123456789/11038.

Arteca, R.N. 1997. *Flooding. In Plant Ecophysiology*. M.N.V. New York. John Wiley & Sons. Prasad, Ed. 151–171pp. ISSN: 3339100994

Asada, K. 1999. The Water-Water Cycle in Chloroplasts: Scavenging of Active Oxygens and Dissipation of Excess Photons. Annu. *Rev. Plant Biol*. 50,601–639. https://doi.org/10.1146/annurev.arplant.50.1.601.

Asaeda, T., Senavirathna, M.D.H., Xia, L.P. & A. Barnuevo. 2018. Application of Hydrogen Peroxide as an Environmental Stress Indicator for Vegetation Management. *Engineering* 4, 610–616. https://doi.org/10.1016/j.eng.2018.09.001.

Asaeda, T., MH. Rashid & J. Schoelynck. 2021. Tissue Hydrogen Peroxide Concentration Can Explain the Invasiveness of Aquatic Macrophytes: A Modeling Perspective. *Front. Environ. Sci*. 8:516301. https://doi.org/10.3389/fenvs.2020.516301.

Asaeda, T., M. Rahman, X. Liping & J. Schoelynck. 2022. Hydrogen Peroxide Variation Patterns as Abiotic Stress Responses of *Egeria densa. Front. Plant Sci.* 13:855477. https://doi.org/10.3389/fpls.2022.855477

Asner, G.P. 1998. Biophysical and Biochemical Sources of Variability in Canopy Reflectance, *Remote Sensing of Environment* 64: 234–253. https://doi.org/10.1016/S0034-4257(98)00014-5.

Austin, A.N., J.P. Hansen, S. Donadi & J.S. Eklöf. 2017. *Relationships between Aquatic Vegetation and Water Turbidity: A Field Survey Across Seasons and Spatial Scales*. https://doi.org/10.1371/journal.pone.0181419.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Baastrup-Spohr, L., K. Sand-Jensen, S.V. Nicolajsen & H.H. Bruun. 2015. From Soaking Wet to Bone Dry: Predicting Plant Community Composition Along a Steep Hydrological Gradient. *J. Veg. Sci.* 26, 619–630. https://doi.org/10.1111/jvs.12280.

Baastrup-Spohr, L., C.L. Møller & K. Sand-Jensen. 2016. Water–Level Fluctuations Affect Sediment Properties, Carbon Flux and Growth of the Isoetid Littorella Uniflo Rain Oligotrophic Lakes. *Freshw. Biol*. 61, 301–315. https://doi.org/10.1111/fwb.127044.

Badan Meteorologi Klimatologi dan Geofisika (BMKG). 2022. *Analisis Curah Hujan dan Sifat Hujan Agustus 2022*. https://www.bmkg.go.id/iklim/informasi-hujanbulanan. bmkg?p=analisis-curah-hujan-dan-sifat-hujan-agustus-2022-2&tag=&lang=ID.

Bai, J.H., R. Xiao, K.J. Zhang, H.F. Gao, B.S. Cui & X.H. Liu. 2013. Soil Organic Carbon as Affected by Land Use in Young and Old Reclaimed Regions of A Coastal Estuary Wetland, China. Soil Use Manage. 29(1):57–64. https://doi.org/10.1111/sum..12021.

Bai, X., K. Chen, H. Zhao & X. Chen. 2015. Impact of Water Depth and Sediment Type on Root Morphology of the Submerged Plant *Vallisneria natans*. J. *Freshw. Ecol.* 30, 75–84. http://dx.doi.org/10.1080/02705060.2014.970672.

Bailey, L.F., J.S. Rothacher & W.H. Cummings. 1951. A Critical, Study of the Cobalt Chloride Method of Measuring Transpiration. *Plant Physiology*. 563–574p. https://www.jstor.org/stable/4258566.

Bais, H.P., R. Vepachedu, S. Gilroy, R.M. Callaway & J.M. Vivanco. 2003. Allelopathy and Exotic Plant Invasion: From Molecules and Genes to Species Interactions. *Science* 301: 1377–1380. https://doi.org/10.1126/science. 1083245.

Baker, N.R. & K, Oxborough, 2004. *Chlorophyll fluorescence as a Probe of Photosynthetic Productivity. In: Govindjee, Papageorgiou G (Ed.), Chlorophyll Fluorescence: A Signature of Photosynthesis*. Kluwer Academic Publishers, Dordrecht, pp. 65–82. https://doi.org/10.1007/978-1-4020-3218-9_3.

Bakshi, A., J.M. Shemansky, C. Chang & B.M. Binder. 2015. History of Research on the Plant Hormone Wthylene. 34: 809-827. https://doi.org/10.1007/s00344-015-9522-9.

Balai Besar Litbang Sumber Daya Lahan Pertanian (BBSDLP). 2014. *Sumberdaya Lahan Pertanian Indonesia: Luas, Penyebaran, dan Potensi. Laporan Teknis 1/BBSDLP/2014*. Edisi ke-1. Balai Besar Litbang Sumberdaya Lahan Pertanian. Bogor. 56p. ISBN: 9786023440832

Balai Penelitian Tanah (BP Tanah). 2009. *Analisis Kimia Tanah, Tanaman, Air, dan Pupuk.* Balai Besar Litbang Sumber Daya Lahan Pertanian Balai Pengembangan dan Penelitian Pertanian Departemen Pertanian. 215 pp. https://repository.pertanian.go.id/server/api/core/bitstreams/77f52e6b-6a13-48bc-96d1-d6a35025d793/content

Barko, J.W. & R.M. Smart 1981. Comparative Influences of Light and Temperature on the Growth and Metabolism of Selected Submersed Fresh Water Macrophytes. *Ecological Monographs*, 51, 219-236. https://apps.dtic.mil/sti/tr/pdf/ADA353197.pdf

Barko, J.W. & R.M. Smart, 1983. Effects of Organic Matter Additions to Sediment on the Growth of Aquatic. *Plants. J. Ecol*. 71: 161–175. https://doi.org/10.2307/2259969.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Barko, J.W., D. Gunnison & S.R. Carpenter. 1991. Sediment Interacters with Submerged Macrophyte Growth and Community Dynamics. *Aquat. Bot.* 41, 41–65. https://doi.org/10.1016/0304–3770(91)90038–7.

Barth, C., M. De Tullio, & P.L. Conklin. 2006. The Role ff Ascorbic Acid in the Control of Fowering Time and the Onset of Senescence. *J. Exp. Bot*. 57, 1657–1665. https://doi.org/10.1093/jxb/erj198.

Beer, S. & R.G. Wetzel. 1981. Photosynthetic Carbon Metabolism in the Submerged Aquatic Angiosperm *Scirpus subterminalis*. *Plant Science Letter*. 21: 199-207. https://doi.org/10.1016/0304-4211(81)90089-4.

Begum, H.A., K.K. Ghosal & T.K. Chattopadhyay. 2010. Comparative Morphology and Floral Biology of Three Species of the Genus N*ymphaea* from Bangladesh. *J. Bot.* 39(2): 179-183. https://www.bdbotsociety.org/public/article/2010%20December/07.pdf.

Benoy, G. & J. Kalff, 1999. Sediment Accumulation and Pb Burdens in Submerged Macrophyte Beds. *Limnol. Oceanogr*. 44: 1081–1090. https://aslopubs.onlinelibrary.wiley.com/doi/pdf/10.4319/lo.1999.44.4.1081

Berni, J.A.J., P.J. Zarco-Tejada, L. Suarez, & E. Fereres. 2009. *Thermal and Narrow-Band Multispectral Remote Sensing for Vegetation Monitoring from an Unmanned Aerial Vehicle.* IEEE Trans Geosci Remote Sens 47(3):722–738. https://doi:10.1109/TGRS.2008.2010457.

Bertacchi, A., V. Giannini, C.D. Franco & N. Silvestri. 2019. *Using Unmanned Aerial Vehicles for Vegetation Mapping and Identification of Botanical Species in Werlands.* Landscape and Ecological Engineering, 15:231–40. https://doi.org/10.1007/s11355-018-003368-1.

Bhusal, N., M. Lee, H. Lee, A. Adhikari, A.R. Han, A. Han & H.S. Kim. 2021. Evaluation of Morphological, Physiological, and Biochemical Traits for Assessing Drought Resistance in Eleven Tree Species. Sci. *Total Environ*. 779, 146466. https://doi.org/10.1016/j.scitotenv.2021.146466.

Biggs, H.J., V.I. Nikora, C.N. Gibbins, S. Fraser, D.R. Green, K. Papadopoulos & D.M. Hicks. 2018. *Coupling Unmanned Aerial Vehicle (UAV) and Hydraulic Surveys to Study the Geometry and Spatial Distribution of Aquatic Macrophytes*. https://doi.org/10.1080/24705357.2018.1466666.

Bini, L.M., S.M. Thomaz, K.J. Murphy & A.F.M. Camargo. 1999. Aquatic Macrophyte Distribution in Relation to Water and Sediment Conditions in the Itaipu Reservoir, Brazil. *Hydrobiologia* 415, 147–154. https://repositorio.unesp.br/handle/114 49/20426.

Birk, S. & F. Ecke. 2014. *The Potential of Remote Sensing in Ecological Status Assessment of Coloured Lakes Using Aquatic Plants*. Ecology Indicator. 46: 398–406. https://doi.org/10.1016/j.ecolind.2014.06.035.

Björk, S. 2010. *The Evolution of Lakes and Wetlands. In Restoration of Lakes, Streams, Floodplains, and Bogs in Europe: Principles and Case Studies*; Eiseltova, M., Ed.; Springer: Dordrecht, the Netherlands. Volume 3, pp. 25–35. https://doi.org/10.1007/978-90-481-9265-6_2.

Blanch, S.J., G.G. Ganf & K.F. Walker. 1999. Growth and Resource Allocation in Response to Fooding in the Emergent Sedge *Bolboschoenus medianus*. *Aquat. Bot*. 63, 145–160. https://dx.doi.org/10.1007/s10452–010–9334–8.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Blaydes & W. Glenn. 1928. A Survey of Water Loss from Leaves. The Phio Journal of Sci. 28(2): 99–119. http://hdl.handle.net/1811/2372 (diakses 16 November 2018).

Bloom, A.J., F.S. Chapin & H.A. Mooney. 1985. Resource Limitation in Plants an Economic Analogue. *Annu. Rev. Ecol. Syst*. 16, 363–392. https://doi.org/10.1146/annurev.es.16.110185.002051.

Boar, R., 2006. Responses of a Fringing *Cyperus papyrus* L. Swamp to Changes in Water Level. *Aquat. Bot*. 84, 85–92. https://dx.doi.org/10.1016/j.aquabot.2005.07.008.

Bodhipadma, K., S. Noichinda, P. Wachirabongkoth, E.Pukpoomin, L. Punnakanto & K. Nathalang. 2011[a]. In Vitro Propagation of *Nymphaea nouchali* var. Versicolor 'Bua Phuen'. *J. Appl. Sci*. https://doi.org/10.4038/jnsfsr.v49i3.10305

Bodhipadma, K., S. Noichinda, P. Wachirabongkoth, E.Pukpoomin, L. Punnakanto & K. Nathalang. 2011[b]. *Nymphaea nouchali* var. Versicolor 'Bua Phuen' seed Morphology Germination in Vitro. *Environ. Nat. Res. J.* 9(2): 15–19. https://www.semanticscholar.org/paper/Nymphaea-nouchali-var.-versicolor-%E2%80%98Bua-Phuean%E2%80%99%3A-and-Bodhipadma-Noichinda/eeea6c48e158d4a8ffe7e753e3f158bceca13cdb.

Bojović, B & J. Stojanović. 2005. Chlorophyll and Carotenoid Content in Wheat Cultivars as A Function of Mineral Nutrition. *Arch. Biol. Sci., Belgrade*, 57(4): 283-290. https://doi.org/10.2298/ABS0504283B.

Bolin, B., E.T. Degens, P. Duvigneaud & S. Kempe. 1979. *The Global Biogeochemical Carbon Cycle. In*: *The Global Carbon Cycle*. B. Bolin, E.T. Degens, S. Kempe, and P. Ketner, Eds, SCOPE Report 13, pp. 1-56, Wiley, Chichester, New York. https://www.researchgate.net/publication/249313536_the_global_biogeochemical_carbon_cycle.

Boon, M.A. & S. Tesfamichael. 2017. *Determination of the Present Vegetation State of A Wetland with UAV RGB Imagery.* The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-3/W2, 2017 37th International Symposium on Remote Sensing of Environment, 8–12 May 2017, Tshwane, South Africa. https://doi.org/10.5194/isprs-archives-XLII-3-W2-37-2017.

Borsch, T.K., W. Hilu, J.H. Wiersema, C. Löhne, W. Barthlott & V. Wildes. 2007. Phylogeny of *Nymphaea* (*Nymphaeaceae*): Evidence from Substitutions and Microstructural Changes in the Chloroplast Trnt-Trnf Region. *International J. Plant Sci.* 168(5): 639–671. https://doi.org/10.1086/513476

Bostic, E. M. & J. R. White. 2007. Soil Phosphorus and Vegetation Influence on Wetland Phosphorus Release After Simulated Drought. *Soil Sci. Soc. Am. J*. 71: 238-244. https://doi.org/10.2136/sssaj2006.0137.

Boyd, C.D. 1968. *Fresh Water Plants: A Potential Source of Protein*. Economic Bot. 22: 359–368. https://doi.org/10.1007/BF02908132.

BPS-HSU. 2015. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2015.* Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutarakab.bps.go.id.

BPS-HSU. 2016. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2016*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutarakab.bps.go.id.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

BPS-HSU. 2017. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2017*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutara kab.bps.go.id.

BPS-HSU. 2018. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2018*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutara kab.bps.go.id.

BPS-HSU. 2019. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2019*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutara kab.bps.go.id.

BPS-HSU. 2020. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2020*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutara kab.bps.go.id.

BPS-HSU. 2021. *Kabupaten Hulu Sungai Utara (HSU) dalam Angka 2021*. Badan Pusat statistik Kabupaten Hulu Sungai Utara. https://hulusungaiutara kab.bps.go.id.

Bradbury, I.K. & J. Grace. 1983. *Primary Production in Wetlands*. *In*: A.J.P. Gore (Editor), Mires: Swamp, Bog, Fen, and Moor. Ecosystems of the World, 4A. Elsevier, Amsterdam, 285-310pp. ISBN:9780444420039.

Brix, H. 1993. *Macrophyte–Mediated Oxygen Transfer in Wetlands: Transport Mechanisms and Rates.* In Constructed Wetlands for Water Quality Improvement. G.A. Moshiri, 393–398pp. Boca Raton, FL. Lewis Publishers. https://doi.org/10.1201/9781003069997-48.

Brock, T.C.M., G.H.P. Arts, I.L.M. Goossen & A.H.M. Rutenfrans. 1983. Structure and Annual Biomass Production of *Nymphoides peltata* (GMEL.) O. Kuntze (Menyanthaceae). *Aqua. Bot.* 17: 167–188. https://doi.org/10.1016/0304-3770(83)90056-6Get rights and content.

Brouwer, R. 1963. *Some Aspects of the Equilibrium Between Overground and Underground Plant Parts*. Jaarboek Van Het Instituut Voor Biologisch En Scheikundig Onderzoek van Landbouwgewassen, Wageningen 31–39. https://edepot.wur.nl/361707.

Brown, D.1995. *Encyclopedia of Herbs and Their Uses*. London, New York, Stuttgart, Moscow: Dorling Kindersley Limited. 317p. ISBN: 0789401843

Budiwati, G.A.N. & E. Kriswiyanti. 2014. Manfaat Tanaman N. pubescens (*Nymphaea* spp., *Nymphaeaceae)* di Desa Adat Sumampan, Kecamatan Sukawati, Kabupaten Gianyar, Bali. Udayana Bali. J. *Simbiosis* 2(1): 122–134. https://ojs.unud.ac. id/index.php/simbiosis/article/view/9494.

Burdick, D.M. & L.A. Mendelssohn. 1990. Relationship between Anatomical and Metabolic Responses to Waterlogging in the Coastal Grass *Spartina patens. J. Experintal Bot*. 41: 223–228. https://doi.org/10.1093/jxb/41.2.223.

