DAFTAR PUSTAKA

[ITIS] Integrated Taxonomic Information System. 2015. *Taxonomic Hierarchy* : *Rhizoporaa mucronata*. https://www.itis.gov. [12 Maret 2023].

Abdel-Farid, I.B., Marghany, M.R., Rowezek, M.M. and Sheded, M.G., 2020. Effect of Salinity Stress on Growth and Metabolomic Profiling of *Cucumis sativus* and *Solanum lycopersicum*. *Plants*, 9(11): 1626.

AbdElgawad, H., Zinta, G., Hegab, M.M., Pandey, R., Asard, H. and Abuelsoud, W., 2016. High salinity induces different oxidative stress and antioxidant responses in maize seedlings organs. *Frontiers in plant science*, *7*: 276.

Acosta-Motos, J.R., Ortuño, M.F., Bernal-Vicente, A., Diaz-Vivancos, P., Sanchez-Blanco, M.J. and Hernandez, J.A., 2017. Plant responses to salt stress: adaptive mechanisms. Agronomy, 7(1): 18.

Afefe, A.A., Khedr, A.H.A., Abbas, M.S. and Soliman, A.S., 2021. Responses and tolerance mechanisms of mangrove trees to the ambient salinity along the Egyptian Red Sea Coast. *Limnological Review*, 21(1): 3-13.

Ai, S.N. 2012. Evolusi Fotosintesis Pada Tumbuhan*, Jurnal Program Studi Biologi FMIPA*, 12(1): 1-7.

Alam, P., Balawi, T.A. and Faizan, M., 2023. Salicylic acid's impact on growth, photosynthesis, and antioxidant enzyme activity of *Triticum aestivum* when exposed to salt. *Molecules*, 28(1): 100.

Alvarez, M.E., Savouré, A. and Szabados, L., 2022. Proline metabolism as regulatory hub. *Trends in Plant Science*, *27*(1): 39-55.

Amintarti, S., Zaini, M. and Ajizah, A., 2022. Bimbingan Teknik Preparasi Jaringan Epidermis Tumbuhan untuk Pengamatan Stomata kepada Guru Biologi. Bubungan Tinggi J. *Pengabdi. Masy*, 4(2): 377-384.

Apriliyani, A., Basyuni, M. and Putri, L.A., 2015. Respon salinitas terhadap pertumbuhan dan komposisi rantai panjang polyisoprenoid semai mangrove *Avicennia officinalis*. *Peronema Forestry Science Journal*, *4*(4): 163-172.

Arunprasath, A., 2022. Biochemical Mechanisms of True Mangrove Plants under Salinity Stress-A Review. *Journal of Environmental Treatment Techniques*, 10(1):103-109.

Azooz M M. 2009. Salt stress mitigation by seed priming with salicylic acid in two faba bean genotypes differing in salt tolerance. *International Journal Agric Biology*, 11(4): 343–350.

Azooz, M.M., Youssef, A.M. and Ahmad, P., 2011. Evaluation of salicylic acid (SA) application on growth, osmotic solutes and antioxidant enzyme activities on broad bean seedlings grown under diluted seawater. *Int J Plant Physiol Biochem*, 3(14): 253-264.

Babaei, M., Shabani, L. and Hashemi-Shahraki, S., 2022. Improving the effects of salt stress by β-carotene and gallic acid using increasing antioxidant activity and regulating ion uptake in Lepidium sativum L. Botanical Studies, 63(1): 22.

Baskorowati, L., Subagya, S., Mahmud, M. and Susanto, M., 2018. Fenologi pembungaan *Rhizophora mucronata* lamk. Di hutan mangrove pasuruan, jawa timur (flowering fenology of *Rhizophora mucronata* lamk. At mangrove forest pasuruan, east java). *Jurnal Penelitian Hutan Tanaman*, *15*(2), pp.113-123.

Bagheri M Z. 2014. The effect of maize priming on germination characteristics, catalase and peroxidase enzyme activity, and total protein content under salt stress. *International Journal Biosci*, 4(2): 104–112.

Barnuevo, A. and Asaeda, T., 2018. Integrating the ecophysiology and biochemical stress indicators into the paradigm of mangrove ecology and a rehabilitation blueprint. *PLoS One*, 13(8): 0202227.

