

DAFTAR PUSTAKA

- Abdullah K, Said AM, Omar D. 2014. Community-based conservation in managing mangrove rehabilitation in Perak and selangor. Procedia social and behavioral science 153 (2014) 121-131, Doi: 10.1016/j.sbspro.2014.10.047
- Abraham, S. 2015. The relevance of wetland conservation in Kerala. International Journal of Fauna and Biological Studies 2015; 2 (3): 01-05
<http://www.faunajournal.com/archives/2015/vol2issue3/PartA/2-2-50.1.pdf>
- Adrianto, TT. 2014. Dasar-dasar Audit Lingkungan. Global Pustaka Utama: Yogyakarta
- Ajai, C.H.B. 2017. Mangrove Inventory, Monitoring, and Health Assessment. In: Finkl C., Makowski C. (eds) Coastal Wetlands: Alteration and Remediation. Coastal Research Library, vol 21. Springer, Cham
https://doi.org/10.1007/978-3-319-56179-0_19
- Alemayehu F, Onwonga Richard, Mwangi James Kinyanjui & Wasonga Oliverv. 2014. Assessment of Shoreline Changes in the Period 1969-2010 in Watamuarea, Kenya. Global Journal of Science Frontier Research: H Environment & Earth Science 14 (6) Version 1.0
<https://journalofscience.org/index.php/GJSFR/article/view/1448>
- Alesheikh A.A, A. Ghorbanali, N. Nouri. 2007. Coastline change detection using remote sensing. Int. J. Environ. Sci. Tech., 4 (1): 61-66, 2007 ISSN: 1735-1472 <https://doi.org/10.1007/BF03325962>
- Alexandre C, Borralho T, Durao A. 2018. Evaluation of Salinization and Sodification in irrigated Areas with Limited Soil Data: Case Study in Southern Portugal. Spanish Journal of Soil Science 8 (1): 102-120
- Alongi DM. 2008. Mangrove forest: resilience, protection from tsunamis and response to global climate change. Estuar coast Shelf Sci 76: 1-13
<https://doi.org/10.1016/j.ecss.2007.08.024>
- Alongi, D. M. 2014. Carbon cycling and storage in mangrove forests. Annual Review of Marine Science 6:195–219.
https://www.researchgate.net/publication/259650328_Carbon_Cycling_and_Storage_in_Mangrove_Forests
- Alongi DM. 2015. The Impact of Climate Change on Mangrove Forests. Curr Climate Change Rep 1: 30-39.
https://www.researchgate.net/profile/Daniel_Alongi2/publication/273488691_The_Impact_of_Climate_Change_on_Mangrove_Forests/links/55666c

cc08aec22682ff1b0c/The-Impact-of-Climate-Change-on-Mangrove-Forests.pdf

- Arief M, Winarso G, Prayogo T. 2011. Kajian Perubahan Garis Pantai Menggunakan Data Satelit Landsat di Kabupaten Kendal; *Jurnal Penginderaan Jauh Vol. 8, 2011 : 71-80*
http://jurnal.lapan.go.id/index.php/jurnal_inderaja/article/view/1614/1452
- Asiyah S, Rindarjono MG, Chatarina Muryani C. 2015. Analisis Perubahan Permukiman dan Karakteristik Permukiman Kumuh Akibat Abrasi dan Inundasi di Pesisir Kecamatan Sayung Kabupaten Demak Tahun 2003 – 2013. *Jurnal GeoEco. 1 (1): 83 – 100*
- Asriningrum W. 2011. Analisis wilayah konservasi mangrove di Kepulauan Talaud. *Globe. 13 (2): 132-138*
- Asrofi A, Ritohardoyo Su, Hadmoko DS. 2017. Strategi Adaptasi Masyarakat Pesisir Dalam Penanganan Bencana Banjir Rob Dan Implikasinya Terhadap Ketahanan Wilayah (Studi Di Desa Bedono Kecamatan Sayung Kabupaten Demak Jawa Tengah). *Jurnal Ketahanan Nasional 23 (2): 125-144*
- Aulia R, Prasetyo Y, Hani'ah. 2015. Analisis Korelasi Perubahan Garis Pantai Terhadap Luasan Mangrove di Wilayah Pesisir Pantai Semarang. *Jurnal Geodesi Undip, Volume 4, Nomor 2, Tahun 2015,(ISSN :2337-845X)*
<http://id.portalgaruda.org/?ref=browse&mod=viewarticle&article=321790>
- Bassi N, M. Kumar D, Sharma A, Pardha-Saradhi P. 2014. Status of wetlands in India: A review of extent, ecosystem benefits, threats and management strategies. *Journal of Hydrology: Regional Studies 2 (2014) 1–19*
<https://doi.org/10.1016/j.ejrh.2014.07.001>
- Berger U, Adams M, Grimm V, Hildenbrandt H. 2006. Modelling secondary succession of neotropical mangroves: Causes and consequences of growth reduction in pioneer species. *Perspectives in Plant Ecology, Evolution and Systematics 7 (2006) 243–252 . doi:10.1016/j.ppees.2005.08.001*
- Blankespoor B, Dasgupta S and Lange GM, 2016. Mangroves as Protection from Storm Surges in a Changing Climate. *Policy Research Working Paper 7596*
- Campbell NA, Jane B. Reece, Lissa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert B. Jackson. 2010. Biologi jilid 3 edisi 8. Penerbit Erlangga. Jakarta
- Chafid MA, Rudhi Pribadi R, Anugroho ADS. 2012. Kajian Perubahan Luas Lahan Mangrove Di Desa Bedono Kecamatan Sayung Kabupaten Demak

Menggunakan Citra Satelit Ikonos Tahun 2004 Dan 2009. Journal Of Marine Research. 1 (2) : 167-173.
<http://ejournal-s1.undip.ac.id/index.php/jmr>

Chen Q, Qian Zhao, Jing Li, Shuguang Jian & Hai Ren. 2016. Mangrove succession enriches the sediment microbial community in South China. Scientific RepoRts | 6:27468 | DOI: 10.1038/srep27468

Cheng, Z, Yao F , Yuan-wang L , Hui-qing C , Zhao-jun L., Jian-ming X. 2017. Uptake and translocation of organic pollutants in plants: A review. *Journal of Integrative Agriculture* 2017, 16(0): 60345-7