Búrquez, A. 1987. Leaf thickness and water deficit in plants: A tool for field studies. J. *Experimental Bot.* 38(186): 109–1114. https://doi.org/10.1093/ JXB/38.1.109

Calderón. R., J.A. Navas-Cortes, C. Lucena & P.J. Zarco-Tejada. 2013. High-resolution Airborne Hyperspectral and Thermal Imagery for Early Detection of *Verticillium* wilt of Olive using Fuorescence, Temperature and Narrow-Band Spectral Indices. *Remote Sens Environ* 139:231–245 https://doi.org/10.1016/ j.rse.2013.07.031.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Carpenter, S.R. & D.M. Lodge. 1986. Effects of Submersed Macrophytes on Ecosystem Processes. *Aquat Bot*. 26: 341–370. https://doi.org/10.1016/0304-3770(86)90031-1.

Carruthers, T.J.B., B.J. Longstaff, W.C. Dennison, E.G. Abal, F.T. Short, R.G. Cdas & K. Aioi. 2001. *Measurement of Light Penetration in Relation to Seagrass*. *In*: F.T. Short & R.G. Cdas. *Global Seagrass Research Methods*. Elsevier Science. https://doi.org/10.1016/B978-044450891-1/50020-7.

Casanova, M.T. & M.A. Brock. 2000. How Do Depth, Duration and Frequency of Flooding Influence the Establishment of Wetland Plant Communities?. *Plant Ecol*. 147, 237–250. https://doi.org/10.1023/.

Casson, S. & J. E. Gray 2008. Influence of Environmental Factors on Stomatal Development. *New Phytolosist*. 178: 9-23. Doi:10.1111/j.1469-8137.2007.02351.x.

Caverzan, A., G.Passaia, S. B. Rosa, C. W. Ribeiro, F. Lazzarotto & M. MargisPinheiro. 2012. Plant Responses to Stresses: Role of Ascorbate Peroxidase in the Antioxidant Protection. *Genet. Mol. Biol*. 35. 4, 1011–1019. https://doi.org/10.1590/S1415-47572012000600016.

Černý, M., H. Habánová, M. Berka, N. Luklová & B. Brzobohatý. 2018. Review Hydrogen Peroxide: Its Role in Plant Biology and Crosstalk with Signalling Networks. *Int. J. Mol.,* 19, 2812. https://doi.org/10.3390/ijms19092812.

Chabot, B.F. & D.J. Hicks. 1982. The Ecology of Leaf Life Spans. *Annual Review of Ecology and Systematics*, 13, 229-259. https://doi.org/10.1146/annurev.es.13.110182.001305.

Chalanika DeSilva, H.C. & T. Asaeda. 2017. Effects of Heat Stress on Growth, Photosynthetic Pigments, Oxidative Damage and Competitive Capacity of Three Submerged Macrophytes. *J. Plant Interact*. 12, 228–236. https://doi.org/10.1080/17429145.2017.1322153.

Chambers, P.A. & J. Kalff. 1987. Depth Distribution and Biomass of Submersed Aquatic Macrophyte Communities in Relation to Secchi Depth. *Can. J. of Fish. and Aquat. Sci.* 42: 701–709. https://doi.org/10.1139/f85090.

Chambers, P.A. & E.E. Prespas. 1988. Underwater Spectral Attenuation and its Effect on the Maximum Depth of Angiosperm Colonization. Can. J. *of Fish. and Aquat. Sci*. 45: 1010–1017. https://doi.org/10.1139/f88-124.

Chambers, P. A., P. Lacoul, K.J. Murphy & S.M. Thomaz. 2008. Global diversity of aquatic macrophytes in freshwater. *Hydrobiologia* 595, 9–26. https://doi.org/10.1111/gcb.13004.

Chapin, F.S. 1980. The Mineral Nutrition of Wild Plants. *Ann. Rev. Ecol. Syst*. 11: 233–60. https://www.jstor.org/stable/2096908.

Chen, J., T. Cao, X. Zhang, Y. Xi & L. Ni, 2016. *Jeppesen, E. Differential Photosynthetic and Morphological Adaptations to Low Light Affect Depth Distribution of Two Submersed Macrophytes in Lakes*. Sci. Rep. 6, 34028. https://doi.org/10.1038/srep34028.

Chen, W., Z. Ge, B. Fei, C. Zhang, Q. Liu & L. Zhang. 2017. Soil carbonand Nitrogen Storage in Recently Restored and Mature Native Scirpus Marshes in the Yangtze Estuary, China: Implications for Restoration. *Ecol. Eng*. 104, 150–157. https://doi.org/10.1016/j.ecoleng.2017.04.027.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Chen, Y., J. Feng, X. Yuan & B. Zhu. 2020. Effects of Warming on Carbon and Nitrogen Cycling in Alpine Grassland Ecosystems on the Tibetan Plateau: a Meta-Analysis. *Geoderma* 370, 114363. https://doi.org/10.1016/j.geoderma. 2020. 114363.

Chen, Z. & D. Gallie. 2004. The Ascorbic Acid Redox State Controls Guard Cell Signaling and Stomatal Movement. *The Plant Cell.* 16: 1143–1162. https://doi. org/10.1105/tpc.021584.

Chernova, A.M. 2019. Non-Destructive Estimation of the Leaf Area in *Nuphar lutea* L. (Nymphaeaceae). Modern Phytomorphology. 13: 20-25. ISSN 2226-3063 e-ISSN 2227-9555. https://doi.org/10.5281/zenodo.20190105.

Chia, S.Y. & M.W, Lim. 2022. A Critical Review on the Influence of Humidity for Plant Growth Forecasting. IOP Conf. Series: *Materials Sci. and Eng.* https://doi.org/10.1088/1757-899X/1257/1/012001.

Chotikarn, P., P. Pramneechota & S. Sinutok. 2022. Photosynthetic Responses of Freshwater Macrophytes to the Daily Light Cycle in Songkhla Lagoon. *Plants.* 11, 2806. https://doi.org/10.3390/plants11212806.

Čížková-Končalová, H., J. Květ & J. Thompson. 1992. Carbon Starvation: A Key to Reed Decline in Eutrophic Lakes. *Aquat. Bot.* 43, 105–113. https://doi.org/ 10.1016/0304–3770(92)90036–I.

College of Food, Agricultual & Natural Resource Sciences (CFANS). 2019. *Mapping Aquatic Vegetation*: Remote Sensing of Water Resources. https://Water. rs.umn .edu. (diakses 21 Desember 2019).

Colmer, T. D. 2003. Long-distance Transport of Gases in Plants: A Perspective on Internal Aeration and Radial Oxygen Loss from Roots. *Plant, Cell and Environment.* 28: 17–38. https://doi.org/10.1046/j.1365-3040.2003.00846.x.

Colmer, T. D. & O. Pedersen, 2008. Underwater Photosynthesis and Respiration in Leaves of Submerged Wetlands Plants: Gas Film Improve CO_2 and O_2 Exchange. *New Phytologist*. https://doi.org/10.1111/j.1469-8137.2007.023 18.x.

Conard, H.S. 1905. *The Waterlilies: A Monograph of the Genus Nymphaea*. Publ. Carnegie Institution of Washington, Baltimore, MD. 4: 1–279. http://www. archive.org/details/waterliliesmonog))conruoft.

Constable, J.V.H., J.B. Grace & D.J. Longstreth. 1992. High Carbon Dioxide Concentrations in Aerenchyma of *Typha latifolia*. *Amer. J. Bot*. 79: 415–418. https://doi.org.10.2307/2445153

Coops, H. & S.H Hosper. 2002. Water-Level Management as a Tool for the Restoration of Shallow Lakes in the Netherlands. *Lake Reserv. Manage*. 18, 293–298. https://doi.org/10.1080/07438140209353935.

Coops, H., F.W.B. van den Brink & G. van der Velde. 1996. Growth and Morphological Responses of Four Helophytes Species in an Experimental Water-Depth Gradient. *Aquat. Bot*., 54: 11–24. https://doi.org/10.1016/0304–3770(96) 01025–X.

Cowardin, L.M., V. Carter, F.C Golet & E.T. LaRoe. 2013. *Classification of Wetlands and Deepwater Habitats of the United States*. Federal Geographic Data Committea (FGDC). file:///C:/Users/HP/AppData/ Local/Temp/Classification-of-Wetlands-and Deep water-Habitats-of-the-United-States-2013.pdf (diakses 01 Oktober 2018).

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Crawford, R.M.M., 1992. Oxygen Availability as an Ecological Limit to Plant Distribution. *Adv. Ecol. Res*. 23, 93–185. https://doi.org/10.1016/S0065–2504(08)60147–6.

Crawford, R.M.M. 1993. *Root Survival in Flooded Soils*. *In*: *Ecosystems of the World, 4A: Mires: Swamp, Bog, Fen, and Moor.* General Studies [Gore, A.J.P. (ed.)]. Elsevier Scientific Publishing Company, Amsterdam, the Netherlands; Oxford, United Kingdom; and New York, NY, USA, 257–283 pp. 257–283.

Croft, H., J. M. Chen, X. Luo, P. Bartlett, B. Chen & R. M. Staebler. 2017. Leaf Chlorophyll Content as a Proxy for Leaf Photosynthetic Capacity. Glob. *Change Biol*. 23, 3513-3524. https://doi.org/10.1111/gcb.13599

Cronk, J.K. & M.S. Fennessy. 2001. *Wetland Plants: Biology and Ecology. Lewis Publishers.* Boca Raton London New York Washington, D.C. 483p.ISBN: 1566703727

Dacey, J.W.H. 1980. Internal Winds in Water Lilies: An Adaptation For Life in Anaerobic Sediments. *Sience*, 210: 1017-1019. https://www.jstor.org/stable/1684273.

Dacey, J.W.H. 1981. Pressurized Ventilation in the Yellow Waterlily. *Ecol.* 62(5): 1137–1147. https://doi.org/10.2307/1937277.

Daffodil, E.D. & V.R. Mohan. 2013. Total Phenolics, Flavonoids and in Vitro Antioxidant Activity of *Nymphaea pubescens* Willd. Rhizome. World Journal of *Pharmacy and Pharmaceutical Sciences*. 22: 3710–3722. file:///C:/Users/HP/Downloads/publishedpaper.pdf.

Darwish, K.M., M.M. Wahba & F. Awad. 2006. Agricultural Soil Suitability of Haplo-soils for Some Crops in Newly Reclamid Areas of Egypt. *J. Appl. Sci. Research* 2(12): 1235–1243. file:///C:/Users/HP/Downloads/Agricultural_Soil_Suitability_of_Haplo-soils_for_S.pdf.

Das, K. & A. Roychoudhury. 2014. Reactive oxygen species (ROS) and Response of Antioxidants as ROS-Scavengers During Environmental Stress in Plants. *Front. Environ. Sci*. 2014, 2, 53. https://doi.org/10.3389/fennvs.2014.00053.

De Keyser, E., E. Dhooghe, A. Christians, M-C Labeke & J. van Huylenbroech. 2019. LED Light Quality Intensifies Leaf Pigmentation in Ornamental Pot Plants. Sci. *Hortic,* 253. 270–275. https://doi.org/10.1016/j.scienta.2019.04.006.

Deegan, B.M., S.D. White & G.G Ganf. 2007. The Influence of Water Level Fluctuations on the Growth Four Emergent Macrophyte Species. *Aquat. Bot.* 86, 309–315. https://doi.org/10.1016/j.aquabot.2006.11.006.

Deegan, B.M., S.D. White & G.G. Ganf. 2012. Nutrients and Water Level Fluctuations: A Study of Three Aquatic Plants. *River Res. Appl*. 28, 359–368. https://doi.org/10.1002/rra.14611.

Dejours, P. 1981. *Principles of Comparative Respiratory Physiology*. Elsevier/North-Holland Biomedical Press. Amsterdam. ISBN: 0444108092, 9780444108098

Deka, N. & N. Devi. 2015. Wild Edible Aquatic and Marshland Angiosperms of Baksa District, BTC Area, Assam, India. *Asian Journal of Plant Science and Research.* 5(1): 32–48. https://www.imedpub.com/abstract/wild-edibleaquatic-and-marshland-angiosperms-of-baksa-district-btc-area-assam-india-14420.html

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Dennison, W.C., R.J. Orth, K.A. Moore, J.C. Stevenson, V. Carter, S. Kollar, P.W. Bergstrom & R.A. Batiuk. 1993. Assessing Water Quality with Submersed Vegetation. *BioScience* 43: 86–94. https://doi.org/10.2307/1311969.

Devi, S.A., B. Thongam & P.J. Handique. 2015. *Nymphaea rubra* Roxb. Ex. Andrews Cultivated as an Ornamental, Food and Vegetable in the North Eastern Region of India. *Genet Resour Crop Evol*. 62:315–320. https://doi.org/10.1007/s10722-014-0177-3.

Dhanabal, S.P.M.M., M.K. Raja, M. Ramanathan & B. Suresh. 2007. Hypoglycemic Activity of *Nemphaea stellata* Leaves Ethanolic Extracti in Alloxan Induced Diabetic Rats*. Fitoterapia* 78: 288–291. https://doi.org/10.1016/j.fifote.2007.02.009.

Du, W., Z. Li, Z. Zhang, Q. Jin, X. Chen & S. Jiang. 2017. Composition and Biomass of Aquatic Vegetation in the Poyang Lake, China. *Scientifica*. https://doi.org/10.1155/2017/8742480.

Duarte, C.M. & J. Kalff. 1986. Littoral Slope As A Predictor of the Maximum Biomass Soft Submerged Macrophyte Communities. *Limnol. Oceanogr*. 31 (5), 1072–1080. https://doi.org/10.4319/lo.1986.31.5.1072.

Duarte, C.M. & J. Kalff. 1990. Patterns in the Submerged Macrophyte Biomass of Lakes and the Importance of the Scale of Analysis in the Interpretation. Can. *J. Fish. Aquat*. Sci. 47, 357–363. https://doi.org/10.1139/f90-037.

Dubois, M., L. van den Broeck & D. Inzé. 2018. The Pivotal Role of Ethylene in Plant Growth. *Trends Plant Sci.* 23(4): 311–323. https://doi.org/10.1016/j.tplants.2018.01.003.

Ecke, F., A. Henry & K. Danell. 2014. Landscape-Based Prediction of the Occurrence of the Invasive Muskrat (*Ondatra zibethicus*). *Ann. Zool. Fenn.* 2014, 51, 325–334. https://doi.org/10.5735/086.051.0304.

Elsheery, N. I., Helaly, M. N., El-Hoseiny, H. M., & S.M. Alam-Eldein 2020. Zinc Oxide and Silicone Nanoparticles to Improve the Resistance Mechanism and Annual Productivity of Salt-Stressed Mango Trees. *Agronomy* 10 (4), 558. https://doi.org/10. 3390/agronomy10040558.

Environmental Protection Agency (EPA). 2007. *Survey of the Nation's Lakes Field Operations Manual*. Doc. EPA841-B-07-004. Office of Water, Washington, D.C. 96 pp. https://www.epa.gov/sites/default/files/2013-11/documents/2007_11_26_lakes_lakessurvey_pdf_lakes_field_op_manual.pdf.

Etnier, S.A. & P.J. Villani. 2007. Differences in Mechanical and Structural Properties of Surface and Aerial Petioles of the Aquatic Plant *Nymphaea odorata* subsp Tuberosa (Nymphaeacea). *Amer. J. Bot*. 94(7): 1067-72. https://doi.org/10.373/ajb.94.7.1067.

Eviati & Sulaiman. 2009. *Petunjuk Teknis Edisi 2. Analisis Kimia Tanah, Tanaman, Air dan Pupuk. Bogor:* Balai Penelitian Tanah. https://repository.pertanian.go.id/server/api/core/bitstreams/77f52e6b-6a13-48bc-96d1-d6a35025d793/content.

Farooqui, F. 1980. Ontogeny of Stomata in Some *Nymphaeaceae. Proc. Indian Acad. Sci.* 89(6): 437–442. https://www.ias.ac.in/aricle/fulltext/plnt/089/06/0437-0442. (diakses 07 Januari 2024).

Fahmi, A. & N. Wakhid. 2017. Karakteristik Lahan Rawa. *In*: *Agroekologi Rawa*. IAARD Press. 678p. ISBN: 9786024252960.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Fatah, L. 2017. Mewujudkan Lahan Rawa Lebak Sebagai Lumbung Pangan. *In*: *Lahan Rawa Lebak*: Sistem Pertanian dan pengembangannya. IAARD Press. 160p. ISBN: 9786023441501.