Barus, W.A., Munar, A., Sofia, I. and Lubis, E., 2021. Kontribusi asam salisilat untuk ketahanan cekaman salinitas pada tanaman. *Jurnal Penelitian Bidang Ilmu Pertanian*, 19(2): 9-19.

Basyuni, M., Telaumbanua, T.F.C., Wati, R., Sulistyono, N. and Putri, L.A.P., 2018. Evaluation of *Rhizophora mucronata* growth at first-year mangrove restoration at abandoned ponds, Langkat, North Sumatra. *In IOP conference series: earth and environmental science*, 126(1): 012118.

Bates, L. S., R. P. Waldron, and I. D. Teare. 1973. Rapid determination of free proline for water stress studies. *Plant and Soil,* 39:205–08.

Białczyk, J., Lechowski, Z. and Libik, A., 1998. Regulation of tannin synthesis in leaves of tomato seedlings by phytohormones and plant growth inhibitors/Regulation der Tanninsynthese in den Blättern von Tomatensämlingen durch Phytohormone und Inhibitoren des Pflanzenwachstums. *Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz/Journal of Plant Diseases and Protection*, 105(5): 496-503.

Chen, J., Zhang, Y., Wang, C., Lü, W., Jin, J.B. and Hua, X., 2011. Proline induces calcium-mediated oxidative burst and salicylic acid signaling. *Amino acids*, 40: 1473-1484.

Chen, Y. and Ye, Y., 2014. Effects of salinity and nutrient addition on mangrove Excoecaria agallocha. *PloS one*, 9(4): 93337.

Colin, L., Ruhnow, F., Zhu, J.K., Zhao, C., Zhao, Y. and Persson, S., 2023. The cell biology of primary cell walls during salt stress. *The Plant Cell*, 35(1): 201-217.

Dehghanian, Z., Habibi, K., Dehghanian, M., Aliyar, S., Lajayer, B.A., Astatkie, T., Minkina, T. and Keswani, C., 2022. Reinforcing the bulwark: unravelling the efficient applications of plant phenolics and tannins against environmental stresses. *Heliyon*, 8(3): e09094

Dittmann, S., Mosley, L., Stangoulis, J., Nguyen, V.L., Beaumont, K., Dang, T., Guan, H., Gutierrez-Jurado, K., Lam-Gordillo, O. and McGrath, A., 2022. Effects of extreme salinity stress on a temperate mangrove ecosystem. *Front for Glob Change*, 5: 859283.

Divekar, P.A., Narayana, S., Divekar, B.A., Kumar, R., Gadratagi, B.G., Ray, A., Singh, A.K., Rani, V., Singh, V., Singh, A.K. and Kumar, A., 2022. Plant secondary metabolites as defense tools against herbivores for sustainable crop protection. *International journal of molecular scienc*es, 23(5): 2690.

Dolatabadian, A., SANAVY, S.A.M.M. and Ghanati, F., 2011. Effect of salinity on growth, xylem structure and anatomical characteristics of soybean. *Notulae Scientia Biologicae*, 3(1): 41-45.

Driscoll, S.P., Prins, A., Olmos, E., Kunert, K.J. and Foyer, C.H., 2006. Specification of adaxial and abaxial stomata, epidermal structure and photosynthesis to CO2 enrichment in maize leaves. *Journal of experimental botany*, 57(2): 381-390.

El-Esawi, M.A., Elansary, H.O., El-Shanhorey, N.A., Abdel-Hamid, A.M., Ali, H.M. and Elshikh, M.S., 2017. Salicylic acid-regulated antioxidant mechanisms and gene expression enhance rosemary performance under saline conditions. *Frontiers in Physiology*, 8: 716.

El-Lamey, T.M., 2012. Effect of salinity on tannins content of *Leucaena leucocephala* (Lam.) de Wit. and *Prosopis chilensis* (Molina) stuntz and techniques for their reduction. *Egyptian Journal of Botany*, 2: 51-63.

El Mouatassim, S., Guerin, P. and Menezo, Y., 1999. Expression of genes encoding antioxidant enzymes in human and mouse oocytes during the final stages of maturation. *Molecular human reproduction*, 5(8)720-725.