Copertino MS. 2011. Add Coastal vegetation to the climate change critical list. *Nature* 473: 255.
<https://search.proquest.com/openview/ed36e1f8a4e34e9d61073e920a428e81/1?pq-origsite=gscholar&cbl=40569>

Cuong, DT, Bayen S, Wurl O, Subramanian K, Wong K.K.S, Sivasothi N, Obbard JP. 2005. Heavy metal contamination in mangrove habitats of Singapore. *Marine Pollution Bulletin* 50 1713–1744
https://www.researchgate.net/profile/Oliver_Wurl/publication/7495878_Heavy_metal_contamination_in_mangrove_habitats_of_Singapore/links/0fcfd50d1a9afb36ba000000/Heavy-metal-contamination-in-mangrove-habitats-of-Singapore.pdf

Dafip, M., Rudhi P., Penggalih J.S., Andhiko S.P., Aysah R. 2014. Potensi Rehabilitasi kawasan mangrove dengan metode ecological mangrove restoration (EMR) di Kota Semarang. *Makalah*. Seminar Nasional Biologi, 29 November 2014. Biologi FMIPA Unnes

Dahuri, R. 2001. Pengelolaan Sumberdaya Wilayah Pesisir dan Lautan Secara Terpadu. PT. Pradnya Paramita. Jakarta

Datta, D, Chattopadhyay R.N, Guha P. 2012. Community based mangrove management: A review on status and sustainability. *Journal of Environmental Management* 107 (2012) 84-95
<https://doi.org/10.1016/j.jenvman.2012.04.013>

Departemen Kelautan dan perikanan (DKP). 2008. Pedoman pengelolaan ekosistem mangrove. Jakarta: Direktorat pesisir dan lautan

Din N., Ngo-Massou V.M., Essomè-Koum G.L., Ndema-Nsombo E., Kottè-Mapoko E., Nyamsi-Moussian L. 2017. Impact of Urbanization on the Evolution of Mangrove Ecosystems in the Wouri River Estuary (Douala Cameroon). In: Finkl C., Makowski C. (eds) *Coastal Wetlands:*

Alteration and Remediation. Coastal Research Library, vol 21. Springer, Cham
https://doi.org/10.1007/978-3-319-56179-0_3

Donato, D.C., Kauffman J.B, Mackenzie R.A, Ainsworth A, Pfleeger A.Z. 2012. Whole-island carbon stocks in the tropical Pacific: Implications for mangrove conservation and upland restoration. *Journal of Environmental Management.* 97 (2012) 89-96
<https://doi.org/10.1016/j.jenvman.2011.12.004>

Ermiliansa D, Samekto A, Purnaweni H. 2014. Peran Prenjak dalam Mewujudkan daerah Konservasi berbasis eco edu wisata mangrove di dusun Tapak Tugurejo Semarang. *Jurnal Ekosains.* VI (1): 62-67

Ervita K, Marfai MA. 2017. Shoreline Change Analysis in Demak, Indonesia. *Journal of Environmental Protection,* 2017, 8, 940-955

Fahrul, MF. 2007. *Metode sampling bioekologi.* Jakarta: PT Bumi aksara

FAO. 2007. The World's Mangroves 1980–2005. Forest Resources Assessment Working Paper No. 153. Food and Agriculture Organization of The United Nations. Rome.
<ftp://ftp.fao.org/docrep/fao/010/a1427e/a1427e00.pdf>

Faturrahmah S dan Marjuki B. 2017. Identifikasi Dinamika Spasial Sumberdaya Mangrove di Wilayah Pesisir Kabupaten Demak Jawa Tengah. *Majalah Geografi Indonesia.* 31 (1): 56 – 64.
<https://doi.org/10.22146/mgi.24234>

Fitriyani, 2015. Peran pemuda dalam mengembangkan Eco Edu Wisata mangrove dan implikasinya terhadap ketahanan lingkungan daerah (studi kasus pada pekumpulan pemuda peduli lingkungan 'Prenjak' dusun Tapak, Kel. Tugurejo, Kec. Tugu, kota Semarang, Prop. Jateng. *Jurnal Ketahanan Nasional.* 21(2): 128-141

Ghosh M.K, Kumar L, Roy C. 2015. Monitoring the coastline change of Hatiya Island in Bangladesh using remote sensing techniques ; *ISPRS Journal of Photogrammetry and Remote Sensing* 101 (2015) 137–144
https://www.researchgate.net/publication/270344794_Monitoring_the_coastline_change_of_Hatiya_Island_in_Bangladesh_using_remote_sensing_techniques

Gilman E.L., Ellison J., Jungblut V., Hanneke Van Lavieren HV, Wilson L., Areki F, Brighouse G, Bungitak J, Dus E, Henry M, Kilman M, Matthews E, Sauni I Jr., Teariki-Ruatu N, Tukia S, Yuknavage K. 2006. Adapting to Pacific

Island mangrove responses to sea level rise and climate change. CLIMATE RESEARCH, 32: 161–176

Giri C, Ochieng E, Tieszen LL, Zhu Z, Singh A, Loveland T, Masek J and Duke N. 2011. Status and distribution of mangrove forest of the world using Earth observation satellite data. Global Ecol Biogeogr 20: 154-159
https://www.researchgate.net/profile/Norman_Duke/publication/49513089_Status_and_distribution_of_mangrove_forest_of_the_world_using_earth_observation_satellite_data/links/00b4952abc89a38758000000.pdf

Gleason R.A, N. H. Euliss, Jr., Tangen B.A, Laubhan M.K, And Browne B.A. 2011. USDA conservation program and practice effects on wetland ecosystem services in the Prairie Pothole Region. Ecological Applications, 21(3) Supplement, 2011, pp. S65–S81. DOI: 10.1890/09-0216.1

Godoy M. D.P. and Lacerda L.D., 2015. Mangroves Response to Climate Change: A Review of Recent Findings on Mangrove Extension and Distribution. Anais da Academia Brasileira de Ciências (2015) 87(2): (Annals of the Brazilian Academy of Sciences)
<https://doi.org/10.1590/0001-3765201520150055>

Gubernur Jawa Tengah. 2018. Perda No. 13 tahun 2018 tentang Rencana Zonasi Wilayah Pesisir dan Pulau-Pulau Kecil Provinsi Jawa Tengah Tahun 2018-2038. Lembaran Daerah Provinsi Jawa Tengah tahun 2018 No 13