Filbin, G. J. & A.R. Hough. 1983. Specific Leaf Area, Photosynthesis, and Respiration in Two Sympatric Nymphaeaceae Populations. *Aquat. Bot*. 17(2): 157–165. https://doi.org/10.1016/0304-3770(83)90111-0.

Firdaus, M. & E.T. Maasawet. 2015. *Prosiding Seminar Nasional I Biologi, Sains, Lingkungan, dan Pembelajaran (Samarinda, Indonesia*) pp 81-92. ISSN: 29632137.

Fitrial, Y. & R. Khairina. 2011. N*. pubescens: Aspek Gizi, Potensi dan Pemanfaatannya sebagai Pangan Fungsional*. Eja Publisher. Jogjakarta. 95p. ISBN/ISSN: 9789791407243.

Fitrial, Y. 2002. Aktivitas Antibakteri Ekstrak Etil Asetat Biji N. pubescens (*Nymphaea pubescens* Willd) Akibat Pemanasan. *Jurnal Pengelolaan Hasil Perikanan Indonesia*. 43–48. https://core.ac.uk/download/pdf/291863273.pdf.

Fitrial, Y. 2009. *Analisis Potensi Biji dan Umbi Teratai (N. pubescens Willd.) untuk Pangan Fungsional Prebiotik dan Antibakteri Escherichia coli* Enteropatogenetik K1.1. Disertasi. Institut Pertanian Bogor. Bogor. http://repository.ipb.ac.id/handle/123456789/40755.

Fitrial, Y., M. Astawan, S.T. Soekarto, K.G. Wiryawan, T. Wresdiyati & R. Khairina. 2008. Potensi Biji N. pubescens sebagai Antidiare. *J. Teknologi dan Industri Pangan.* 19(2): 158–164. file:///C:/Users/HP/Downloads/350-Article%20Text-14964-2-10-20120727.pdf

Food of Agriculture Organizaion (FAO). 2009. *How to Feed the World in 2050*. Insights Exp Meet FAO 2050:1–35. https://doi.org/10.1111/j.1728-4457.2009.00312.x.

Food of Agriculture Organization (FAO)/World Human Organization (WHO). 1991. *Protein Quality Evaluation.* Report of a Joint FAO/WHO Expert Consultation Food and Agriculture Organization of the United Nations. FAO, Rome, Food, and Nutrition. 51: 1–66. https://pubmed.ncbi.nlm.nih.gov/1817076/

Ford, K.A. & P.D. Champion. 2019. *Flora of New Zealand: Seed Plants Nymphaeales. Manaaki Whenue Press.* http://dx.doi.org/10.7931/b1jh–cp50.

Francis, C.A., J.M. Beman & M.M.M. Kuypers. 2007. New Processes and Players in the Nitrogen Cycle: *The Microbial Ecology of Anaerobic and Archaeal Ammonia Oxidatio*n. ISME J. 1(1), 19–27. https://doi.org/10.1038/ismej.2007.8.

Fraser, L. H. & J. P. Karnezis. 2005. A Comparative Assessment of Seeding Survival and Biomass Accumulation for Fourteen Wetland Plant Species Growth Under Minor Water-Depth Differences. *Wetlands* 25:520–30. https://fraser-lab.com/wp-content/uploads/2019/03/Fraser-and-Karnezis-2005-A-comparative-assessment-of-seedling-survival-and-biomass-accumulation-for-fourteen-wetland-plant-species-grown-under-minor-water-depth-differences.pdf.

Fujimura, Y., M. Takada, H. Fujita & T. Inoue. 2013. Change in Distribution of the Vascular Plant *Sasa palmate* in Sarobetsu Mire between 1977 and 2003. *Landse Ecol Eng* 9: 305-309. https://doi.org/10.1007/s11355-012-0193-4.

Furukawa, F., K.I Maruyama, Y.K. Saito & M. Kaneko. 2020. Corn Height Estimation Using UAV for Yield Prediction and Crop Monitoring. *in*: *Unmanned Aerial*

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Vehicle: Applications in Agriculture and Environment. Springer Nature Switzerland. Doi:10.1007/978-3-030-27157-2.

Gechev, T.S. & J. Hille. 2005. Hydrogen Peroxide as A Signal Controlling Plant Programmed Cell Death. *Journal of Cell Biology* 168: 17–20. Doi: 10.1083/ jcb.200409170

Gechev, T.S., F. Van Breusegem, J.M. Stone, I. Denev & C. Laloi. 2006. Reactive Oxygen Species As Signals That Modulate Plant Stress Responses and Programmed Cell Death. *BioEssays* 28: 1091–1101. Doi: 10.1002/bies.20493.

Gechev, T.S., I.N. Minkov & J. Hille. 2005. Hydrogen Peroxide-Induced Cell Death in Arabidopsis: Transcriptional and Mutant Analysis Reveals A Role of An Oxoglutarate-Dependent Dioxygenase Gene in the Cell Death Process. *International Union of Biochemistry and Molecular Biology Life* 57: 181–188. Doi: 10.1080/15216540500090793.

Gerber, A., C.J. Cilliers, C. van Ginkel & R. Glen. 2004. *Easy Identification of Aquatic Plants*. Department of Water Affairs and Forestry, Pretoria, Afrika Selatan. https://www.scribd.com/document/416422137/DWAF-2004-Easy-Identification-of-Aquatic-Plants-Web.

Givnish, T.J., 1987. Comparative Studies of Leaf Form: Assessing the Relative Roles of Selective Pressures and Phylogenetic Constraints. *New Phytol*. 106: 131–160. https://doi.org/10.1111/j.1469-8137.1987.tb04687.x.

Gopal, B. & K.P. Sharma. 1990. Ecology of Plant Populations. In *Ecology and Management of Aquatic Vegetation in the Indian Subcontinent.* Edited by B. Gopal. Kluwer Academic Publishers, Dordrecht, pp. 79–106. ISBN: 0792304012, 9780792304012.

Grace, J.B. 1989. Effects of Water Depth on *Typha latifolia* and *Typha domingensis*. *Amer. J. Bot.* 76(5): 762-768. Doi: 10.12307/2444423.

Grosse, W., K. Jovy & H. Tiebel. 1996. Influence of Plants on Redox Potential and Methane Production in Water-Saturated Soil. *Hydrobiologia,* 340: 93–99. Doi: 10.1007/BF00012739.

Guiliani, R., N. Koteyeva, E. Voznesenskaya, M.A. Evans, A.B. Cousins & G.E. Edwards. 2013. *Coordination of Leaf Photosynthesis, Transpiration, and Structural Traits in Rice and Wild Relatives (*Genus Oryza). Plant physiology, 162(3): 1632–1651. https://doi.org/10.1104/pp.113.217497.

Gupta, O.P. 1987. *Aquatic Weed Management*. New Delhi, India: Today and Tomorrow Printers and Publishers. 135p. ISBN: 8170193125.

Guruge, D.P.G.S.K., D. Yakandawala & K. Yakandawala. 2016. Confirming the Identity of Newly Recorded *Nymphaea rubra* Roxb. Ex Andrews Discerning from *Nymphaea pubescens* Willd. Using Morphometrics and Molecular Sequence Analyses. Bangladesh *J. Plant Taxon*. 23(2): 107–117. Doi: 10.3329/bjpt.v23i2.30819.

Håkanson, L.1982*. Lake Bottom Dynamics and Morphometry*: The Dynamic Ratio. Water Resources Research. 18(5): 1444–1450. https://doi.org/10.1029/WR018i005p01444.

Håkanson, L. 2002. *Modelling radiocesium in Lakes and Coastal Areas-New Approaches for Ecosystem Modellers.* New York. Boston, Dondrechid, London, Moscow. file:///C:/Users/HP/Downloads/0.Intro..pdf.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Hart, B.T., I.C. Cambell, C. Angehrn-Bettinazzi & M.J. Jones. 1993. Australian Water Quality Guidelines: A New Approach for Protecting Ecosystem Health. *Journal Aquatic Ecosystem Stress Recovery*. 2: 151–163.

Hatfield, J. L. & J. H. Prueger. 2015. *Temperature extremes: Effect on Plant Growth and Development.* Weather and Climate Extremes, 10, 4–10. https://doi.org/10.1016/j.wace.2015.08.001.

Heichel, G. 1971. Stomatal Movements, Frequencies, and Resistance in Two Maize Varieties Differing in Photosynthetic Capacity. *J. Exp. Bot.*, 22: 644–649. https://academic.oup.com/jxb/article/22/3/644/575381.

Hemalatha, P. & Ilavarasan. 2016. Anti Diabetic Activity of Siddha Herbal Preparation Allipoo Chooranum (*Nymphaea pubescens* flower) on STZ Induced Diabetic Rats. *International Journal of Pharmacy & Pharmaceutical Research* (Ijppr). 7(2): 283–291. https://ijppr.humanjournals.com/wp-content/uploads/2016/10/21.Hemalatha-P-Ilavarasan.pdf.

Hossain, M.A. & S.N. Uddin. 2011. Mechanism of Waterlogging Tolerance in Wheat: Morphological and Metabolic Adaptations under Hypoxia or Anoxia. *AJCS* 5(9): 1094–1101. https://www.cropj.com/alamgir_5_9_2011_1094_1101.pdf.

Hough, A.R. & R.G. Wetzel. 1977. Photosynthetic Pathways of Some Aquatic Plants. *Aquat. Bot.* 3: 297–313. https://doi.org/10.1016/0304-3770(77)90035-3.

Howard, R.J. & I.A. Mendelssohn. 1995. Effect of Increased Water Depth on Growth of a Common Perennial Freshwater-intermediate Marsh Species in Coastal Louisiana. *Wetlands* 15: 82–91. Doi: 19.1007/BF03160683.

Huang, X., L. Wang, X. Guan, Y. Gao, C. Liu & D. Yu. 2018. The root structures of 21 aquatic plants in a macrophyte–dominated lake in China. *J. Plant Ecol*. 11, 39–46. https://doi.org/10.1093/jpe/rtx018.

Huber, H., X. Chen, M. Hendriks, D. Keijsers, L.A.C.J. Voesenek, R. Pierik, H. Poorter, Hans de Kroon & E.J.W. Visser. 2012. Plasticity as a Plastic Response: How Submergence-Induced Leaf Elongation in *Rumex palustris* Depends on Light and Nutrient Availability in Its Early Life Stage. *New Phytol*. 194, 572–582. https://doi:10.1111/j.1469-8137.2012.04075.x.

Hughes. 2004. Lily, White Pond. www.botanical.com. (diakses 5 Maret 2010).

Hume, N.P., M.S. Fleming, & A.J. Horne. 2002. Denitrification Potential and Carbon Quality of Four Aquatic Plants in Wetland Microcosms. *Soil Sci. Soc. Am. J.*, 66: 1706–1712. https://doi.org/10.2136/asssaj2002.1706.

Husen, E., I. Las & D. Nursyamsi. 2014. *Sumberdaya Lahan Pertanian Indonesia: Luas, Penyebaran, dan Potensi Ketersediaan*. Balai Besar Sumberdaya Lahan Pertanian. Badan Penelitian dan Pengembangan Pertanian. Kementan. https://www.researchgate.net/profile/Sukarman-Kartawisastra/publication/323457112_SUMBERDAYA_LAHAN_PERTANIAN_INDONESIA_Luas_Penyebaran_dan_Potensi_Ketersediaan/links/5a970219aca27214056b33c7/SUMBERDAYA-LAHAN-PERTANIAN-INDONESIA-Luas-Penyebaran-dan-Potensi-Ketersediaan.pdf

Husson, E., F. Ecke & H. Reese. 2016. Comparison of Manual Mapping and Automated Object-Based Image Analysis of Non-Submerged Aquatic Vegetation from Very-Hight-Resolution UAS Image. *Remote Sensing*. 8, 774. https://doi.org/10.3390/rs8090724.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Iqbal, N. 2017. Ethylene Role in Plant Growth, Development and Senescence: Interaction With Other Phytohormones. *Fron. Plant Sci.* 08. https://doi.org/10.3389/fpls.2017.00475.

Irvine, F.R & R.S. Trickett. 1953. Waterlilies as Food. *Kew Bull* 8(3): 363–370. https://www.jstor.org/stable/4115519?origin=crossref.

Ishida, T., J. Kurihara, F.A. Viray, S.B. Namuco, E.C. Paringit, P.J. Perez, Y. Takajashi & J.J. Marciano. 2018. A Novel Approach for Vegetation Classification using UAV-based Hyperspectral Imaging. *Comput. Electron. Agr.* 144: 80–85. Doi: 10.1016/j.compag.2017.11.027. https://www.researchgate.net/publication/322185489_A_novel_approach_for_vegetation_classification_using_UAV-based_hyperspectral_imaging.

Islam, M.S., M. Hasanuzzaman, M. Rokonuzzaman & K. Nahar. 2009. Effect of Split Application of Nitrogen Fertilizer on Morphophysiological Parameters of Rice Genotypes. *International Journal of Plant Production* 3(1): 51–61. file:///C:/Users/HP/Downloads/MirzaHasanuzzaman.pdf

Ismail, S.N, M. Abd. Hamid & M. Mansor. 2021. An Overview of Macrophytes in the Tropical Wetland Ecosystem. *Indonesian Journal of Limnology*, 2(1): 25-34. https://doi.org/10.51264/inajl.v2i1.12.

Ismuhajaroh, B.N., D. Indradewa, B. Kurniasih & S.N.H. Utami. 2022[a]. Interrelationships of Air Canal Adaptation in the Leaves of Water Lilies and Water Depth of *Lebak* Swampland in Kalimantan Selatan. *JEMT.* Vol. XIII, 1(57): 197–210. https://doi.org/10.14505/jemt.13.1(57).18

Ismuhajaroh, B.N., D. Indradewa, B. Kurniasih & S.N.H. Utami. 2022[b]. The Effect of Water Depth on the Structure and Allocation of Waterlily (*Nymphaea pubescens* Willd.) Biomass in *Lebak* Swampland in Kalimantan Selatan. *JEMT.* Vol. XIII, 5(61): 1395–1395. https://doi.org/10.14505/jemt.13.5(61).14

Issac, J. 1987. *Bush Food: Aboriginal Food and Herbal Ethnobotany*. Deep publication, New Delhi. ISBN: (0947116907.

Izza, F. & A.N. Laily. 2015. *Seminar Nasional Konservasi dan Pemanfaatan Sumberdaya Alam (Surakarta, Indonesia*) pp 17780. ISBN: 978602719717.

Jackson, M.B. 1989*. Regulation of Aerenchyma Formation in Roots and Shoots by Oxygen and Ethylene.* In Cell Separation in Plants: Physiology, Biochemistry and Molecular Biology. D.J. Osborne and M.B. Jackson, Eds. 263–274pp. Berlin. Springer-Verlag. Doi: 10.1007/978-3-642-76470-7_7.

Jackson, M.B. 1990. Hormones and Developmental Changes in Plants Subjected to Submergence or Soil Waterlogging. *Aquat. Bot*. 38: 49–72. https://doi.org/10.1016/0304-3770(90)90098-6.

Jackson, M.B. 2008. Ethylene-promoted Elongation: an Adaptation to Submergence Stress. *Ann. Bot*., 101: 229-248. https://doi.org/10.1093/aob/mcm237.

Jackson, R.D. & A.R. Huete. 1991. *Interpreting Vegetation Indices,* Prev. Vet. Med, 11: 185–200. https://doi.org/10.1016/S0167-5877(05)80004-2.

Janes, R.A., J.W. Eaton & K. Hardwick. 1996. The Effect of Floating Mats of *Azolla filiculoides* Lam. and *Lemna minuta* Kunth. on the Growth of Submerged Macrophytes. *Hydrobiologia,* 340: 23–26. ISSN/ISBN: 0018-8158.

Jian, Z., F. Ma, Q. Guo, A. Qin & W. Xiao. 2018. Long–Term Responses of Riparian Plant's Composition to Water Level Fluctuation in China's Three Gorges

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Reservoir. *PLoS ONE.* 13: e0207689. https://doi.org/10. 1371/journal.pone. 0207689.

Jiang, H.S., Y Zhang, L. Yin, W. Li, Q. Jin, W. Fu, T. Zhang & W. Huang. 2018. Diurnal Changes in Photosynthesis by Six Submerged Macrophytes Measured Using Fluorescence. *Aquatic Botany*, 14 Johannesson, K. 2008. Phosphorus Retention in a Constructed Wetland – the Role of Sediment Accretion. Thesis. Doi: 10.1016/j.aquabot.2018.05.003.