El Moukhtari, A., Cabassa-Hourton, C., Farissi, M. and Savouré, A., 2020. How does proline treatment promote salt stress tolerance during crop plant development?. *Frontiers in plant science*, 11: 1127.

Eraslan, F., Inal, A., Pilbeam, D.J. and Gunes, A., 2008. Interactive effects of salicylic acid and silicon on oxidative damage and antioxidant activity in spinach (*Spinacia oleracea* L. cv. Matador) grown under boron toxicity and salinity. *Plant Growth Regulation*, 55: 207-219.

Faghih, S., Zarei, A. and Ghobadi, C., 2019. Positive effects of plant growth regulators on physiology responses of Fragaria× ananasAS cv.'Camarosa'under salt stress. *International Journal of Fruit Science*, *19*(1): 104-114.

Fauziah, Q.N. and Susanti, S., Morphological Structure and Fertility of Melinjo (Gnetum gnemon L.) Pollen based on Microscopic Data. *Berkala Ilmiah Biologi*, 13(2): 1-12.

Feng, X., Xu, S., Li, J., Yang, Y., Chen, Q., Lyu, H., Zhong, C., He, Z. and Shi, S., 2020. Molecular adaptation to salinity fluctuation in tropical intertidal environments of a mangrove tree *Sonneratia alba*. *BMC Plant Biology*, 20(1): 1-14.

Goudarzi, M. and Pakniyat, H., 2009. Salinity causes increase in proline and protein contents and peroxidase activity in wheat cultivars. *Journal of Applied Sciences*, 9(2): 348-353.

Guo, J., Du, M., Tian, H. and Wang, B., 2020. Exposure to high salinity during seed development markedly enhances seedling emergence and fitness of the progeny of the extreme halophyte *Suaeda salsa*. *Frontiers in Plant Science*, 11: 1291.

Hakim, M.A., Juraimi, A.S., Hanafi, M.M., Ismail, M.R., Selamat, A., Rafii, M.Y. and Latif, M.A., 2014. Biochemical and anatomical changes and yield reduction in rice (Oryza sativa L.) under varied salinity regimes. *BioMed Research International*, 2014: 6-11.

Halimu, R.B., Sulistijowati, R. and Mile, L., 2017. Identifikasi Kandungan Tanin pada Sonneratia Alba| Identification of tannin content in Sonneratia Alba. *The NIKe Journal*, *5*(4): 95-93.

Handayani, P.A., Ramadani, N.S. and Kartika, D., 2019. Pemungutan tanin propagul mangrove (*Rhizopora mucronata*) dengan pelarut etanol dan aquades sebagai zat warna alami menggunakan metode microwave assisted extraction. *Jurnal Kompetensi Teknik*, 10(1): 22-27.

Hao, S., Wang, Y., Yan, Y., Liu, Y., Wang, J. and Chen, S., 2021. A review on plant responses to salt stress and their mechanisms of salt resistance. *Horticulturae*, 7(6): 132.

Harborne, J.B. and Smith, D.M., 1978. Anthochlors and other flavonoids as honey guides in the Compositae. *Biochemical Systematics and Ecology*, 6(4): 287-291.

Hassoon, A.S. and Abduljabbar, I.A., 2019. *Review on the role of salicylic acid in plants*. In Sustainable crop production, Intech Open, pp. 61-64.. .

Hayat, S., Hayat, Q., Alyemeni, M.N., Wani, A.S., Pichtel, J. and Ahmad, A., 2012. Role of proline under changing environments: a review. *Plant signaling & behavior*, *7*(11): 1456-1466.

Hidayatullah, M. and Umroni, A., 2013. Pertumbuhan Bakau (*Rhizophora mucronata* Lam.) dan Produktivitas Silvofishery di Kabupaten Kupang. *Jurnal Penelitian Hutan dan Konservasi Alam*, 10(3):315-325.

Hmidi, D., Abdelly, C., Athar, H.U.R., Ashraf, M. and Messedi, D., 2018. Effect of salinity on osmotic adjustment, proline accumulation and possible role of ornithine-δ-aminotransferase in proline biosynthesis in *Cakile maritima*. *Physiology and molecular biology of plants*, 24: 1017-1033.