Gunawan H. 2015. Suksesi sekunder hutan terganggu bekas perambahan di Taman Nasional Gunung Ciremai, Jawa Barat (Secondary succession on disturbed forest area ex illegal cultivation in Mount Ciremai National Park, West Java. PROS SEMNAS MASY BIODIV INDON Volume 1, Nomor 7, Oktober 2015; Halaman: 1591-1599. DOI: 10.13057/psnmbi/m010709

Hadi SP. 2019. *Bunga Rampai Manajemen Lingkungan (Bagian kedua)*. Thafa Media: Yogyakarta

Hardati, P., Setyowati, DLN., Wilonoyudho, S., Martuti, NKT., Utomo, APY. 2015. *Pendidikan Konservasi*. Magnum Pustaka Utama-Unnes. Semarang

Hartati, T., Amanah, S., Sobari, M.P. 2005. Perilaku Petambak dalam Konservasi Hutan Mangrove Di Desa Jayamukti. Kabupaten Subang. Provinsi Jawa Barat. Buletin ekonomi Perikanan, VI (1): 13-36
<https://media.neliti.com/media/publications/11003-ID-perilaku-petambak-dalam-konservasi-hutan-mangrove-di-desa-jayamukti-kabupaten-su.pdf>

Hartini, S., Saputro GB, Yulianto M, Suprajaka. 2010. Assessing the Used of Remotely Sensed Data for Mapping Mangroves Indonesia. SELECTED TOPICS in POWER SYSTEMS and REMOTE SENSING. In 6th WSEAS

International Conference on REMOTE SENSING (REMOTE '10), Iwate Prefectural University, Japan. October 4-6, 2010; pp. 210-215.

<http://www.wseas.us/e-library/conferences/2010/Japan/POWREM/POWREM-34.pdf>

Harty C. 2009. Mangrove planning and management in New Zealand and South East Australia – A reflection on approach. Ocean & Coastal Management 52 (2009) 278–286. doi:10.1016/j.ocecoaman.2009.03.001

Hashim R, Kamali B, Tamin NM, Zakaria R. 2010. An integrated approach to coastal rehabilitation: Mangrove restoration in Sungai Haji Dorani, Malaysia. Estuarine, coastal and shelf science 86 (2010): 118-124
Doi: 10.1016/j.ecss.2009.10.021

Hastuti, E. D., Anggoro, S. dan Pribadi, R. 2012. Dinamika Kondisi Struktur Komunitas Vegetasi dan Kualitas Fisika-Kimia Lingkungan Di Kawasan Hutan Mangrove Kota Semarang. *Jurnal Lingkungan Tropis*, 6(1): 61-71.
<https://docs.google.com/viewer?a=v&pid=sites&srcid=bGluZ2t1bmdhb1l0cm9waXMub3JnfHd3d3xneDo1MmMwZmQ0ODg3MjUyOGQ>

Heriyanto NM and Subiandono E. 2012. Composition and Structure, Biomass, and Potential of Carbon Content In Mangrove Forest At National Park Alas Purwo. Jurnal Penelitian Hutan dan Konservasi Alam. 9 (1) : 023-032

Hidayah R, Suntoyo, dan Armono HD. 2012. Analisa Perubahan Garis Pantai Jasri, Kabupaten Karangasem Bali; Jurnal Teknik ITS. 1 (1) Sept. 2012) ISSN: 2301-9271
<http://ejurnal.its.ac.id/index.php/teknik/article/view/1996/652>

Hutabarat S dan Evans SM. 2000. *Pengantar Oceanografi*. Jakarta: UI Press

Indrayanti, MD, Fachrudin, A, Setiobudiandi, I, 2015. Penilaian Jasa Ekosistem mangrove di Teluk Blanakan Kabupaten Subang. Jurnal Ilmu Pertanian Indonesia (JIPI). 20 (2): 91-96
<http://journal.ipb.ac.id/index.php/JIPI/article/view/9950/7777>

Irsadi A., Anggoro S., Soeprobawati TR. 2017a. Analisis Penggunaan Lahan di sekitar Mangrove untuk Pengelolaan Lingkungan Pesisir Semarang Berkelanjutan. Prosiding Seminar nasional Pendidikan Biologi dan Biologi Jurusan Pendidikan Biologi. Fakultas MIPA. Universitas Negeri Yogyakarta

Irsadi A., Martuti NKT., Nugraha SB. 2017b. Estimasi Stok Karbon Mangrove di Dukuh Tapak, Kelurahan Tugurejo, Kota Semarang. Sainteknol Vol. 15 No. 2 Desember 2017

Irsadi A., Anggoro S., Soeprobowati TR., Helmi M., Khair ASE. 2019a. Shoreline and Mangrove Analysis along Semarang-Demak for Sustainable Environmental Management. *Jurnal Pendidikan IPA Indonesia* Vol. 8 (1) (2019) 1-11. DOI: 10.15294/jpii.v8i1.17892

Irsadi A., Anggoro S., Soeprobowati TR. 2019b. Abrasi di Pesisir Desa Bedono, Sayung, Demak: Menarik Benang Merah Dampak Perubahan Iklim. *Makalah* dipresentasikan pada FGD ‘Peningkatan Inisiatif Masyarakat dalam Perubahan Iklim’ Kementerian Lingkungan Hidup dan Kehutanan bekerjasama dengan Universitas Diponegoro, di Hotel Santika Premier Semarang, 2 Mei 2019

Islam S.N., Yahya U.A.A.B. 2017. Impacts of Coastal Land Use Changes on Mangrove Wetlands at Sungai Mangsalut Basin in Brunei Darussalam. In: Finkl C., Makowski C. (eds) *Coastal Wetlands: Alteration and Remediation*. Coastal Research Library, vol 21. Springer, Cham
https://doi.org/10.1007/978-3-319-56179-0_4

Kariada NTM dan **Irsadi A.** 2014. Peranan Mangrove Sebagai Biofilter Pencemaran Air di Wilayah Tambak Bandeng Tapak, Semarang. *J. Manusia dan Lingkungan* 21 (2): 188-194. <https://doi.org/10.22146/jml.18543>