John, D.M. 2014. Impact of Invasive Aquatic Plants on Aquatic Biology. *In*: *Biology and Control of Aquatic Plants*: A Best Management Practices. Lyn A. G*. et al*. (Editors). The Aquatic Ecosystem Restoration Foundation (AERF). 3rd Edition. https://aquatics.org/bmpchapters/1.1%20Impact%20of%20Invasive%20Aquatic%20Plants%20on%20Aquatic%20Biology.pdf.

Jonckheere I., S. Fleck. K. Nackaerts, & B. Frederic. 2004. Methods for Leaf Area Index Determination. Part I: Theories, Techniques and Instruments. *Agric For Meteorol* 121:19–35. http://w3.avignon.inra.fr/valeri/documents/JonckheereAFM2003Accepted.pdf.

Jones, M.B. 1993. Plant Microclimate in: *Photosynthesis and Production in a Changing Environment A Field and Laboratory Manual*. Hall D.O, J.M.O. Scurlock, H.R. Bolhär-Nordenkampf, R.C. Leegood & S.P. Long. UNEP. 1st Edition. https://doi.org/10.1007/978-94-011-1566-7.

Julien, M.H., M.P. Hill & P.W. Tipping. 2009. *Salvinia molesta DS Mitchell (Salviniaceae). Weed Biological Control with Arthropods in the Tropics, pp*. 378–407. Cambridge University Press, Cambridge (UK). www.scielo.org.za/scielo.php?script=sci_nlinks&ref=702284&pid=S0006-82412017000200007000037&lng=en.

Kang, W.H., J.S. Park, K.S. Park & J.E. Son. 2016. Leaf Photosynthetic Rate, Growth, and Morphology of Lettuce Under Different Fractions of Red, Blue, and Green Light from Light-Emitting Diodes (LEDs) *Hortic. Environ. Biotechnol*. 57 573–79. Doi: 10.1007/s13580-016-0093-x.

Karki, G. 2020. *Transpiration in plants: types, mechanism, affecting factors and significance*. https://www.onlinebiologynotes.com/transpiration-in-plants-ypes-mechanism-affecting-factors-and-significance/.

Karthiyayini, T., N.R. Sandu & K.L. Senthilkumar. 2011. Anti Diabetic Activity on the Flowers of *Nymphaea pubescens* Willd. *Res J. Pharmaceu Bio.* Chem. Sci. 11(2): 866–873. ISSN: 0975-8585. https://www.rjpbcs.com/pdf/2011_2(1)/105.pdf.

Kaul, R.B. 1976. Anatomical Observations on Floating Leaves. *Aquat. Bot.* 2: 215-234 http://digitalcommons.unl.edu/bioscifacpub/461. (diakses 28 Oktober 2017).

Keddy, P.A., 2000. *Wetland Ecology.* Cambridge University Press, Cambridge, England. ISBN: 0-521-78367-4.

Keddy, P.A. 2010. *Wetland Ecology: Principles and Conservation* (2nd Edition). Cambridge University Press, Cambridge, UK. 497 p ISBN: 9780511778179. https://doi.org/10.1017/CBO9780511778179

Kementrian Pertanian (Kementan). 2016. Grand Design Lumbung Pangan Dunia (Roadmap Pengembangan Komoditas Strategis 2016-2045. Presentasi Menteri Pertanian, Jakarta 3 Oktober 2016. ISBN: 978-602-344-196-9.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

https://ppid.pertanian.go.id/doc/1/Buku%20Seri/Sukses%20Swasembada%20Indonesia%20Menjadi%20Lumbung%20Pangan%20Dunia%202045.pdf.

Kemp, W.M., M.R. Lewis & T.W. Jones. 1986. Comparison of Methods for Measuring Production by the Submersed Macrophyte, *Potamogeton perfoliatus* L. Lim. *Oceanography* 31: 1322–1334. https://aslopubs.onlinelibrary.wiley.com/doi/pdf/10.4319/lo.1986.31.6.1322.

Kennedy, M.P., Milne, J.M., Murphy & K.J., 2003. Experimental Growth Responses to Groundwater Level Variation and Competition in five British Wetland Plant Species. *Wetl. Ecol. Manage*. 11, 383–396. https://doi.org/10.1023/b:wetl.0000007194.01073.6b.

Khairina, R. & Y. Fitrial. 2002. Produksi dan Kandungan Gizi Biji N. pubescens (*Nymphaea pubescens* Willd.) Tanaman Air yang Terdapat di Hulu Sungai Utara. *Jurnal Ilmiah Fakultas Pertanian* UNLAM 2(9): 77–88.

Khan, T.A., M. Mazid & F. Mohammad. 2012. A Review of Ascorbic Acid Potentialities Against Oxidative Stress Induced in Plants. *J. Agrobiol,* 28(2): 97-111. https://doi.org/10.2478/v10146-011-0011-x.

Kirk, J.T.O. 2011. *Light and Photosynthesis in Aquatic Ecosystems*. Cambridge University Press. 3rd Edition. ISBN 13: 978-0521151757.

Klavsen, S.K., T.V. Madsen & S.C., Maberly, 2011. Crassulacean Acid Metabolism in the Context of Other Carbon-Concentrating Mechanisms in Freshwater Plants: *A Review. Photosynth*. Res. 109, 269–279. Doi: 10.1007/s11120-011-96308.

Kleindl, P.M. & A.D. Steinman. 2021. Contrasting Trajectories in Macrophyte Community Development After Shoreline Restoration: Water Level Obscures Trends. *Aquat. Bot.* 169, 103327. https://doi.org/10.1016/j.aquabot.2020.103327.

Klok, C.J., G. van der Velde & K.M Landsbergen. 1990. Production, Nutrient Dynamics and Initial Decomposition off Loating Leaves of *Nymphaea alba* L., and *Nuphar lutea* (L.) Sm. (Nymphaeaceae) in Alkaline and Acid Waters. *Biogeochemistry* 11: 235–250. https://doi.org/10.1007/BF00004498.

Klok, P.F. & G. van der Velde. 2017. Plant Traits and Environment: Floating Leaf Blade Production and Turnover of Waterlilies. *PeerJ.* https://doi.org/10.7717/peerj.3212.

Kocsy, G., G. Galiba & C. Brunold. 2001. Role of Glutathione in Adaptation and Signaling During Chilling and Cold Acclimation in Plants. *Physiol. Plant*. 113, 165–167. https://doi.org/10.1034/j.1399-3054.2001.1130202.x.

Koncalova, H. 1990. Anatomical Adaptations to Waterlogging in Roots of Wetland Graminoids: Limitations and Drawbacks. *Aquat. Bot*. 38: 127-134. https://doi.org/10.1016/0304-3770(90)90102-Q.

Kordyum, E, S. Mosyakin, G. Ivanenko, Y. Ovcharenko & V. Brykov. 2021. Hydropotes of Young and Mature Leaves in *Nuphar lutea* and *Nymphaea alba* (Nymphaeaceae): Formation, Functions and Phylogeny. *Aquat. Bot*. 169: 1-8. https://doi.org/10.1016/j.aquabot. 2020.103342.

Kordyum, E. & E. Klimenko. 2013. Chloroplast Ultrastructure and Chlorophyll Performance in the Leaves of Heterophyllous *Nuphar lutea* (L.) Smith. Plants. *Aquat. Bot.*. 110: 84-91. http://dx.doi.org/10.1016/j.aquabot.2013.05.013

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Kornijów, R., G.J. Measey & B. Moss. 2016. The Structure of the Littoral: Effects of Waterlily Density and Perch Predation on Sediment and Plant–Associated Macroinvertebrate Communities. *Freshw. Biol.* 61, 32–50. https://.org/10.1111/fwb.12674

Kosakivska, I.V., M.M. Shcherbatiuk, L.M. Babenko & O.V. Polishchuk. 2018. Characteristics Of Photosynthetic Apparatus Of Aquatic Fern Salvinia Natans Floating And Submerged Fronds. *Adv. Biol. & Earth Sciences* 3(1): 13–26. http://jomardpublishing.com/UploadFiles/Files/journals/ABES/V3N1/KasakivskaI.pdf.

Krebs, C.J. 1989. *Ecological Methodology.* Harper Collins Publisher, Inc. New York. ISBN 13: 9780321021731, ISBN 10: 0321021738.

Krisna, B, E. Tarwaca, S. Putra, R. Rogomulyo & D. Kastono. 2017. Pengaruh Pengayaan Oksigen dan Kalsium terhadap Pertumbuhan Akar dan Hasil Selada Keriting (*Lactuca sativa* L.) *Vegetalik*a 6 14–27. https://doi.org/10.22146/veg.30900.

Kufel, L. & T. Ozimek. 1994. Can Chara Control Phosphorus Cycling in Lake Łuknajno (Poland)? *Hydrobiologia* 275/276, 277–283. Doi: 10.1007/BF00026718.

Kunii, H. & M. Aramaki. 1992. Annual Net Production and Life Span of Floating Leaves in Nymphaea Tetragona Georgi: A Comparison with Other Floating–Leaved Macrophytes. *Hydrobiologia*, 242: 185–193. https://doi.org/10.1007/BF00019967

Kunii, H. 1991. Aquatic Macrophyte Composition in Relation to Environmental Factors of Irrigation Ponds Around Lake Shinji, Shimane, Japan. *Vegetatio* 97, 137–148. Doi: 10.1007/BF00035387.

Kusfriyadi, M.K. 2004. Kajian Pemanfaatan Tepung Talipuk dari Bunga Teratai putih (Nymphaea pubescens Willd.) sebagai Bahan Substitusi dalam Pembuatan Biskuit. http://repository.ipb.ac.id/handle/123456789/132262.

Lacoul, P. & B. Freedman. 2006. Environmental influences on aquatic plants in freshwater ecosystems. *Environ. Rev*. 14, 89–136 https://doi.org/10.1139/aO6–001.

Laing, H.E. 1940. The Composition of the Internal Atmosphere of *Nuphar advenum* and Other Water Plants. *Amer. J. Bot.* 27: 861–868. https://doi.org/10.1002/j.1537-2197.1940.tb13947.x

Lakna, 2017. *Difference between Chlorophyll A and B*. https://pediaa.com/difference-between-chlorophyll-a-and-b/#ab

Larcher, W. 1995. Physiological Plant Ecology. In: *Ecophysiology and Stress Physiology of Functional Groups*, (3rd ed.). Springer, New York, 1-528. https://doi.org/10.1007/978-3-642-87851-0.

Laurentius, A.C., J. Voesenek, M. Banga, J.G.H.M Rijnders, E.J.W. Visser & C.W.P.M. Blom. 1996. Hormone Sensitivity and Plant Adaptations to Flooding. *Folia Geobotanica Phytotaxonomica* 31: 47–56. Doi: 10.1007/BF02803993.

Lauridsen, T.L., E. Jeppesen & M. Sondergaard. 1994. Colonization and Succession of Submerged Macrophytes in Shallow Lake Vaeng During the First Five Years Following Fish Manipulation. *Hydrobiologia* 275-276: 233-242. ISSN:0018158.

Lawson, T., A.J. Simkin, G. Kelly & D. Granot. 2014. Mesophyll Photosynthesis and Guard Cell Metabolism Impacts on Stomatal Behaviour. *New Phytol* 203: 1064–1081. https://doi.org/10.1111/nph.12945

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Lee H.I. & Y.H. Kim. 2013 Utilization Efficiencies of Electric Energy and Photosynthetically Active Radiation of Lettuce Grown under Red LED, Blue LED and Fluorescent Lamps with Different Photoperiods *J. Biosyst. Eng*. 38 279–86. Doi: 10.5307/JBE.2013.38.4.279.

Lei, D., L. Jiang, X. Wu, W. Liu, & R. Huang. 2022. Soil Organic Carbon and Its Controlling Factors in the Lakeside of West Mauri Lake along the Wetland Vegetation Types. *Processes.* 10(4), 765. https://doi.org/10.3390/pr10040 7655.

Les, DH. 2018. *Dicotyledons of North America: Ecology, Life History and Systematics*. CRC Pres. 1351p. ISBN: 9781482225020.

Lestari, F. 2014. *Pengaruh Sampah terhadap Kandungan Klorofil Daun dan Regenerasi Hutan Mangrove di Kawasan Hutan Lindung, Angke Kapuk, Jakarta Utara*. Departemen Silvikultur, Fakultas Kehutanan, IPB, Bogor. http:// repository.ipb.ac.id/handle/123456789/71630.

Li, L., S. Cheng, H. Fang, G. Yu, M. Xu, Y. Wang, X. Dang & Y. Li. 2015. Effects of Nitrogen Environment on Transfer and Acumulation of Soil Organic Carbon in Alpine Meadows on Qing-Tibetan Plateau. *Acta Pedol. Sin*. 52, 183–193 (in Chinese).

Li, Y., N. He, J. Hou, L. Xu, C. Liu, J. Zhang, Q. Wang, X. Zhang & X. Wu. 2018. Factors Influencing Leaf Chlorophyll Content in Natural Forests at the Biome Scale. *Front. Ecol. Evol*. 6:64. https://doi.org/10.3389/fevo.2018.00064.

Lillesand, T.M., R.W. Kiefer & J.W. Chipman. 2015. *Remote Sensing and Image Interpretation.* John Wiley & Sons, Inc. United States of America. 7th Edition. 770p. ISBN: 1118919459.

Lin, C., Z.N. Gong & W.J. Zhao. 2010. "The Extraction of Wetland Hydrophytes Types Based on Medium Resolution TM Data," *Acta Ecol. Sin.* 30(23), 6460–6469. ISSN: 10000933.

Lin, Y. F., S.R. Jing, D.Y. Lee, & T.W. Wang, 2002. Effect of Macrophytes and External Carbon Sources on Nitrate Removal from Groundwater in Constructed Wetlands. *Environ. Pollut*., 119: 413–420. https://doi.org/10.10 16/S0269-7491(01)00299-8.

Liu, M., Z. Wang, S. Li, X. Lü, X. Wang & X. Han. 2007. Changes in Specific Leaf Area of Dominant Plants in Temperate Grasslands along A 2500-Km Transect in Northern China. *Sci. Rep*. 7: 10780. https://doi.org/10.1038/s41598-017- 11133-z.

Liu, T., X. Hu, J. Zhang, J. Zhang, Q. Du & J. Li. 2018. H_2O_2 mediates ALA-Induced Glutathione and Ascorbate Accumulation in the Perception and Resistance to Oxidative Stress in *Solanum lycopersicum* at Low Temperature. *BioMed Central.* Doi: 10.1186/s12870-018-1254-0

Liu, X., Y. Zhang, K. Shi, Y. Zhou, X. Tang, G. Zhu & B. Qin. 2015. Mapping Aquatic Vegetation in a Large, Shallow Eutrophic Lake: A Frequency-Based Approach Using Multiple Years of MODIS Data. *Remote Sensing*. 7: 10295–10320. https://doi.org/10.3390/rs70810295

Löhne, C, T. Borsch, S.W.L. Jacobs, C.B. Hellquist & J.H. Wiesema. 2008. Nuclear and Plastid DNA Sequences Reveal Complex Reticulate Patterns in Australia Water-lilies (*Nymphaea subgenus* Anecphya, Nymphaeaceae). *Australia Systematic Bot.* 21(4): 229-250. Doi: 10.1071/SB07010. file:///C:/Users/HP/ Downloads/Nuclear_and_plastid_DNA_sequences_reveal_complex_r.pdf.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Lu, H., H. Sun & J. Long. 2022. Analysis of Plant Water Transport Mechanism and Requirement for Growth Based on the Effect of Thermal Environment. *Forests.* 13, 583. https://doi.org/10.3390/f13040583.

Lu, J., S.E. Bunn & M.A. Burford. 2018. Nutrient Release and Uptake by Littoral Macrophytes During Water Level Fluctuations. *Sci. Total Environ*. 622, 29–40. https://doi.org/10.1016/j.scitotenv.2017.11.1999.

Lu, X.M. & J. J. Chen. 2012. Effects of the Diurnal Variation of Sunlight on Water Quality and the Physiology of *Nymphaea tetragona*. *Environ. Toxicol. Chem*., 94: 294–309. https://doi.org/10.1080/02772248.2011.648939.