Karminarsih E. 2007. Pemanfaatan Ekosistem Mangrove bagi Minimasi Dampak Bencana di Wilayah Pesisir. *JMHT* Vol. XIII (3): 182-187, Desember 2007

Kartikasari, V., Tandjung, S.D. dan Sunarto. 2002. Akumulasi Logam Berat Cr dan Pb Pada Tumbuhan Mangrove Avicennia marina Di Muara Sungai Babon Perbatasan Kota Semarang dan Kabupaten Demak Jawa Tengah. *Jurnal Manusia dan Lingkungan*, IX (3): 137-147
<https://doi.org/10.22146/jml.18596>

Keraf AS. 2005. *Etika Lingkungan*. Kompas: Jakarta

Keshavarz, Musa, Dariush Mohammadikia, Fatemeh Gharibpour, Abdul-Reza Dabbagh. 2012. Accumulation of Heavy Metals (Pb, Cd, V) in Sediment, roots and leaves of Mangrove species in Sirik Creek along the Sea Coasts of Oman, Iran. *J. Appl. Sci. Environ. Manage.* 16 (4) 323 -326
<http://jlsb.science-line.com/attachments/article/14/JLSB-2012-B17.%2088-91.pdf>

Kirui K. B, J.G. Kairo, J. Bosire, K.M. Viergever, S. Rudra, M. Huxham, R.A. Briers, 2013. Mapping of mangrove forest land cover change along the Kenya coastline using Landsat imagery; *Ocean & Coastal Management*. 83 (2013) 19-24
<https://doi.org/10.1016/j.ocecoaman.2011.12.004>

Kordi, M.G.H. 2012. *Ekosistem mangrove: potensi, fungsi dan pengelolaan*. Rineka Cipta: Jakarta

Krauss, K.W., Cormier N, Osland MJ, Kirwan ML, Stagg CL, Nestlerode JA, Marc J. Russell, From AS, Spivak AC, Dantin DD, Harvey JE & Almario AE. 2017. Created mangrove wetlands store belowground carbon and surface elevation change enables them to adjust to sea-level rise. *Scientific Reports* |7: 1030| DOI:10.1038/s41598-017-01224-2

Kumar, N.J.I., Sajish, P.R., Kumar, R.N., George, B. and Viyol, S. 2011. Bioaccumulation of Lead, Zinc and Cadmium in *Avicennia marina* Mangrove Ecosystem near Narmada Estuary in Vamleshwar, West Coast of Gujarat, India. *Journal International. Environmental Application & Science*, 6 (1): 008-013.

<http://www.jieas.com/volumes/vol111-1/abs11-v6-i1-2.pdf>

Kusmana, C. 1996. Nilai Ekologis Ekosistem Hutan Mangrove (*Ecological Values of Mangrove Forest Ecosystem*). Media Konservasi, V (I), April 1996 : 17-24

Kusmana, C. dan Onrizal. 2003. Prospek Perkembangan Hutan Mangrove di Indonesia. Yogyakarta. makalah: Seminar Mengurangi Dampak Tsunami: Kemungkinan Penerapan Hasil Riset, BPPT – JICA, 11 Maret 2003

Kustanti A, Nugroho B, Darusman D, Kusmana C. 2012. Integrated management of mangrove ecosystem in Lampung Mangrove Center (LMC) East Lampung Regency. *Journal of Coastal Development*, 15 (2): 209-216

Lara R.J., Cohen M., Szlafsztein C. 2010. Drivers of Temporal Changes in Mangrove Vegetation Boundaries and Consequences for Land Use. In: Saint-Paul U., Schneider H. (eds) *Mangrove Dynamics and Management in North Brazil. Ecological Studies (Analysis and Synthesis)*, vol 211. Springer, Berlin, Heidelberg
https://doi.org/10.1007/978-3-642-13457-9_8

Latupapua MJJ. 2011. Struktur dan komposisi beberapa jenis burung di mangrove kawasan Segoro Anak Taman Nasional Alas Purwo. Jurnal Agroforestri, VI (1): 1-11

Lignon MC; Michel M. Mahiques MM; Schaeffer-Novelli Y; Rodrigues M; Klein DA; Goya SC; Menghini RP; Tolentino CC; Cintrón-Molero G and Dahdouh-Guebas F. 2009. Analysis Of Mangrove Forest Succession, Using Sediment Cores: A Case Study In The Cananéia –Iguape Coastal System, São Paulo-Brazil. *Brazilian Journal Of Oceanography*, 57(3):161-174, 2009

- Li X, Michiel C.J. Damen, 2010. Coastline change detection with satellite remote sensing for environmental management of the Pearl River Estuary, China; Journal of Marine Systems 82 (2010) S54–S61
<https://doi.org/10.1016/j.jmarsys.2010.02.005>
- Luong NV, Tateishi R & Hoan NT. 2015. Analysis of an Impact of Succession in Mangrove Forest Association Using Remote Sensing and GIS Technology. Journal of Geography and Geology, 7 (1): 2015. doi:10.5539/jgg.v7n1p106
- MacFarlane, G.R., Koller, C.E. and Blomberg, S.P. 2007. Accumulation and partitioning of heavy metals in mangroves: A synthesis of fieldbased studies. *Chemosphere*, 69 : 1454–1464
<https://doi.org/10.1016/j.chemosphere.2007.04.059>
- Mangrovemagz.com. 2017. Kondisi mangrove dan pengelolaannya di Kota Semarang. <http://mangrovemagz.com/2017/03/06/kondisi-mangrove-dan-pengelolaannya-di-kota-semarang/>
- Marfai MA. 2012. Preliminary Assessment of Coastal Erosion and Local Community Adaptation in Sayung Coastal Area, Central Java – Indonesia. QUAESTIONES GEOGRAPHICAE, 31(3). 2012
- Marfai MA., Pratomoatmojo, NA., Hidayatullah, T., Nirwansyah, AW., Gomareuzzaman M., 2011. *Model Kerentanan Wilayah Pesisir Berdasarkan Perubahan Garis Pantai dan Banjir Pasang (Studi Kasus: Wilayah Pesisir Pekalongan)*. Percetakan Pohon Cahaya
- Martuti, NKT. 2013. Keanekaragam Mangrove Di Wilayah Tapak, Tugurejo, Semarang. *Jurnal MIPA*, 36 (2): 123-130
<https://journal.unnes.ac.id/nju/index.php/JM/article/viewFile/2971/3007>
- Martuti, NKT., Marianti, A., **Irsadi, A.**, 2015. IPTEKS Bagi Kelompok Ekoeduwisata Mangrove di Semarang. REKAYASA, 13 (2),
<http://download.portalgaruda.org/article.php?article=445298&val=5685&title=IBM%20REVITALISASI%20POSYANDU%20DESA%20TAMBAKREJO>
- Martuti NKT. 2016. Dinamika Logam Cu dalam Tambak Bandeng: Interaksi antara Media Lingkungan, Avicennia marina dan Ikan Bandeng. *Disertasi. Program Doktor Ilmu Lingkungan Undip, Semarang*
- Martuti NKT, Setyowati DL, Nugraha SB, Mutiatari DP. 2017. Carbon stock potency of mangrove ecosystem at Tapak Sub-village, Semarang, Indonesia. AACL Bioflux, 2017, 10 (6). <http://www.bioflux.com.ro/aacl>

Martuti NKT, Setyowati DL, Nugraha SB. 2018. *Ekosistem Mangrove (Perannya di Pesisir)*. Lembaga Penelitian dan Pengabdian kepada Masyarakat Unnes: Semarang

Martuti NKT, Widianarko B., Yulianto B. 2017. Translocation and Elimination of Cu in *Avicennia marina*. Pertanika Journal. Tropical Agricultural Science. 40 (2): 285 - 294

Masselink G. and Russel P. 2013. Impact of Climate Change on Coastal erosion. MCCIP Science Review 2013:71-86. doi:10.14465/2013.arc09.071-086

Mayo T. W, Peter W.C. Paton P. W. C, and August P. V. 2015. Responses of Birds to Humans at a Coastal Barrier Beach: Napatrie Point, Rhode Island. *Northeastern Naturalist*. 22(3):501–512

Minhass P.S., Qadir M., Yadav R.K. 2019. Groundwater Irrigation Induced Soil Sodification and Response Options. *Agricultural Water Management* 215 (2019) 74-85. doi.org/10.1016/j.agwat.2018.12.030

Mondal I, Bandyopadhyay J, Jana MK. 2013. Mangrove Zonation and Succession Pattern of Fazergange and Bakkhali area at Sundarban, W.B., India Using Remote Sensing & GIS Techniques. *Indian Cartographer*, Vol. XXXIII, 2013. <https://www.researchgate.net/publication/271710940>

Moor, H., Hylander, K., Norberg, J. 2015. Predicting climate change effects on wetland ecosystem services using species distribution modeling and plant functional traits. *AMBIO* 2015, 44 (Suppl. 1):S113–S126.
DOI 10.1007/s13280-014-0593-9

Muharam. 2014. Penanaman Mangrove Sebagai Salah Satu Upaya Rehabilitasi Lahan dan Lingkungan di Kawasan Pesisir Pantai Utara Kabupaten Karawang. *Jurnal Ilmiah Solusi* 1 (1): 1-14

Mukhtar AS dan Heriyanto NM. 2012. Keadaan suksesi tumbuhan pada kawasan bekas tambang batubara di Kalimantan Timur. *Jurnal penelitian hutan dan konservasi alam*, 9 (4): 341-350

Mulyadi, E, Laksmono R, Aprianti D. 2009. Fungsi Mangrove Sebagai Pengendali Pencemar Logam Berat. *Jurnal Ilmiah Teknik Lingkungan*. Vol.1 Edisi Khusus <http://eprints.upnjatim.ac.id/1263/2/Edi-mulyadi.pdf>

Murdiyanto, B. 2003. *Mengenal, Memelihara dan Melestarikan Ekosistem Bakau*. Direktorat Jenderal Perikanan Tangkap Departemen Kelautan dan Perikanan: Jakarta

- Muryani C. 2010. Analisis Perubahan Garis Pantai Menggunakan SIG Serta Dampaknya Terhadap Kehidupan Masyarakat di Sekitar Muara Sungai Rejoso Kabupaten Pasuruan; Forum Geografi, 24 (2): 173 – 182
<http://hdl.handle.net/11617/1219>
- Nazir, M. 2011. *Metode penelitian*. Ghalia Indonesia. Jakarta
- Nguyen H. H. 2014. The relation of coastal mangrove changes and adjacent land-use: A review in Southeast Asia and Kien Giang, Vietnam Ocean & Coastal Management 90 (2014) 1e10
- Nontji. 2002. *Laut Nusantara*. Penerbit Djambatan. Jakarta
- Novianty, R., Sastrawibawa S, Juliandri D. 2012. Identifikasi Kerusakan dan Upaya Rehabilitasi Ekosistem Mangrove di pantai Utara Kabupaten Subang. *Jurnal Perikanan dan Kelautan*, 3 (1): 41-47
<http://jurnal.unpad.ac.id/akuatika/article/view/539/617>
- Nursal, Fauziah Y, Alzukri. 2012. Komposisi dan struktur Vegetasi Strata sapling di Kawasan Hutan Wisata Rimbo Tujuh Danau Kabupaten Kampar Provinsi Riau. Jurnal Biogenesis. 8 (2): 1-11
- Odum, P.E. 1996. Dasar-dasar ekologi edisi ketiga (Fundamental of ecology third edition). Gadjah Mada University Press: Yogyakarta
- Onrizal. 2008. *Panduan Pengenalan dan Analisis Vegetasi Hutan Mangrove*. Departemen Kehutanan, Fakultas Pertanian, Universitas Sumatera Utara
- Pahuluan, A, Soeprobawati T.R., Hadiyanto. 2017. Environmental Carrying Capacity Based On Land Balance For Evaluation Planning Of Spatial And Regional In Solok. *Journal of Ecological Engineering*, 18 (3): 22–30,
DOI: 10.12911/22998993/6936
- Parman S, 2010. Deteksi Perubahan Garis Pantai Melalui Citra Penginderaan Jauh di Pantai Utara Semarang Demak; *Jurnal Geografi*, 7 (1) Januari 2010,
<https://journal.unnes.ac.id/nju/index.php/JG/article/view/88/89>
- Paul A.K., Ray R., Kamila A., Jana S. 2017. Mangrove Degradation in the Sundarbans. In: Finkl C., Makowski C. (eds) *Coastal Wetlands: Alteration and Remediation*. Coastal Research Library, vol 21. Springer, Cham Regency, West Sumatra. *Journal of Ecological Engineering*, 18 (3): 22–30, DOI: 10.12911/22998993/69360
- Pons LJ, Fiselier JL. 1991. Sustainable development of mangroves. *Landscape and urban planning* 20 (1991): 103-109, Doi: 0169-2046/91/\$03.50