Ludwig, J.A. & J.F. Reynolds. 1988. *Statistical Ecology: A Primer on Methods and Computing.* John Wiley & Sons, Inc. Canada. ISBN: 0-471-83235-9. https://www2.ib.unicamp.br/profs/thomas/NE002_2011/maio12/LR%201988%20StatEcol%20sel1.pdf.

Luo, J., H. Duan, M. Ronghua, X. Jin, , F. Li, H Weiping, K. Shi & H. Wenjiang. 2017. Mapping Species of Submerged Aquatic Vegetation with Multi-seasonal Satellite Images and Oonsidering Life History Information. *International Journal of Applied Earth Observation and Geoinformation* 57:154–165. https://doi.org/10.1016/j.jag.2016.11.007.

Luo, W.B., F.B. Song & Y.H. Xie. 2008. Trade-off between Tolerance to Drought and Tolerance to flooding in Three Wetland Plants. *Wetlands* 28, 866–873. https://doi.org/10.1672/07-225.1.

Mabberley, D.J. 1997. *The Plant-Book: A Portable Dictionary of the Vascular Plants.* Cambridge, University Press. ISBN: 0-521-41421-0.

Macek, P., E. Rejmánková & K. Houdková. 2006. The Effect of Long–Term Submergence on Functional Properties of *Eleocharis cellulosa* Torr. *Aquat. Bot.* 84, 251–258. Doi: http://dx.doi.org/0.1016/j.aquabot.2005.11.003.

Mackinney, G. 1941. Absorption of Light by Chlorophyll Solutions. *J. Biol. Chem.* 140: 315-322. http://jbc.org/content/140/2/315.full.pdf. (diakses 27 Januari 2020).

Madden, M., T. Jordan, S. Bernardes, D.L. Cotten, N. O'Hare & A. Pasqu. 2015. Unmanned Aerial Systems and Structure from Motion Revolutionize Wetlands Mapping. *In*: Tiner, R.W., M.W. Lang & V.V. Klemes. 2015. *Remote Sensing of Wetlands: Applications and Advances*. CRC Press, Taylor and Frances Group. Doi: 10.1201/b18210-13. file:///C:/Users/HP/Downloads/Maddenetal2015wetlands.pdf.

Madsen, J.D. & C.M. Morgan. 2021. Water Temperature Controls the Growth of Waterhyacinth and South American Spnge Plant. *J. Aquat. Plant. Manage*. 59s: 28–32. https://apms.org/wp-content/uploads/japm-59-01s-28.pdf

Madsen, J.D. 1999. *Aquatic Plant Control Technical Note MI-02 Point Intercept and Line Intercept Methods for Aquatic Plant anagement.* US. Army Engineer Waterways Experiment Station. www.wes.army.millel/aqua/pdf/apemi-02pdf.

Madsen, J.D., P.A. Chambers, W.F. James, E.W. Koch & D.F. Westlake. 2001. The interaction between water movement, sediment dynamics and submersed macrophytes. *Hydrobiologia*. 444:71–84. Doi: 10.1023/A:1017520800568.

Madsen, T. & H. Brix, 1997. Growth, Photosynthesis and Acclimation by Two Submerged Macrophytes in Relation to Temperature. *Oecologia,* 110: 320–327. https://doi.org/10.1007/s004420050165.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Maftu'ah, E., W.H., Yusuf & S. Nurzakiah. 2017. Adaptasi Perubahan Iklim di Lahan Rawa Lebak untuk Tanaman Pangan *In*: *Lahan rawa Lebak: Sistem Pertanian dan Pengembangannya.* IAARD Press. ISBN: 978-602-344-150-1. https://repository.pertanian.go.id/handle/123456789/8340.

Magee, T.K., T.L. Ernst, M.E. Kentula & K.A. Dwire. 1999. Floristic Comparison of Freshwater Wetlands in an Urbanizing Environment. *Wetlands* 19, 477–489. http://dx.doi.org/10.1007/BF03161690.

Malik, A. 2008. *Pengolahan Citra Digital dengan ER Mapper Versi 7.0*. Jurusan Geografi. Universitas Negeri Makasar. https://www.researchgate.net/publication/295073376Pengolahan_Citra_Digital_dengan_ER_Mapper_ver_70. (diakses: 28 Januari 2010).

Malthus, T.J. & D.G. George. 1997. Airborne Remote Sensing of Macrophytes in Cefni reservoir, Anglesley, UK. *Aquat. Bot.* 58: 317–332. https://doi.org/10.1016/S0304-3770(00043-3.

Malthus, T.R. 1798. *An Essay on the Principle of Population*. London, Electronic Scholarly Publishing Project. ISBN: 0521419549. https://assets.cambridge.org/97805214/19543/frontmatter/9780521419543_frontmatter.pdf.

Marcaccio, J.V., C.E. Markle & P. Chow-Fraser. 2016. Use of Fixed-wing and Multi-rotor Unmanned Aerial Vehicles to Map Dynamic Changes in a Freshwater Marsh. *J. Unmanned Veh. Syst*. 4: 193-202. https://doi:org/10.1139/juvs2015-2016

Marion, L.C. & J.M. Paillisson. 2003. A mass balance assessment of the contribution of floating-leaved macrophytes in nutrient stocks in an eutrophic macrophyte-dominated lake*. Aquat. Bot.* 75: 249-260. Doi: 10.1016/S0304-3770(02)00177-8. https://www.academia.edu/10125403/A_mass_balance_assessment_of_the_contribution_of_floating_leaved_macrophytes_in_nutrient_stocks_in_an_eutrophic_macrophyte_dominated_lake.

Marshall, T.R. & P.E. Lee. 1994. Mapping Aquatic Macrophytes through Digital Image Analysis of Aerial Photographs: An Assessment. *Aquat. Plant Management*. 32: 61–66. https://www.apms.org/wp-content/uploads/japm-32-02-061.pdf

Matese, A., P. Toscano, S.F. Di Gennaro, L. Genesio, F.O. Vaccari, J. Primicerio, C. Belli, A. Zaldei, R. Bianconi & B. Gioli. 2015. Intercomparison of UAV, Aircraft and Satellite Remote Sensing Platforms for Precision Viticulture. *Remote Sens* 7:2971–2990. https://doi.org/10.3390/rs70302971.

Maurer, D.A. & J.B. Zedler. 2002. Differential Invasion of A Wetland Grass Explained by Tests of Nutrients and Light Availability on the Establishment and Clonal Growth. *Oecologia* 131, 279–288. https://doi.org/10.1007/s00442–002–0886–8.

Maylani, E.D., R. Yuniati & W. Wardhana. 2020. *The Effect of Leaf Surface Character on the Ability of Water Hyacinth, Eichhornia crassipes (Mart.)Solms, to Transpire Water.* IOP Conf. Series: Materials Science and Engineering 902. https://doi.org/10.1088/1757-899X/902/1/0120070.

Mayo, A.W. & T. Bigambo. 2005. *Nitrogen Transformation in Horizontal Subsurface Fow Constructed Wetlands I: Model Development*. Phys. Chem. Earth Parts ABC. 30, 658–667.

McLaughlin, J.W., M.R. Gale, M.F. Jurgensen & C.C. Trettin, 2000. Soil Organic Matter and Nitrogen Cycling in Response to Harvesting, Mechanical Site

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Preparation, and Fertilization in A Wetland With A Mineral Substrate. *Forest Ecology and Management,* 129(1-3), 7–23. https://doi.org/10.1016/s0378-1127(99)00164-4

McMahon, T. A. & B. L. Finlayson. 2003. Droughts and Antidroughts: the Low-Flow Hydrology of Australian Rivers. *Freshwater Biology* 48:1147–60. Doi: 10.1046/ j.1365-2427.2003.01098.x.

Meehl, G.A., T.F. Stocker, W.D. Collins, A.J. Gaye, J.M. Gregory, A. Kitoh, R. Knutti, J.M., Murphy, A. Noda, S.C.B. Raper, J.G. Watterson, A.J.Weaver & Z. Zhao. 2007. *Global Climate Projections*. *In*: Solomon, S., D.Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor, & H.L. Miller. Cambridge University Press, Cambridge, U.K. and New York, NT. file:///C:/Users/HP/Downloads/ Global_Climate_Projections.pdf.

Meisinger, J.J., R.E., Palmer & D.J., Timlin. 2015. Effects of Tillage Practices on Drainage and Nitrate Leaching from Winter Wheat in the Northern Atlantic Coastal-Plain USA. *Soil Tillage Res*. 151, 18–27. Doi: 10.1016/j.still.2015. 02.007.

Mentzer, A.P. 2018. Photosynthesis in Aquatic Plants. https://sciencing.com (diakses 24 Desember 2019).

Miao, S.L., S. Newman & F.H. Sklar. 2000. Effects of Habitat Nutrients and Seed Sources on Growth and Expansion of *Typha domingensis*. *Aquat. Bot.* 68, 297–311. https://doi.org/10.1016/S0304–3770(00)00127–3.

Mielke, S. 2016. *Aquatic Vegetation Density Mapping-BioBase 2015 Report. PLSLWD Monitoring Assistant Edited by Jaime Rockey.* Water Resources Specialist. https://www.plslwd.org/wp-content/uploads/2016/07/The-Biobase-Report.pdf.

Miranda, V., N.R. Baker & S.P. Long. 1981. Anatomical Variation Along the Length of the *Zea mays* in Relation to Photosynthesis. *New Phytol.* 88: 595–605. https://www.esalq.usp.br/lepse/imgs/conteudo_thumb/Anatomical-variation-along-the-length-of-the-zea-ma-ys-leaf-in-relation-to-photosynthesis.pdf.

Mitsch, W.J. & J.G. Gosselink. 2015. *Wetlands.* John Wiley and Sons Inc. Hoboken, Ney Jersey. 5th Edition. 736p. ISBN: 9781118676820

Mommer, L., T.L. Pons & E.J.W. Visser. 2005. Submergence-Induced Morphological, Anatomical, and Biochemical Responses in A Terrestrial Species Affect Gas Diffusion Resistance and Photosynthetic Performance. *Plant Physiol.* 139, 497-508. Doi: 10.1104/pp.105.064725.

Moreno, C., N. Farahbakhshadzad & G.M. Morrison. 2002. Ammonia Removal from Oil Refinery Effluent in Vertical Upflow Macrophyte Column Systems. *Water Air Soil Pollut*. 2002, 135, 237–247. Doi: 10.1023/A:1014753817216.

Müller, I., B. Schmid & J. Weiner. 2000. The Effect of Nutrient Availability on Biomass Allocation Patterns in 27 Species of Herbaceous Plants. Perspect. *Plant Ecol. Evol. Syst.* 3, 115–127. https://doi.org/10.1078/1433–8319–00007.

Muñoz, P. & S. Munné-Bosch. 2018. Photo-Oxidative Stress During Leaf, Flower and Fruid Development. *Plant Physiology.* 176(2): 1004–1014. https://doi.org/10. 1104/pp.17.01127.

Muthulinganm, M. 2010. Antihepatotoxic Efficacy of *Nymphaea pubescens* (Willd.) on Acetaminophen Induced Liver Damage in Male Wistar Rats. *International*

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Journal of Current Research. 3: 012-016. file:///C:/Users/HP/Downloads/Anti hepatotoxic efficacy of I Tinctoria on paracet.pdf.

Nagata, N., R. Tanaka, S. Satoh & A. Tanaka. 2005. Identification of a Vinyl Reductase Gene for Chlorophyll Synthesis in *Arabidopsis thaliana* and Implications for the Evolution of Prochlorococcus Species. *Plant Cell* 17, 233–240. https://doi.org/ 10.1105/tpc.104.027276.

Naidoo, G., K.L. McKee & I.A. Mendelssohn. 1992. Anatomical and Metabolic Responses to Waterlogging and Salinity in *Spartina alterniflora* and *S. patens* (Poaceae). *Amer. J. Bot*. 79: 765-770. Doi: 10.1002/j.1537-2197.1992.tb 13652.x.

Nedukha, O.M. 2013. Anatomical, Ultrastructural, and Biochemical Signs of *Trapa natans* Leaves Adaptation to Submergence in Natural Water Habits. *In*: M.C. Grzesiak, A. Rzepka, T. Hura, S. Grzesiak (Ed.), *Plant Functions under Environmental Stress* (pp. 123-135). Crakow, Poland, Publ.: The F. Gorski Institute of Plant Physiology, Polish Acad. Sci. https://ifr-pan.edu.pl/public/files/misc/files/Plant%20Functioning%20Under%20Environmental%20Stress%202019%20-%20final.pdf.

Neill, C. 1990. Effects of Nutrients and Water Levels on Emergent Macrophyte Biomass in A Prairie Marsh. *Can. J. Bot.* 68: 1007–1014. Doi: 10.1139/b90-127.

Nicotra, A.B., A. Leigh, C.K. Boyce, C.S. Jones, K.J. Niklas & D.L. Royer. 2011. The Evolution and Functional Significance of Leaf Shape in the Angiosperms. *Functional Plant Biol.*, 38: 535–552. Doi: 10.1071/fp11057.

Ningsih, C.S. & E. Daningsih. 2022. Ketebalan Daun Dan Laju Trnaspirasi Tanaman Hias Monokotil (Leaf Thickness and Transpiration Rate of Monocotyledon Ornamental plants). *Jurnal Ilmu Pertanian Indonesia*. 27(4): 514-520. http://journal.ipb.ac.id/index.php/JIPI.

Noggle, G.R. & J.F. George, 1991. *Introductory Plant Physiology*. Prentice-Hall, Inc., Englewood Cliffs. ISBN-13: 978-0135021873, ISBN-10: 0135021871.

Noor, M. 2004. *Lahan Rawa: Sifat dan Pengelolaan Tanah Bermasalah Sulfat masam.* Raja Grafindo Persada. Jakarta. 241p. ISBN: 9793654287.

Noor, M. 2007. *Rawa Lebak: Ekologi, Pemanfaatan, dan Pengembangannya.* Raja Grafindo Persada. Jakarta. ISBN: 978-979-769-132-5.

Noor, M., K. Anwar & B. Kartiwa. 2017. Sistem Polder untuk Pengembangan Pertanian Berkelanjutan di Lahan Rawa Lebak. *In: Lahan Rawa Lebak. Sistem Pertanian dan Pengembangannya.* IAARD Press. ISBN: 978-602-344-150-1.

Noorginayuwati & Y. Rina. 2006. *Keragaan Pangelolaan Air di Tingkat Petani pada Pertanaman Musim Kemarau di Lahan rawa lebak*. Prosiding Semnas Iptek Solusi Kemandirian Pangan. Yogyakarta 2-3 Agustus 2006. Kerjasama LIPI, BPTP Yogyakarata dan UGM.

Nowak, M.M., K. Dziób & P. Bogawski. 2018. Unmanned Aerial Vehicles (UAVs) in Environmental Biology: a Review. *Europea J. of Ecol*. 4(2): 56-74. https://doi.org/10.2478/eje-2018-0012

Nursyamsi, D., M. Alwi, M. Noor, K. Anwar, E. Maftu'ah, I. Khairullah, I. Ar-Riza, S. Raihan, R.S. Simatupang, Noorginayuwati & A. Jumberi. 2014. *Buku*

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Pedoman Pengelolaan Lahan Rawa Lebak untuk Pertanian Berkelanjutan. Balitbangtan. IAARD Press. Jakarta. 72p. http://124.81.126.59/handle/123456789/7473.

O'Hare, M.T. 2015. Aquatic Vegetation A Primer for Hydrodynamic Specialists. *Journal of Hydraulic Research* 53: 687–698. https://doi.org/10.1080/00221686.2015.1090493.

O'Hare, M.T., F.C. Aguiar, T. Asaeda, E.S. Bakker, P.A. Chambers & J.S. Clayton. 2017. Plants in Aquatic Ecosystems: Current Trends and Future Directions. *Hydrobiologia* 153, 1-11. https://doi.org/10.1007/s10750-017-3190-7.

Okia, C.A, J.G. Agea, J.M. Kimondo, R.A.A. Abohassan, P. Okiror, J. Obua & Z. Teklehaimanot. 2011. Use and Management of Balanites Aegyptiaca in the Drylands of Uganda. *Research J. of Biol.l Sci*. 6(1): 15–24. Doi: 10.3923/rjbsci.2011.15.24.

Oser, B.L. 1998. An Integrated Essential Amino Acid Index for Predicting the Biological Value of Proteins. *In*: *Protein and Amino Acid Nutrition*. Ed. A.A. Albanese. Academic Press New York. 295–311pp. https://dtk.tankonyvtar.hu/bitstream/handle/123456789/8916/B9780123956835500146.pdf?sequence=14&isAllowed=y.