Prasad, S.N., Ramachandra, N., Sengupta AT, Kumar A, Tiwari AK, Vijayan VS & Vijayan L. 2002. Conservation of wetland of India- a review. Tropical Ecology 43(1): 173-186, 2002
https://www.researchgate.net/publication/238087971_Conservation_of_wetlands_of_India_-_A_review

Prasita V. D. 2015. Determination of Shoreline Changes from 2002 to 2014 in The Mangrove Conservation Areas of Pamurbaya using GIS; Procedia Earth and Planetary Science 14 (2015) 25 – 32,
doi: 10.1016/j.proeps.2015.07.081

Prihatanto, A., S.R. Giyarsih, R. Suharyadi. 2013. Identifikasi kondisi kebencanaan di kawasan keperisiran kecamatan Tugu Kota Semarang. *Makalah*. Seminar Nasional Pendayagunaan Informasi geospatial Untuk optimalisasi otonomi daerah., <http://hdl.handle.net/11617/4245>

Purnaweni H, Kismartini, Sudharto P. Hadi, Soraya I. 2018. Coastal Community Group for Coastal Resilient in Timbulsloko Village, Sayung, Demak Regency, Indonesia. E3S Web of Conferences 31, 09009 (2018) ICENIS 2017. <https://doi.org/10.1051/e3sconf/20183109009>

Purnobasuki H. 2005. Tinjauan Perspektif Hutan Mangrove. Surabaya: Airlangga University Press

Purnobasuki H. 2013. Perlunya mangrove center dan perda pesisir.
<https://www.researchgate.net/publication/258373195>

Puryono S, Anggoro S, Suryanti, Irwan D. 2019. Pengelolaan Pesisir dan Laut Berbasis Ekosistem. Undip Press: Semarang

Rahman MAA, Asmawi MZ. 2016. Local Residents' Awareness towards the Issue of Mangrove Degradation in Kuala Selangor, Malaysia. Procedia - Social and Behavioral Sciences 222 (2016): 659–667.
doi: 10.1016/j.sbspro.2016.05.222

Rambo, A. Terry, 1981, Introductory essay: The conceptual development of human ecology, pp 1-49. In A.T. Rambo ed. Conceptual approaches to human ecology: A sourcebook on alternative paradigms for the study of human interactions with the environment, East-West Environment and Policy Institute, Honolulu, Hawaii, USA

Randy AF, Hutomo M, Purnama H. 2015. Collaborative effort on mangrove restoration in Sedari Village, Karawang District, West Java Province. Procedia environmental sciences 23 (2015): 48-57 Doi: 10.1016/j.proenv.2015.01.008

Rasuly A, Naghdifar R, Rasoli M, 2010. Monitoring of Caspian Sea Coastline Changes Using Object-Oriented Techniques; *Procedia Environmental Sciences* 2 (2010) 416–426, <https://doi.org/10.1016/j.proenv.2010.10.046>

Republik Indonesia. 2007. Undang-Undang Republik Indonesia No. 27 tahun 2007 tentang Pengelolaan Wilayah Pesisir dan Pulau-Pulau Kecil. Tambahan Lembaran Negara Republik Indonesia No. 4739

Republik Indonesia. 2009. Undang-Undang RI No. 32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup. Lembaran Negara Republik Indonesia tahun 2009 No. 140 dan Tambahan Lembaran Negara Republik Indonesia No. 5059

Republik Indonesia. 2008. Peraturan Menteri Kelautan dan Perikanan No. Per.17/Men/2008 tentang Kawasan Konservasi di Wilayah Pesisir dan Pulau-Pulau Kecil. Biro Hukum dan Organisasi DKP

Republik Indonesia. 2011. UU No. 4 tahun 2011 tentang Informasi Geospasial. Lembaran Negara RI tahun 2011 No. 49, Kementerian Sekretariat Negara RI

Republik Indonesia. 2014. Undang-Undang Republik Indonesia No. 1 tahun 2014 tentang Perubahan Atas Undang-Undang Nomor 27 Tahun 2007 tentang Pengelolaan Wilayah Pesisir dan Pulau-Pulau Kecil. Tambahan Lembaran Negara Republik Indonesia No. 5490

Republik Indonesia. 2016. Peraturan Presiden No. 51 tahun 2016 tentang Batas Sempadan Pantai. Lembaran Negara RI tahun 2016 Nomor 113

Republik Indonesia. 2018. Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia No. 20 tahun 2018 tentang Jenis Tumbuhan dan Satwa yang Dilindungi. Dirjen Peraturan Perundang-undangan, Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia

Ristianti NS. 2016. S.M.A.R.T. eco-village for hazardous coastal area in Bedono Village, Demak Regency. *Procedia - Social and Behavioral Sciences* 227 (2016) 593–600. CITIES 2015 International Conference, Intelligent Planning Towards Smart Cities, CITIES 2015, 3-4 November 2015, Surabaya, Indonesia

Ross, P.M. and Adam, P. 2013. Climate Change and Intertidal Wetlands. *Biology* 2013, 2, 445-480; doi:10.3390/biology2010445

Rudi E dan Fadli N. 2009. Pola Suksesi makrobenthos di Perairan Sabang pasca tsunami. *Biospesies*, 2 (1): 5-9

- Saenger, P & McConchie D. 2004. Heavy metals in mangroves: methodology, monitoring and management. *Envis Forest Bulletin*, vol. 4, pp. 52-62. http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=1614&context=esm_pubs
- Salim A. G, Siringoringo H. H, dan Budi Hadi Narendra B. H. 2016. Pengaruh Penutupan Mangrove terhadap Perubahan Garis Pantai dan Intrusi Air Laut Di Hilir Das Ciasem Dan Das Cipunegara, Kabupaten Subang. *J. Manusia dan Lingkungan*, Vol. 23 (.3): 319-326
- Sandilyan S. 2014. Impacts of Climate Change on Indian Mangroves: A Review Paper. *Global Journal of Environmental Research* 8 (1): 01-10
<https://DOI: 10.5829/idosi.gjer.2014.8.1.1104>
- Saputra, A. 2015. Keanekaragaman Makro-invertebrata di Pantai Sepanjang, Gunungkidul D.I. Yogyakarta. *Makalah*. Seminar Nasional Konservasi dan Sumberdaya Alam 2015. PKLH-FKIP UNS
- Saru, A. 2014. *Potensi ekologis dan pengelolaan ekosistem mangrove di wilayah pesisir*. IPB Press: Bogor
- Sawitri R, Suharti, S dan Karlina, E. 2011. Interaksi Masyarakat Dengan Hutan dan Lingkungan Sekitarnya di Kawasan dan Daerah Penyangga Taman Nasional Kutai. *Jurnal penelitian Hutan dan Konservasi Alam*. 8 (2) : 129-142, 2011
- Sengupta R. 2010. *Mangrove Soldiers of Our Coasts*. Mangrove For The Future India, 20, Anand Lok, August Kranti Marg. India
- Setiadi R, Jawoto S, Sophianingrum M, Rosalia D. 2008. Indikator Pembangunan Berkelanjutan Kota Semarang. *Riptek* 2 (2): 1-12
- Seto K. C, Michail Fragkias. 2007. Mangrove conversion and aquaculture development in Vietnam: A remote sensing-based approach for evaluating the Ramsar Convention on Wetlands; *Global Environmental Change* 17 (2007) 486–500
<https://doi.org/10.1016/j.gloenvcha.2007.03.001>
- Setiyowati D, Supriharyono dan Triarso, I. 2016. Valuasi Ekonomi Sumberdaya Mangrove Di Kelurahan Mangunharjo, Kecamatan Tugu, Kota Semarang. *Saintek Perikanan*, 12 (1): 67-74
- Setyawan A. D., Kusumo W. 2006a. Pemanfaatan Langsung Ekosistem mangrove di Jawa Tengah dan Penggunaan Lahan di Sekitarnya; Kerusakan dan Upaya Restorasinya. *Biodiversitas* 7 (3): 282-291
<http://biodiversitas.mipa.uns.ac.id/D/D0703/D070318.pdf>

- Setyawan, A. D., Kusumo W. 2006b. Permasalahan Konservasi Ekosistem Mangrove di Pesisir Kabupaten Rembang, Jawa Tengah. *BIODIVERSITAS*, 7 (2): 159-163
<http://biodiversitas.mipa.uns.ac.id/D/D0702/D070214.pdf>
- Shetty A, K.S. Jayappa, D. Mitra, 2015. Shoreline Change Analysis of Mangalore Coast and Morphometric Analysis of Netravathi-Gurupur and Mulky-Pavanje Spits ; *Aquatic Procedia* 4 (2015) 182 – 189
<https://doi.org/10.1016/j.aqpro.2015.02.025>
- Silva, L. F. F., W. Machado, S. D. Lisboa Filho And L. D. Lacerda. 2010. Mercury Accumulation In Sediments Of A Mangrove Ecosystem In Se Brazil. *Water, Air, and Soil Pollution* 145: 67–77, 2003
<https://doi.org/10.1023/A:1023610623280>
- Sinha S. 1999. Accumulation of Cu, Cd, Cr, Mn and Pb from artificially contaminated soil by Bacopa Monnieri. *J. Environmental Monitoring and Assessment* 57 (3): 253-264. <https://doi.org/10.1023/A:1006091215529>
- Situmorang R. O. P. 2018. Social Capital in Managing Mangrove Ecotourism Area by The Muara Baimbai Community, Indonesian. *Journal of Forestry Research.* 5 (1): 21-34
doi: <https://doi.org/10.20886/ijfr.2018.5.1.21-34>
- Soraya D, Suhara O, Taofiqurohman A. 2012. Perubahan Garis Pantai Akibat Kerusakan Hutan Mangrove di Kecamatan Blanakan dan Kecamatan Legonkulon, Kabupaten Subang; *Jurnal perikanan dan Kelautan*, 3 (4): 355-364 <http://jurnal.unpad.ac.id/jpk/article/view/2580/2333>
- Soekanto, S. 2002. *Sosiologi Suatu Pengantar*. Jakarta: PT Rajawali Press
- Spalding M, McIvor A, Tonneijck FH, Tol S and van Eijk P. 2014. Mangroves for coastal defence. Guidelines for coastal managers & policy makers. Published by Wetlands International and The Nature Conservancy. 42 p
- Stone K, Mahadev Bhat, Ramachandra Bhatta, Andrew Mathews. 2008. Factors influencing community participation in mangroves restoration: A contingent valuation analysis. *Ocean & Coastal Management* 51 (2008) 476–484. doi:10.1016/j.ocemoaman.2008.02.001
- Stone S, Leon M.C., Fredericks P. 2010. Perubahan Iklim & Peran Hutan Manual Komunitas. Conservation International
http://www.conservation.org/publications/documents/redd/CI_Climate_Change_and_the_Role_of_Forests_Bahasa_Manual_Komunitas.pdf

Suedy S. A., Soeprbowati T. R dan Hidayat J.W. 2015. Keanekaragaman Flora Mangrove di Muara Banjir Kanal Timur Semarang Berdasarkan Bukti Polennya. Prosiding *Seminar Nasional Biologi II tahun 2015. Magister Biologi Undip*
<http://mbio.undip.ac.id/wp-content/uploads/2016/06/2015-SEMNAS-MBIO-POLEN-BKT.pdf>

Subiandono E, Bismark M., Heriyanto N. M. 2013. Kemampuan Avicennia marina (Forsk.) Vierh. Dan Rhizophora apiculata Bl. Dala penyerapan polutan logam Berat. Jurnal Penelitian Hutan dan Konservasi Alam. 10 (1): 93-102

Suhelmi, I.R., Afi, R.N. dan Prihatno, H. 2013. Penentuan Garis Pantai Berdasarkan Undang-Undang Informasi Geospasial dalam Mendukung Pengelolaan Pesisir dan Laut. *Jurnal Ilmiah Geomatika* 19 (1): 19 -24

Sulaiman, A & Soehardhi, I. 2008. Pendahuluan Geomorfologi Pantai Kuantitatif. BPPT: Jakarta