Pagter, M., C. Bragato & H. Brix. 2005. Tolerance and Physiological Responses of Phragmites Australis to Water Deficit. *Aqua. Bot*. 81:285–99. Doi: 10.1016/j.aquabot.2005.01.002.

Paillisson, J.M. & L. Marion. 2005. Can Small Water Level Fuctuations Affect the Biomass of *Nymphaea alba* in large lakes?. *Aquat. Bot.* 84: 259–266. Doi: 10.1016/j.1quabot.2005.10.004.

Paillisson, J.M. & L. Marion. 2011. Water Level Fluctuations for Managing Excessive Plant Biomass in Shallow Lakes. *Ecol. Eng*. 37: 241–247. https://doi.org/10.1016/j.ecoleng.2010.11.017

Panda, A. & M.K Misra. 2011. Ethnomedicinal Survey of Some Wetland Plants of South Orissa and Their Conservation. *Indian Journal of Traditional Knowledge.* 10(2): 296–303. https://nopr.niscpr.res.in/bitstream/123456789/11507/1/IJTK%2010(2)%20296-303.pdf.

Papeş, M., R. Tupayachi, P. Martínez, A.T. Peterson, & G.V.N. Powell. 2010. Using Hyperspectral Satellite Imagery for Regional Inventories: A Test with Tropical Emergent Trees in the Amazon Basin, *Journal of Vegetation Science* 21(2): 342–354. https://doi.org/10.1111/j.1654-1103.2009.01147.x.

Pavet, V., E. Olmos, G. Kiddle, S. Mowla, S. Kumar, J. Antoniw, M.E. Alvarez & C.H. Foyer. 2005. Ascorbic Acid Deficiency Activates Cell Death and Disease Resistance Responses in Arabidopsis. *Plant Physiol*. 139: 1291–1303. Doi: 10.1104/pp.105.067686.

Peeters, E.T.H.M., R.E.M. Neefjes & B.G. van Zuidam. 2016. Competition between Free-Floating Plants is Strongly Driven by Previously Experienced Phosphorus Concentrations in the Water Column. PLOS ONE*, 11(9), e0162780.* https://doi.org/10.1371/journal.pone.0162780.

Petrov, V.D. & F.V. Breusegem. 2012. Hydrogen Peroxide-a Central Hub for Information Flow in Plant Cells. AoB Plants. http://aobplants.oxfordjournals.org/.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Phillips, G., Willby, N. and Moss, B. 2016. Submerged Macrophyte Decline in Shallow Lakes: What Have We Learnt in the Last Forty Years?. *Aquat. Bot*. 135: 37–45. https://doi.org/10.1016/j.aquabot.2016.04.004.

Phillips, G.L. 2005. Eutrophocation of Shallow Temperature Lakes. *In*: O'Sullivan, P.E., Reynolds, C.S. (Eds.), *The Lakes Handbook, Lakes Restoration and Rehabilitation*, vol. 2. Blackwell Publishing, pp.261–278. Doi: 10.1002/9780470750506.ch10.

Pieczynska, E. 1993. Detritus and Nutrient Dynamics in the Shore Zone of Lakes A Review. *Hydrobiologia*. 251, 49–58.

Pip, E. 1989. Water Temperature and Freshwater Macrophyte Distribution. *Aquat. Bot.* 34: 367–373. https://doi.org/10.1016/0304–3770(89)90079–X.

Polko, J.K., J.A. van Rooij, S. Vanneste, R. Pierik, A.M.H. Ammerlaan, M.H. Vergeer van Eijk, F. McLoughlin, K. Gühl, G. van Isterdael & L.A.C.J. Voesenek. 2015 Ethylene–Mediated Regulation of A2-Type CYCLINs Modulates Hyponastic Growth in Arabidopsis. *Plant Physiol*. 169: 194–208. http://dx.doi.org/10.1104/pp.15.00343

Poorter, H. & O. Nagel. 2000. The Role of Biomass Allocation in the Growth Response of Plants to Different Levels of Light, CO_2, Nutrients and Water: A quantitative review. Aust. *J. Plant Physiol*. 27, 595–607. http://dx.doi.org/10.1071/pp99173_co.

Poorter, H., K.J. Niklas, P.B. Reich, J. Oleksyn, P. Poot & L. Mommer. 2012. Biomass Allocation to Leaves, Stems and Roots: Meta–Analyses of Interspecific Variation and Environmental Control. *New Phytol*. 193, 30–50. https://doi.org/10.1111/ j.1469–8137.2011.03952.x.

Pospíšil, P. 2016. Production of Reactive Oxygen Species by Photosystem II As A Response to Light and Temperature Stress. *Front. Plant Sci*.7:1950. https://doi.org/10.3389/fpls.2016.01950.

Prasad, A., A. Kumar, M. Suzuki, H. Kikuchi, T. Sugai & M. Kobayashi. 2015. Detection of Hydrogen Peroxide in Photosystem II (PSII) using Catalytic Amperometric Biosensor. *Front. Plant Sci.* 6:862. https://doi.org/10.3389/fpls.2015.00862.

Puijalon, S., Lena, J.P., Riviere, N., Champagne, J.Y., Rostan J.C. & G. Bornette. 2008. Phenotypic Plasticity in Response to Mechanical Stress: Hydrodynamic Performance and Fitness of Four Aquatic Plant Species. *New Phytol*. 177, 907–917. https://doi.org/10.1111/j.1469–8137.2007.02314.x.

Qi, Q., D. Zhang, M. Zhang, S.Tong, W. Wang & Y. An. 2021. Spatial Distribution of Soil Organic Carbon and Total Nitrogen in Disturbed *Carex tussock* Wetland. *Ecological Indicators*, 120, 106930. https://doi.org/10.1016/j.ecolind. 2020.106930.

Qian, H.F., X.F. Peng, X. Han, J. Ren, K.Y. Zhan & M. Zhu. 2014. The Stress Factor, Exogenous Ascorbic Acid, Affects Plant Growth and the Antioxidant System in *Arabidopsis thaliana*. Russ. J*. Plant Physiol*. 61, 467–475. https://doi.org/10.1134/S1021443714040141.

Qin, B., P. Xu, Q. Wu, L. Luo & Y. Zhang. 2007. Environmental issues of Lake Taihu, China. *Hydrobiologia.* 581: 3–14. Doi:10.1007/978-1-4020-6158-5_2.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Quilchano, C., T. Marañón, I.M. Pérez-Ramos, L. Noejovich, F. Valladares & M.A., Zavala, 2008. Patterns and Ecological Consequences of Abiotic Heterogeneity in Managed Corkoak Forests of Southern Spain. *Ecol. Res*. 23 (1), 127–139. Doi: 10.1007/s11284-007-0343-6.

Rahayuningsih, S.E.A. 2017. *Kajian Fisiologis dan Agronomis Ketahanan Tanaman Jagung pada Cekaman Genangan*. Disertasi. Universitas Gadjah Mada.

Raihana, Y., L. Indrayati & R.S. Simatupang. 2017. Penataan Lahan untuk Mendukung Diversifitaksi Tanaman di Lahan Rawa Lebak *In*: *Lahan rawa Lebak: Sistem Pertanian dan Pengembangannya*. IAARD Press. ISBN: 978-602-344-150-1.

Raj, R., S. Kar, R. Nandan, & A. Jagarlapudi 2020. Precision Agriculture and Unmanned Aerial Vehicles (UAVs). *In*: *Unmanned Aerial Vehicle: Applications in Agriculture and Environment.* Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-27157-2.

Raja, M.M.M.K, N.K Sethiya & S.H Mishra. 2010. A Comprehensive Review on *Nymphaea stellata*: A Traditionally Used Bitter. J. of Adv. *Pharmaceutical Technology & Research* 1(3): 311-319. Doi: 10.4103/0110-5558.72424.

Rajagopal, K., K. Sasikala & B. Ragavan. 2008. "Hypoglycemic and Antihyperglycemic Activity of *Nymphaea stellata* Flowers in Normal and Alloxan Diabetic rats," *Pharmaceutical Biology*. 46: 654–659. Doi: 10.1080/13880200802182554.

Ramı´rez-Rodrı´guez, J. V., Lo´pez-Bucio & L. Herrera-Estrella. 2005. Adaptive Responses in Plants to Nonoptimal Soil pH *in*: Jenks M. & P.M. Haegawa. *Plant Abiotic Stress*. Blacwell Publishing. Doi: 10.1002/9780470988503.ch6.

Raulings, E.J., K. Morris, M.C. Roache & P.I. Boon. 2010. The Importance of Water Regimes Operating at Small Spatial Scales for the Diversity and Structure of Wetland Vegetation. *Freshwater Biol*. 55, 701–715. https://doi.org/10.1111/j.1365–2427.2009.02311.x.

Rea, N. & G.G. Ganf. 1994[a]. How Emergent Plants Experience Water Regime in a Mediterranean-type Wetland. *Aquat. Bot*. 49: 117-136. Doi: 10.1016/0304-3770(94)90033-7.

Rea, N. & G.G. Ganf. 1994[b]. Water Depth Changes and Biomass Allocation in Two Contrasting Macrophytes. *Aust. J. Mar. Freshwat. Res.* 45: 1459-1468. https://www.jstor.org/stable/3237100.

Rebelo, L.-M., C.M. Finlayson & N. Nagabhatia. 2009. Remote Sensing and GIS for Wetland Inventory, Mapping and Change Analysis. *Journal of Environmental Management* 90(7): 2144–2153. Doi: 10.1016/j.jenvman.2007.06.027.

Reddy, K.R. & R.D. DeLaune. 2023. *Biogeochemistry of Wetlands: Science and Applications.* CRC Press, Boca Raton, FL. eBook ISBN: 9780429095764. https://doi.org/10.1201/9780203491454.

Reddy, K.R., R.G. Wetzel & R.H. Kadlec. 2008. Biogeochemistry of Phosphorus ini Wetlands. American Society of Agronomy, Crop Sciences Society of America.

Reddy, K.R., R.H. Kadlec, E. Flaig & P.M. Gale. 1999. *Phosphorus Retention in Streams and Wetlands: A Review.* Critical Reviews in Environmental Science and Technology 29: 83-146. http://dx.doi.org/10.1080/10643899912591822.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Reid, R.J. & L.M. Mosley. 2016. *Comparative Contributions of Solution Geochemistry, Microbial Metabolism and Aquatic Photosynthesis to the Development of High pH in Ephemeral Wetlands in South East Australia*. Science of the Total Environment, 542, 334–343. https://doi.org/10.1016/j.scitotenv.2015.10.040.

Ribaudo, C., M. Bartoli, D. Longhi, S. Castaldi, S.C. Neubauer & P. Viaroli. 2012. CO_2 and CH_4 Fluxes Across a *Nuphar lutea* (L.) Sm. stand. *Journal of Limnology* 71:200–210. Doi: 10.4081/jlimnol.2012.e21.

Richards, J.H. & C. Cao. 2012. Germination and Early Growth of *Nymphaea odorata* at Different Water Depths. *Aquat. Bot*. 98: 12-19. https://doi.org/10.1016/j.aquabot.2011.12.003.

Richards, J.H., D.N. Kuhn & K. Bishon. 2012. Interrelationships of Petiolar Air Canal Architecture, Water Depth, and Convective Air Flow in *Nymphaea odorata* (Nyphaeaceae). *Amer. J. Bot*. 99(12): 1903-1909. https://doi.org/10.3732/ajb.120026.

Richards, J.H., T.G. Troxler, D.W. Lee & M.H. Zimmerman. 2011. Experimental Determination of Effects of Water Depth on *Nymphaea Odorata* Growth, Morphology and Biomass Allocation. *Aquat. Bot*. 95: 9-16. https://doi.org/10.1016/j.aquabot.2011.03.002.

Ridge, I. & Amarasinghe.1984. Ethylene and Growth Control in Amphibious Plants. *In*: *Plant Life in Aquatic and Amphibious Habitats*. R.M.M. Crawford. Oxford. Blackwell Scientific. 53-76pp. ISBN: 0632016280, 9780632016280.

Riis, T., B. Olesen, J.S. Clayton, C. Lambertini, H. Brix & B.K. Sorrell. 2012. Growth and Morphology in Relation to Temperature and Light Availability During the Establishment of Three Invasive Aquatic Plant Species. *Aquat. Bot*. 102, 56–64. https://doi.org/10.1016/j.aquabot.2012.05.002.

Ritchie, R.J. 2012. Photosynthesis in the Blue Water Lily (*Nymphaea Caerulea* Saligny) Using Pulse Amplitude Modulation Fluorometry. Int. *J. Plant Sci.* 173 (2): 124-136. https://doi.org/10.1086/663.168.

Roelfsema, M.R.G., S. Hanstein, H.H. Felle & R. Hedrich. 2002. CO_2 provides an Intermediate Link in the Red Light Response of Guard Cell. *Plant J*., 32: 65-75. Doi: 10.1046/j.1365-313x.2002.01403.x.

Ross, C.W. 1974. *Plant Pysiology Laboratory Manual*. Wadsworth. California. 200p. ISBN : 0534003516 (pbk.).

Rouse, Jr, J., R. Haas, J. Schell & D. Deering. 1974. *Monitoring Vegetation Systems in the Great Plains with ERTS.* Proceedings, 3rd Earth Resource Technology Satellite-1 (ERTS-1) Symposium. NASA, Goddard Space Flight Center. https://ntrs.nasa.gov/api/citations/19740022614/downloads/19740022614.pdf

Roy, D.Kr., A.D. Talukdar, M.D. Choudhury & B.Kr. Sinha. 2013. Less Known Uses of *Nymphaea* Spp. (Nymphaeaceae) as the Traditional Food Item (Vhet-Laddu) in Northeast India. Int*. J. Food, Agric. Vet. Sci.* 3(2): 82-87. https://www.cibtech.org/J-FOOD-AGRI-VETERINARY-SCIENCES/PUBLICATIONS/2013/ Vol_3_No_2/JFAV...13-019...DILIP.pdf.

Rusmayadi, G. & R. Khairina. 2015. Productivity of Hairy Water Lily (*Nymphaea pubescens* Willd.) Seeds in South Kalimantan's Backswamps Based on Linear Model. *TWJ* 1(1): 1–8. https://doi.org/10.20527/twj.v1i1.10.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Ryen, F.J. 1985. Isolation and Characterization of Photosynthetically Active Cells from Submerged and Floating Leaves of the Aquatic Macrophyte Potamogeton Nodosus Poir. *Plant Cell Physiology*. 26: 309–315. ISSN: 0032-0781. https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=200902047390891421

Sacher, R. 2006. *Waterlily Soil, Fertilizer, and Pots.Water Gardening International*. 1(3).www.watergardenersinternational.org/journal/1-3/rich/page1.html. (diakses 27 Agustus 2018).

Sago, Y. 2016. Effects of Light Intensity and Growth Rate on Tipburn Development and Leaf Calcium Concentration in Butterhead Lettuce. *HortScience* 51 1087–9. Doi: 10.21273/HORTSCI10668-16.

Saity, G. & S.W.L. Jacobs. 2014. *Waterplants in Australia*. Sainty Books, NSW. Australia. ISBN: 0958105510, 0958105510.

Saleh, M., R.S. Simatupang & Koesrini. 2017. Tanaman Buah Eksotik Lahan Rawa. *In*: *Agroekologi Rawa*. IAARD Press. ISBN: 978-602-425-296-0.

Salvucci, M.E. & G. Bowes. 1983. Two Photosynthetic Mechanisms Mediating the Low Photo–Respiratory State in Submersed Aquatic Angiosperms. *Plant Physiol*. 73: 488–496. Doi: 10.1104/pp.73.2.488.

Sand-Jensen, K. & H. Frost-Christensen. 1999. Plant Growth and Photosynthesis in the Transition Zone between Land and Stream. *Aquat. Bot*. 63: 23-35. Doi: 10.1016/S0304-3770(98)00107-7.

Sand-Jensen, K. & J. Borum. 1991. Interactions among Phytoplankton, Periphyton, and Macrophytes in Temperate Freshwaters and Estuaries. *Aquat. Bot*. 41: 137–317. Doi: 10.1016/0304-3770(91)90042-4.

Sasidharan, R., S. Hartman, Z. Liu, S. Martopawiro, N. Sajeev, H. van Veen & L.A.C.J. Voesenek. 2017. Signal Dynamics and Interactions During Flooding Stress. *Plant Physiol*. 176(2): 1106–1117. https://dx.doi.org/10.1104/pp.17.01232.

Scheffer, M., S. Szabó, A. Gragnani, E.H. van Nes, S. Rinaldi, N. Kautsky, J. Norberg, R.M.M. Roijackers & R.J.M. Franken 2003. Floating plant dominance as a stable state. *PNAS* 100: 4040–4045. Doi: 10.1073/pnas.0737918100.

Scheffer, M. 1998. *Ecology of Shallow Lakes. Population and Community Biology Series.* Chapman and Hall. London. 378p. ISBN-13: 978-0412749209, ISBN-10: 0412749203.

Schwarz, A. M., M de Winton, & I. Hawes. 2002. Species-Specific Depth Zonation in New Zealand Charophytes as A Function of Light Availability. *Aquat. Bot*. 72, 209–217. Doi: 10.1016/S0304-3770(01)00201-7.

Scoffoni, C., C. Vuong, S. Diep, H. Conchard & L. Sack. 2014. Leaf Shrinkage with Dehydration Coordination with Hydraulic Vulnerability and Drough Tolerance. *Plant Physiology*, 164(4): 1772–1788. Doi: 10.1104/pp.113.221424.

Sculthorpe, C.D. 1967. *The Biology of Aquatic Vascular Plants*. Edward Arnold, London, UK. ISBN: 3874292576.

Selvakumari, E., S. Shantha, T.P. Prabhu & C. Sreenathkumar. 2012. Antioxidant Activity of Ethanolic Flower Extract from *Nymphaea pubescens* Willd. Against Human Cervical and Breast Carcinoma in Vitro. *Int Res J. Pharma*. 3: 124–125.

Shajeela, P.S., V. Kalpanadevi & V.R. Mohan. 2012. Potential Antidiabetic, Hypolipodaemic and Antioxidant Effect of *Nymphaea pubescens* Extract in

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Alloxan Induced Diabetic Rats. *J. App. Pharma Sci*. 2: 83–88. ISSN: 2231-3354. https://www.japsonline.com/admin/php/uploads/385_pdf.pdf

Shao, H.B., L.Y. Chul, Z.H. Lu & C.M. Kang. 2008. Primary Antioxidant Free Radical Scavenging and Redox Signaling Pathways N Higher Plant Cells. Int. J. *Biol. Sci.* 4, 8–14. https://doi.org/10.7150/ijbs.4.8

Shashika, D.P.G., K. Guruge, D. Yakandawala & K. Yakandawala. 2016. Confirming the Identity of Newly Recorded *Nymphaea rubra* Roxb. Ex Andrews Discerning from *Nymphaea pubescens* Willd. Using Morphometrics and Molecular Sequence Analyses. *Bangladesh J. Plant Taxon*. 23(2): 107-117. Doi: 10.3329/bjpt.v23i2.30819.

Shibata, T, K. Iwao & T. Takano. 1995. Effect of Vertical Air Flowing on Lettuce Growing in a Plant Factory. *Acta Hortic*. 399 175–82. https://doi.org/10.17660/ActaHortic.1995.399.20.

Shipley, B. & D. Meziane. 2002. The Balanced–Growth Hypothesis and the Allometry of Leaf and Root Biomass Allocation. *Funct. Ecol*. 16, 326–331. https://doi.org/10.1046/j.1365–2435.2002.00626.x.

Shtein, I., Z.A. Popper & S. Harpaz-Saad. 2017. Permanently Open Stomata of Aquatic Angiosperms Display Modified Cellulose Crystallinity Patterns. *Plant Signaling & Behavior*. 12(7): 1–4. https://doi.org/10.1080/15592324.2017.1339858

Shukla, R.S & P.S. Chadel. 1996. *Plant Ecology*. S Chand and Company L.td. New Delhi. 328p. ISBN: 9788121905480, 8121905486.

Silva, T.S.F., P.F. Maycira, J.M. Melack & M.L.M. Novo. 2008. *Remote Sensing of Aquatic Vegetation*: Theory and Aplications Environ Monitoring Assess 140: 131–145. https://doi.org/10.1007/s10661-007-9855-3.

Simatupang, R.S. & E.B.E. Pangaribuan. 2009. *Peluang dan Prospek Pengembangan Tanaman Sayur-Sayuran di Lahan Rawa Lebak*. Agrocientiae. 16(2): 16–123. ISSN: 1907-0799. https://epublikasi.pertanian.go.id/berkala/jsl/article/view/3347/3381.

Sinden-Hempstead, M & K.T. Killingbeck. 1996. Influences of Water Depth and Substrate Nitrogen on Leaf Surface Area and Maximum Bed Extension in *Nymphaea odorata*. *Aquat. Bot.* 53: 151-162. https://doi.org/10.1016/0304-3770(96)01020-0.

Smart, R.M. & J.W. Barko. 1986. Laboratory Culture of Submersed Fresh Water Macrophytes on Natural Sediments. *Aquat. Bot.* 21: 251-263. https://doi.org/10.1016/0304-3770(85)90053-1.

Smith, C.S. & M.S. Adams. 1986. Phosphorus Transfer from Sediments by Myriophyllum-Spicatum. *Limnol. Oceanogr*. 1986, 31, 1312–1321. https://aslopubs.onlinelibrary.wiley.com/doi/pdf/10.4319/lo.1986.31.6.1312.

Smith, W.K., D.T. Bell & K.A. Shepherd. 1998. Associations Between Leaf Structure, Orientation, and Sunlight Exposure in Five Western Australian communities. Amer. J. Bot., 85(1): 56–63. https://bsapubs.onlinelibrary.wiley. com/doi/pdf/10.2307/2446554.

Snir, A, M. Gurevitz & Y. Marcus. 2007. Alterations in Rubisco Activity and in Stomatal Behavior Induce a Daily Rhythm in Photosynthesis of Aerial Leaves in the Amphibious-Plant *Nuphar lutea*. *Photosynth Res*. 90: 233–242. Doi: 10.1007/s11120-007-9142-8.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Soil Survey Staff. 2014. *Keys to Soil Taxonomy*, 12th edn. USDA Natural Resources Conservation Service, Washington, DC. https://www.nrcs.usda.gov/sites/default/files/2022-09/Keys-to-Soil-Taxonomy.pdf.

Solórzano, J.V., J.A. Gallardo–Cruz, C. Peralta–Carreta, R. Martínez–Camilo & A.F.M. de Oca. 2020. Plant Community Composition Patterns in Relation to Microtopography and Distance to Water Bodies in A Tropical Forested Wetland. *Aquat. Bot.* 167, 103295. https://doi.org/10.1016/j.aquabot.2020.103295.

Song, B. & K. Park. 2020. Detection of Aquatic Plants Using Multispectral UAV Imagery and Vegetation Index Remote Sens. 12: 387. https://doi.org/10.3390/rs12030387.

Sorrell, B.K. & C.C. Tanner. 2000. Convective Gas Flow and Internal Aeration in Eleocharis Sphacelata in Relation to Water Depth. *The Journal of Ecology* 88(5): 778–789. Doi: 10.1046/j.1365-2745.2000.00493.x.

Squires, M.M. & L.F.W. Lesack. 2003. Spatial and Temporal Patterns of Light Attenuation Among Lakes of the Mackenzie Delta. *Freshw. Biol.* 47: 1–20. Doi: 10.1046/j.1365-2427.2003.00960.x.

Stahr, K.J. & M.A. Kaemingk. 2017. *An Evaluation of Emergent Macrophytes and Use Among Groups of Aquatic Taxa.* Lake Reserv Manage. 00:1–10. Doi: 10.1080/10402381.2017.1339747.

Stengel, E. & C.J. Soeder. 1975. *Control of Photosynthetic Production in Aquatic Ecosystems. In Photosynthesis and Productivity in Different Environments*. J.P. Cooper. Cambridge. Cambridge University Press. 645-660pp. ISBN-10: 0521113423, ISBN-13: 978-0521113427.

Sterling, T.M. (2005). Transpiration: Water Movement through Plants. *Journal of Natural Resources and Life Sciences Education*, 34(1): 123–123. https://doi.org/10.2134/jnrlse.2005.0123

Stodolo, J. 1987. *Aquarium Plants*. T.F.H. Publications. Inc. ISBN 10: 0866222510, ISBN 13: 9780866222518.

Strayer, D.L. & D. Dudgeon. 2010. Freshwater Biodiversity Conservation: Recent Progress and Future Challenges. *Freshwater Science*, 29, 344-358. https://doi.org/10.1899/08-171.1.

Subagyo, H. & M. Noor, 2017. Perspektif Lahan Rawa dalam Mendukung Lumbung Pangan Dunia *In*: *Agroekologi Rawa*.IAARD Press.ISBN: 978-602-425-296-0.

Subagyo, H. 2006. Lahan Rawa Lebak. *In*: *Karakteristik dan Pengelolaan Lahan Rawa. Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian*. Badan penelitian dan pengembangan Pertanian. Departemen Pertanian. Bogor. ISBN: 9799474523, 9789799474520

Sumlu, S., H.H. Atar & K.M. Khawar. 2010. Breaking Seed Dormancy of Water Lily (*Nymphaea alba* L.) under in Vitro Conditions. *Biotechnol & Biotechnol. EQ.* 1582–1586. Doi: 10.2478/V10133-010-0009-3.

Swingle, D.B. 1959. A *Textbook of Systematic Botany*. McGRAW-HILL BOOK COMPANY, INC. New York and London. ISBN 10: 1179534751, ISBN 13: 978-1179534756

Tavechio, W.L.G., & S.M. Thomaz. 2003. Effects of Light on the Growth and Photosynthesis of Egeria najas Planchon. *Braz. Arch. Biol. Tech*. 46: 203–209. Doi: 10.1590/S1516-89132003000200011.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Tibbitts, T.W & G. Bottenberg. 1976 Growth of Lettuce (*Lactuca sativa*) Under Controlled Humidity Levels. *J. Am. Soc. Hortic. Sci.* 101 70–3. https://iopscience.iop.org/article/10.1088/1757-899X/1257/1/012001/pdf.

Tiner, R.W. 2017. Wetland Indicators: A Guide to Wetland Formation, Identification, Delineation, Classification, and Mapping.CRC Press. Taylor and Francis Group. Boca Raton, London New York. 2nd Edition. ISBN:9781439853696, eBook ISBN: 9781315374710.

Tiner, W. 2015a. Wetlands: An Overview. *In*: Tiner, R.W., M.W. Lang & V.V. Klemes. 2015. *Remote Sensing of Wetlands: Applications and Advances*. CRC Press, Taylor and Frances Group. ISBN: 13:978-1-4822-3735-1.

Tiner, W. 2015b. Introduction to Wetland Mapping and Its Challenges *In*: Tiner, R.W., M.W. Lang & V.V. Klemes. 2015. *Remote Sensing of Wetlands: Applications and Advances.* CRC Press, Taylor and Frances Group. ISBN: 13:978-1-4822-3735-1.

Topa, M.A. & K.W McLeod. 1986. Aerenchyma and Lenticel Formation in Pine Seedlings: *A Possible Avoidance Mechanism to Anaerobic Growth Conditions. Physiologia Plantarum* 68: 540–550 https://doi.org/10.1111/j.13993054.1986.tb03394.x. (diakses 09 Desember 2019).

Toro, F.G. & A. Tsourdos. 2018. *UAV-Based Remote Sensing Volume 2.* Spesial Issue. MDPI Sensors. ISSN;1423-8220. www.mdpl.com/journal/sensor.

Torres-Fernández del Campo, J., M. Olvera-Vargas, B.L. Figueroa-Rangel, R. Cuevas-Guzmán & L.I. Iñiguez-Dávalos. 2018. Patterns of Spatial Diversity and Structure of Mangrove Vegetation in Pacific West–Central Mexico. *Wetlands.* https://doi.org/10.1007/s13157–018–1041–6.

Tóth, V.R. 2018. Monitoring Spasial Variability and Temporal Dynamics of Phragmites Using Unmanned Aerial Vehicles. *Fortiers In Plant Science*. https://doi:10.3389/fpls.2018.0072.

Treman, I. W. 2012. Pemanfaatan Pengindraan Jauh untuk Kajian Desifikasi Rumah Mukim Perkotaan. *Media komunikasi FIS* 11(1): 1-15. https://doi.org/10.23887/mkfis.v11i2.455.

Trettin, C.C., M. Davidian, M.F. Jurgensen & R. Lea. 1996. Organic Matter Decomposition Following Harvesting and Site Preparation of A Forested Wetland. *Soil Sci. Sot. Am. J.* 60, 1994-2003. https://www.srs.fs.usda.gov/pubs/ja/ja_trettin001.pdf.

Tsuchiya, T., 1991. Leaf Life Span of Floating–Leaved Plants. Kluwer Academic Publishers, Belgium. *Vegetation* 97, 149–160. https://doi.org/10.1007/BF00035388.

Tsukaya, 2018. Leaf Shape Diversity with An Emphasis on Leaf Contour Variation, Developmental Background, and Adaptation. Semin. *Cell Dev. Biol*. 79, 48–57. Doi: 10.1016/j.semcdb.2017.11.035.

Tunan, A.M. 2012. *Phytochemical Investigation of Nymphaea pubescens and Study of its Antimicrobial Activities*. Dissertation. Pharmaceutical Research (PHRM 404) of the Department of Pharmacy, East West University for the Degree of Bachelor of Pharmacy. http://dspace.ewubd.edu/handle/2525/74.

Twilley, R.R., L.R. Blanton, M.M. Brinson & G.J., Davis. 1985. Biomass Production and Nutrient Cycling in Aquatic Macrophyte Communities of the Chowan River, North Carolina. *Aquat. Bot*. 22, 231–252. https://doi.org/10.1016/0304–3770(85)90002–6.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

USDA, NRCS, 2006. In G. W. Hurt & L. M. Vasilas (eds.) Field Indicators of Hydric Soil in the United States, Version 6.0 USDA NRCS in Cooperation with the National Technical Committee for Hydric Soil. *Ft. Worth, TX*. https://www.nrcs.usda.gov/sites/default/files/2022-09/Field_Indicators_of_Hydric_Soils.pdf.

van der Valk, A. & D.M. Mushet. 2016. Interannual Water-Level Fluctuations and the Vegetation of Prairie Potholes: Potential Impacts of Climate Change. *Wetlands* 36, 397–406. https://doi.org/10.1007/s13157–016–0850–8.

van der Valk, A.G., 2005. Water-Level Fuctuations in North American Prairie Wetlands. *Hydrobiologia* 539, 171–188. https://doi.org/10.1007/s10750–004–4866–3.

van Wijk, M.T., M. Williams, L. Gough, S.E. Hobbie & G.R., Shaver. 2003. Luxury Consumption of Soil Nutrients: A Possible Competitive Strategy in Above–Ground and Below–Ground Biomass Allocation and Root Morphology for Slow–Growing Arctic Vegetation?. *J. Ecol.* 91, 664–676. https://doi.org/10.1046/j.1365–2745.2003.00788.x

Vartapetian, B.B. & M.B. Jackson. 1997. Plant Adaptations to Anaerobic Stress. *Annals of Bot.* 79: 3–20. https://doi.org/10.1093/oxfordjournals.aob.a0 10303.

Vasilas, B.L., M. Rabenhorst, J. Fuhrmann, A. Chirnside & S. Inamdar. Wetland Biogeochemistry Tecniques. In: Anderson, J.T. & C. A. Davis. 2013. *Wetland Techniques, Volume 1 Foundations*. Springer Dordrecht Heidelberg New York London. https://doi.org/10.1007/978-94-007-6860-4.

Viña, A., A.A. Gitelson, A.L. Nguy-Robertson & Y. Peng. 2011. Comparison of Different Vegetation Indices for the Remote Assessment of Green Leaf Area Index of Crops. *Remote Sens. Environ*. 115: 3468–3478. Doi: 10.1016/ j.rse.2011.08.010. file:///C:/Users/HP/ Downloads/2-1.pdf.