Suniada K.I. 2015. Deteksi Perubahan Garis Pantai Di Kabupaten Jembrana Bali Dengan Menggunakan Teknologi Penginderaan Jauh; *Jurnal Kelautan Nasional*, 10 (1): 13-19
https://www.researchgate.net/publication/304133124_Deteksi_Perubahan_Garis_Pantai_di_Kabupaten_Jembrana_Bali_dengan_Menggunakan_Teknologi_Penginderaan_Jauh

Suprakto, B., Soemarno, Marsoedi, Diana Arfiati. 2014. Development of mangrove Conservation Area Based on Land Suitability and Environmental Carrying Capacity (Case Study from Probolinggo Coastal Area, East Java, Indonesia). *International Journal of Ecosystem* 2014, 4(3): 107-118
DOI: 10.5923/j.ije.20140403.02

Supriharyono. 2002. *Pelestarian dan Pengelolaan Sumberdaya Alam di Wilayah Pesisir*. Gramedia Pustaka Utama: Jakarta

Suyono, Supriharyono, Hendrarto B dan Radjasa O. K. 2015. Pemetaan Degradasi Ekosistem Mangrove dan Abrasi Pantai Berbasis *Geographic Information System* di Kabupaten Brebes-Jawa Tengah. *Oceatek*, 9 (01): 90-92.
<http://download.portalgaruda.org/article.php?article=340481&val=5331&tittle=Pemetaan%20Degradasi%20Ekosistem%20Mangrove%20dan%20Abrasi%20Pantai%20Berbasis%20Geographic%20Information%20System%20di%20Kabupaten%20Brebes-Jawa%20Tengah>

Tanaka S. 1992. *Bali Environment the Sustainable Mangrove Forest*. Development of Sustainable Mangrove Management Project: Jakarta

- Tam N. F. Y. & Y. S. Wong. 1996. Retention And Distribution Of Heavy Metals In Mangrove Soils Receiving Wastewater. *Environmental Pollution*, 94 (3): pp. 283-291, [https://doi.org/10.1016/S0269-7491\(96\)00115-7](https://doi.org/10.1016/S0269-7491(96)00115-7)
- Temiz F, Durduran S. S. 2016. Monitoring Coastline Change Using Remote Sensing and GIS Technology: A case study of Acıgöl Lake, Turkey. World Multidisciplinary Earth Sciences Symposium (WMESS 2016), IOP Conf. Series: *Earth and Environmental Science* 44 (2016) 042033
<http://iopscience.iop.org/article/10.1088/1755-1315/44/4/042033/pdf>
- Tochamnanvit, T and Muttitanona W. 2014. Investigation Of Coastline Changes In Three Provinces Of Thailand Using Remote Sensing. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-8, 2014 ISPRS Technical Commission VIII Symposium, 09 – 12 December 2014, Hyderabad, India
<https://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-8/1079/2014/isprsarchives-XL-8-1079-2014.pdf>
- Triadmodjo, B. 1999. *Teknik Pantai*. Unit Antar Universitas Ilmu Teknik, Universitas Gadjah Mada, Beta Offset, Yogyakarta
- Umilia E. & Asbar. 2016. Formulation of Mangrove ecosystem management model based on eco-minawisata in the Coastal Sinjai, South Sulawesi. *Procedia - Social and Behavioral Sciences* 227 (2016) 704 – 711
doi: 10.1016/j.sbspro.2016.06.136
- UNFPA & IIED. 2013. Climate vulnerability and adaptation in the Semarang Metropolitan Area: a spatial and demographic analysis. Technical Briefing. Oktober 2013, http://vietnam.unfpa.org/sites/default/files/pub-pdf/UNFPA_Technical_Briefing_%28Bilingual%29.pdf
- Usman, Adel R.A., Raed S. Alkredaa, M.I.Al-Wabel. 2013. Heavy metal contaminationin sediments and mangroves from the coast of Red Sea: Avicennia marina as potential metal bioaccumulator. *Ecotoxicology and Environmental Safety* 97(2013) 263–270
<https://doi.org/10.1016/j.ecoenv.2013.08.009>
- Wahyuni Y, Putri, EIK dan Simanjuntak, S.M.H. 2014. Valuasi Total Ekonomi Hutan Mangrove Di Kawasan Delta Mahakam Kabupaten Kutai Kartanegara Kalimantan Timur. *Jurnal Penelitian Kehutanan Wallacea*. 3 (1): 1 – 12
<http://jurnal.balithutmakassar.org/index.php/wallacea/article/view/29/32>
- Ward, R. D., D. A. Friess, R. H. Day, and R. A. MacKenzie. 2016. Impacts of climate change on mangrove ecosystems: a region by region overview.

Ecosystem Health and Sustainability 2(4):e01211. doi:10.1002/ehs2.1211.
<http://onlinelibrary.wiley.com/doi/10.1002/ehs2.1211/epdf>

Yuan, F., Leng B., Wang B. 2016. Progress in Studying Salt Secretion from The Salt Gland in Recretohalophytes: How Do Plant Secrete Salt ?. *Frontiers in Plant Science*, 7: 1-12. doi: 10.3389/fpls.2016.00977

Yulianti, R.A., P.G. Ariastita. 2012. Arahan Pengendalian Konversi Hutan Mangrove menjadi Lahan Budidaya di Kawasan Segara Anakan. *Jurnal Teknik ITS*, 1 (1), Sept. 2012
<http://ejurnal.its.ac.id/index.php/teknik/article/view/793/350>

Yuniastuti, E. 2016. Identifikasi Tipologi dan Dinamika, Potensi dan Permasalahan, dan Strategi Pengelolaan Wilayah Kepesisiran Di Wilayah Kepesisiran Demak. *Jurnal Geografi* 8 (1): 31-45

Yusuf M dan Handoyo G. 2004. Dampak pencemaran terhadap kualitas perairan dan strategi adaptasi organisme makrobenthos di perairan pulau Tirangcawang Semarang. *Jurnal Ilmu Kelautan:* 9 (1): 12-42

Zid M, Alkhudri A.T. 2016. *Sosiologi Pedesaan: Teoretisasi dan Perkembangan Kajian Pedesaan di Indonesia.* PT Raja Grafindo Persada: Jakarta