Visser, E.J.W., R.H.M. Nabben, C.W.P.M. Blom & L.A.C.J. Voesenek. 1997. Elongation by Primary Lateral Roots and Adventitious Roots during Conditions of Hypoxial and Hight Ethylene Concentrations. *Plant Cell and Environment*. 20: 647-653. https://doi.org/10.1111/j.1365-3040.1997.00097.x

Voesenek, L.A.C.J. & R. van der Veeon. 1994. The Role of Phytohormon in the Plant Stress: How to Much or Two Little Waters. *ACTA Bot. Neerl*, 43: 91-127. https://doi.org/10.1111/j.1438-8677.1994.tb00739.x

Von-caemmerer, S. & N. Baker. 2006. The Biology of Transpiration. From Guard Cells to Globe. *Plant Physiol.* 143(1), 3–3. https://doi.org/10.1104/pp.104. 900213.

Vymazal, J. & L. Kröpfelová. 2008. *Wastewater Treatment in Constructed Wetlands with Horizontal Sub-Surface Flow*. Springer. 579p. ISBN: 1402085796. Doi: 10.1007/978-1-4020-8580-2.

Vymazal, J. 2007. Removal of Nutrients in Various Types of 645 Structured Wetlands. *Sci Total Environ*: 380:48-65. Doi: 10.1016/j.scitotenv.2006.09.014.

Walton, S.P. 1996. *Aquatic Plant Mapping for 36 King Country Lakes. King Country Surface Water Management Division 70th Avenue*. Suite 2200. Seattle. https://your.kingcounty.gov/dnrp/library/1996/kcr166.pdf

Wandell, H.D. & L.G. Walfson. 2007. *A Citizen's Guide for the Identification, Mapping, and Management of the Common Rooted Aquatic Plants of Michigan Lakes*. Michigan State University Extension. https://micorps.net/wp-content/uploads/2017/12/CommonRootedAqPlants-MSUE-WQ-55.pdf.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Wang, J., J. Bakshi Q. Zhao, Q. Lu & Z Xia. 2016[a]. Five-Year Changes in Soil Organic Carbon and Total Nitrogen in Coastal Wetlands Affected by Flow-Sediment Regulation in a Chinese delta. *Sci.Rep.* Doi: 10.1038/srep21137.

Wang, P., Q. Zhang, Y.S. Xu & F.H. Yu. 2016[b]. Effects of Water Level fluctuation on the Growth of Submerged Macrophyte Communities. Flora-Morphol. Distrib. *Funct. Ecol. Plants.* 223, 83–89. http://dx.doi.org/10.1016/j/flora.2016.05.005.

Wang, X., B. Helgason, C. Westbrook & A. Bedard-Haughn. 2016[c]. Effect of Mineral Sediments on Carbon Mineralization, Organic Matter Composition and Microbial Community Dynamics in Amountain Peatland. *Soil Bio. Biochem*. 103: 16–27. Doi: 10.106/j.soilbio.2016.07.025.

Wang, Y., H. Ji, R. Wang & S. Guo. 2019. Responses of Nitrification and Denitrification to Nitrogen and Phosphorus Fertilization: Does the Intrinsic Soil Fertility Matter? Plant Soil 440, 443–456. https://doi.org/10.1007/s11104-019-04108-8.

Wang, Z. K.W.H. Kwok, G.C.S. Lui, G-J. Zhou, J-S. Lee, M.H.W. Lam & K.M.Y.Leung. 2014. *The Difference between Temperate and Tropical Salwater Species' Acute Sensitivity to Chemicals is Relatively Small*. Doi: 10.1016/j.chemosphere.2013.10.066.

Washington State Department of Ecology (WSDOE), 1994. A Citizen's Manual for Developing Integrated Aquatic Vegetation Management Plans. Water Quality Financial Assistance Program. 1st Edition. http://stlri.org/pdfs/Citizen%27sGuide-VegMgt.pdf.

Waters, I. & J.M. Shay. 1992. Effect of Water Depth on Population Parameters of a *Typha glauca* Stand. *Can. J. Bot.* 70: 349–51. Doi: 10.1139/b92-046.

Webb, M.A., R.A. Jr. Ott & C.C. Bonds. 2012. *Propagation and Establishment of Native Aquatic Plants in Reservoirs.* Management Data Series, No. 273. Inland Fisheries Division, Austin, Texas 78744. https://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_t3200_1770.pdf.

Webb, R.H. & S.A. Leake. 2006. Ground-water Surface Interaction and Long-term Change in Riverine Riparian Vegetation in the Southwestern United States. *Journal of Hydrology* 320: 320–323. https://doi.org/10.1016/j.jhydrol.2005.07.022

Weber, M. & R. Brandle. 1996. Some Aspects of the Extreme Anoxia Tolerance of the Sweet Flag. *Acorus calamus* L. *Folia Geobotanica Phytotaxonomica*. 31: 37-46. https://boris.unibe.ch/91764/1/1996_FoliaGeobot_31_37.pdf.

Weerakoon, H. P. A. T., K. S. S. Atapaththu & H.B. Asanthi. 2018. Toxicity Evaluation and Environmental Risk Assessment of 2-Methyl-4-Chlorophenoxy Acetic Acid (MCPA) on Non-Target Aquatic Macrophyte *Hydrilla verticillata*. *Environ. Sci. Pollut. Res. Int*. 25, 30463–30474. https://doi.org/10.1007/s11356-018-3013-z.

Wei, G.W., Y. Chen, X.S. Sun, Y.H. Chen, F.L. Luo & F.H. Yu. 2019. Growth Responses of Eight Wetland Species to Water Level Fluctuation with Different Ranges and Frequencies. *PLOS ONE*. 14, e0220231 https://doi.org/10.1371/journal.pone.0220231.

Weisner, S.E.B. 1988. Factors Affecting the Internal Oxygen Supply of *Phragmites australis* (Cav.) Trin. Ex Steudel in situ. *Aquat. Bot*. 31: 329-335. Doi: 10.1016/0304-3770(88)90021-6.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Westlake, J., J Kvêt & A. Szczepanski. 1999. The Production Ecology of Wetlands; Cambridge university press: Cambridge, UK. ISBN: 9780511549687. https://doi.org/10.1017/CBO9780511549687

Wetzel, R.G. & G.E. Likens. 2000. Limnological Analyses. Springer, New York. 3rd Edition. ISBN: 978-1-4419-31863, ISBN 978-1-4757-3250-4 (eBook) http://www.jlakes.org/ch/book/978-1-4757-3250-4.pdf.

Wetzel, R.G. 1983. Limnology. Saunders, Philadelphia. PA. 850pp. ISBN 10: 00305 79139, ISBN 13: 9780030579134

Wetzel, R.G. 1988. Water as Environment for Plant Life *In*: J.J. Symoens. *Vegetation of Inland Waters.* Dordrecht. Kluwer Academic. 1–30pp. ISBN: 9061931967.

Wetzel, R.G. 2001. *Limnology: Lake and River Ecosystems*. 3rd ed. Academic Press, San Diego. ISBN: 978-0-12-744760-5. Doi: https://doi.org/10.1016/C2009-0-02112-6.

White, J.R., K.R. Reddy & J.M. Newman. 2006. Hydrologic and Vegetation Effects on Water Column Phosphorus in Wetland Soil. *Ekol. Appl.* 7: 268–276. https://soils.ifas.ufl.edu/wetlands/publications/pdf-articles/304.hydrologic%20and%20vegetation%20effects%20on%20water%20column%20phosphorus%20in%20wetland%20mesocosms.pdf

White, M.S., M.A. Xenopoulos, K. Hogsden, R.A. Metcalfe & P.J. Dillon. 2008. Natural Lake Level fluctuation and Associated Concordance with Water Quality and Aquatic Communities within Small Lakes of the Laurentian Great Lakes region. *Hydrobiologia* 613, 21–31. https://doi.org/10.1007/s10750–008–9469–y.

Wiersema, J.H. 1987. A Monograph of *Nymphaea* Subgenus *Hydrocallis* (Nymphaeaceae). *Systematic Botany Monographs*. 16: 1–112. ISBN: 091286 1169,9780912861166.

Wild, A & G. Wolf. 1980. The Effect of Different Light Intensities on the Frequency and Size of Stomata, the Size of Cells, the Number, Size and Chlorophyll Content of Chloroplasts in the Mesophyll and the Guard Celss During the Otogeny of Primary Leaves of *Sinapis alba* Z. Pflanz, 97: 325–342. https://eurekamag.com/research/006/642/006642062.php.

Willmer, C. & M. Fricker. 1996. *Stomata.* 2nd Edition. Fdmundsbury Press Bury St Edmunds, Suffolk. 387p. Doi: 10.1007/978-94-011-0579-8. ISBN: 978-94-010-4256-7, ISBN: 978-94-011-0579-8(eBook).

Wium-Andersen, S. U. Anthoni, C. Christophersen & G. Houen. 1982. *Allelopathic Effects on Phytoplanjton by Substances Isolated from Aquatic Macrophytes (Charales).* Wiley. 39(2): 187-190. https://www.jstor.org/stable/3544484

Wolken, J.J., A.D. Mellon & C.L. Greenblatt. 1955. Environmental Factors Affecting Growth and Chlorophyll Synthesis in Euglena. I. Physical and Chemical. II. The Effectiveness of the Spectrum for Chlorophyll Synthesis. *J. Eukaryot. Microbiol.* 2, 89–96. https://doi.org/10.1111/j.1550-7408.1955.tb02407.x

Woodward, F.I. 1987. Stomatal Numbers are Sensitive to Increases in CO_2 from Pre-industrial Levels. *Nature* 327: 617–618. http://dx.doi.org/10.1038/327617a0.

Wu, J., H-B. Zhao, D. Yu & X. Xu. 2017. Transcriptome Profiling of the Floating Leaved Aquatic Plant *Nymphoides Peltata* in Response to Flooding Stress. *BMC Genom.* 18: 119. https://doi.org/10.1186/s12864-017-3515-y.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Xie, C., J.F. Li & F. P.A. 2018. Environmental Factors Influencing Mucilage Accumulation of the Endangered *Brasenia schreberi* in China. *Sci. Rep.* 8, 17955. https://doi.org/10.1038/s41598-018-36448-3.

Xu, D.Q., W. Gao & J. Ruan. 2015. Effects of Light Quality on Plant Growth and Development, *Plant Physiol*. J51, 1217–1234. https://doi.org/10.13592/j.cnki.ppj.2015.1002.

Yang, F. & Z. Guo. 2015. Characterization of Micro–Morphology and Wettability of Lotus Leaf, Waterlily Leaf, and Biomimetic ZnO Aurface. *J. Bionic Eng*. 12, 88–97. https://doi.org/10.1016/S1672–6529(14)60103–7.

Yang, J.P., N.G. Dengler & R.F. Horton. 1987. Heterophylly in Ranunculus Flabellaris: The Effect of Abscisic Acid on Leaf Anatomy. *Annals of Bot*. 60(2): 117-125. https://www.jstor.org/stable/42757848.

Yichun, X., S. Zongyao & Y. Mei. 2008. Remote Sensing Imagery in Vegetation Mapping: A. Review. *J. Plant Eco*. 1: 9-23. https://doi.org/10.1093/jpe/rtm005.

Yoandestina. 2013. Berita Trivia Rawa (8): Watun. Balittra. http://balittra.litbang.pertanian.go.id. (diakses 21 Februari 2018).

Yousaf, A., N. Khalid, M. Aqeel, A. Noman, N. Naeem, W. Sarfraz, U. Ejaz, Z.a Qaiser & A. Khalid. 2021. Nitrogen Dynamics in Wetland Systems and Its Impact on Biodiversity . Nitrogen, 2: 196–217. https://doi.org/10.3390/nitrogen2020013.

Yu, H., Y. Niu, Y. Hu & D. Du. 2014. Photosynthetic Response of the Floating-Leaved Macrophyte *Nymphoides peltata* to A Temporary Terrestrial Habitat and Its Implications for Ecological Recovery of Lake Side Zones. Knowl. *Manag. Aquatic Ecosyst.* 412, 08. https://doi.org/10.1051/kmae/2013090.

Yu, L. & D. Yu. 2011. Differential Responses of the Floating-Leaved Aquatic Plant *Nymphoides peltata* to Gradual Versus Rapid Increases in Water Levels. *Aquat. Bot*. 94(2): 71–6. https://doi.org/10.1016/j.aquabot.2020.11.004.

Zak, D., J. Gelbrecht, S. Zebra, T. Shatwell, M. Barth, A. Cabezas & P. Steffenhagen. 2014. How Helophytes Influence the Phosphorus Cyle in Degraded Inundated Peat Soil-Implications for Fen Restoration. *Ecol. Eng* 66:82-90. https://10.1016/j.ecoleng.2013.10.003.

Zhang J.B., C.C. Song & S.M. Wang. 2007[a]. Dynamics of Soil Organic Carbon and Its Fractions After Abandonment of Cultivated Wetlands in Northeast China. *Soil Till Res*. 96:350–360. https://doi.org/10.1016/j.still.2007.08.006.

Zhang, X.B., P. Liu, Y.S., Yang & W.R Chen. 2007[b]. Phytoremediation of Urban Wastewater by Model Wetlands with Ornamental Hydrophytes. *J. Environ. Sci*. 19, 902–990. https://doi.org/10.1016/S1001-0742(07)60150-8.

Zhang X., D. He, G. Niu, Z. Yan & J. Song. 2018. Effects of Environment Lighting on the Growth, Photosynthesis, and Quality of Hydroponic Lettuce in A Plant Factory Int. *J. Agric. Biol. Eng*. 11 33–40. https://doi.org/10.25165/j.ijabe.20181102.3420

Zhang, A.Y., W. Cornwell, Z.J. Li, G.M. Xiong, D. Yang & Z.Q. Xie. 2019. Dam Effect on Soil Nutrients and Potentially Toxic Metals in A Reservoir Riparian Zone. Clean–Soil Air Water. 47, 1700497. https://doi.org/10.1002/clen.2017004977.

Zhang, C., W. Li, Y. Gao, Z. Xu & X. Tian. 2022. Artificial Regulation Effect of Plant Retarddants on Leaf Anatomical Characteritics of Elaeagnus Angustifolia. Front. *Environ. Sci*. https://doi.org/10.3389/fenvs.2022.900960.

UNIVERSITAS
GADJAH MADA
Kajian pola spasial, fisiologis, dan agronomis Teratai (Nymphaea pubescens Willd.) dI rawa lebak, Kalimantan Sselatan
Bakti Nur Ismuhajaroh, Prof Dr. Ir. Didik Indradewa, Dip.Agr.St.; Ir. Budiastuti Kurniasih, M.Sc., PhD.; Prof. Dr. Ir. Sri
Universitas Gadjah Mada, 2024 | Diunduh dari http://etd.repository.ugm.ac.id/

Zhang, M., Z., Gong, W. Zhao, R. Pu & K. Liu. 2016. Estimating Wetland Vegetation Abundance from Landsat-8 Operational Land Imager Imagery: A Comparison between Linear Spectral Mixture Analysis and Multinomial Logit Modeling Methods. J*. Applied Remote Sensing*. https://doi.org/10.1117/1.JRS.10.015005.(diakses 29 November 2019).

Zhao, D., H. Jiang, J. Cai & S. An. 2012[a]. Artificial Regulation of Water Level and its Effect on Aquatic Macrophyte Distribution in Taihu Lake. PLOS One 7: 1-10. https://doi.org/10.1371/journal.pone.0044836.

Zhao, D., H. Jiang, T. Yang, Y. Cai, D. Xu & S. An. 2012[b]. Remote Sensing of Aquatic Vegetation Distribution in Taihu Lake Using an Improved Classification Tree with Modified Thresholds*. J. Environ. Manag*. 95, 98–107. https://doi.org/10.1016/j.jenvman.2011.10.007.

Zhu, J., G. Sun, W. Li, Y. Zhang, G. Miao, A. Noorments, S.G. McNulty, J.S. King, M. Kumar & X. Wang. 2017. Modeling the Potential Impacts in the Southeastern United States. *Hydrol. Earth Syst. Sci.* 21: 6289–6305. https://doi.org/10.5194/hess-21-6289-2017.

Zimmermann, P. & U. Zentgraf. 2005. The Correlation between Oxidatives Tress and Leaf Senescence during Plant Development. *Cell Mol. Bio. Lett*. 10, 515–534. https://pubmed.ncbi.nlm.nih.gov/16217560/.

Zomer, R.J., A. Trabucco, & S.L. Ustin. 2009. Building Spectral Libraries for Wetlands Land Cover Classification and Hyperspectral Remote Sensing. *J. Environ. Manag.* 90:2170–2177. https://doi.org/10.1016/j.jenv man.2007.o6.028.