Hoppe-Speer, S.C., Adams, J.B., Rajkaran, A. and Bailey, D., 2011. The response of the red mangrove *Rhizophora mucronata* Lam. to salinity and inundation in South Africa. *Aquatic Botany*, *95*(2): 1-76.

Hu, Y., & Schmidhalter, U. 2005. Drought and salinity: a comparison of their effects on mineral nutrition of plants. *Journal of Plant Nutrition and Soil Science*, 168(4): 541-549.

Huchzermeyer, B., Menghani, E., Khardia, P. and Shilu, A., 2022. Metabolic pathway of natural antioxidants, antioxidant enzymes and ROS providence. *Antioxidants*, 11(4): 761.

Hundare, A., Joshi, V. and Joshi, N., 2022. Salicylic acid attenuates salinity-induced growth inhibition in in vitro raised ginger (*Zingiber officinale* Roscoe) plantlets by regulating ionic balance and antioxidative system. *Plant Stress*, 4: 100070.

Husen, A., Iqbal, M., Sohrab, S.S. and Ansari, M.K.A., 2018. Salicylic acid alleviates salinity-caused damage to foliar functions, plant growth and antioxidant system in Ethiopian mustard (*Brassica carinata* A. Br.). *Agriculture & Food Security*, 7(1): 1-14.

Hussain, B., War, A.R. and Pfeiffer, D.G., 2023. Jasmonic acid and salicylic acid induced defensive response in wine grapes against *Drosophila suzukii* (Diptera: Drosophilidae). *Heliyon*, 9(6): 16505.

Hoffmann, J., Berni, R., Sutera, F.M., Gutsch, A., Hausman, J.F., Saffie-Siebert, S. and Guerriero, G., 2021. The effects of salinity on the anatomy and gene expression patterns in leaflets of tomato cv. micro-tom. *Genes*, 12(8): 1165.

Idrees, M., M. M. A. Khan, T. Aftab, M. Naeem, and N. Hashmi. 2010. Salicylic acid induced physiological and biochemical changes in lemongrass varieties under water stress. *Journal of Plant Interactions,* 5(4): 293–303.

Javaheri M, Mashayekhi K, Dadkhah A, Tavallaee F Z. 2012. Effects of salicylic acid on yield and quality characters of tomato fruit (*Lycopersicum esculentum* Mill.). *Int J Agric Crop Sci*, 4(16): 1184–1187.

Jiang, G.F., Li, S.Y., Dinnage, R., Cao, K.F., Simonin, K.A. and Roddy, A.B., 2023. Diverse mangroves deviate from other angiosperms in their genome size, leaf cell size and cell packing density relationships. *Annals of Botany*, 131(2): 347-360.

Kahveci, H., Bilginer, N., Diraz-Yildirim, E., Kulak, M., Yazar, E., Kocacinar, F. and Karaman, S., 2021. Priming with salicylic acid, β-carotene and tryptophan modulates growth, phenolics and essential oil components of Ocimum basilicum L. grown under salinity. *Scientia Horticulturae*, 281: 109964.

Kairo, J.G., Mangora, M.M., Network, W.I.O.M. and Western Indian Ocean Marine Science Association, 2020. *Guidelines on Mangrove Ecosystem Restoration for the Western Indian Ocean Region-Western Indian Ocean Ecosystem Guidelines and Toolkits.* Nairobi Convention. pp. 4-5

Kaya, C., Ugurlar, F., Ashraf, M. and Ahmad, P., 2023. *Salicylic acid interacts with other plant growth regulators and signal molecules in response to stressful environments in plants*. Plant Physiology and Biochemistry. Pp. 431-443

Kodikara, K.A.S., Jayatissa, L.P., Huxham, M., Dahdouh-Guebas, F. and Koedam, N., 2017. The effects of salinity on growth and survival of mangrove seedlings changes with age. *Acta Botanica Brasilica*, 32: 37-46.

Kodikara, K.A.S., Pathmasiri, R., Irfan, A., Loku Pullukuttige, J., Madarasinghe, S.K., Farid, D.G. and Nico, K., 2020. Oxidative stress, leaf photosynthetic capacity and dry matter content in young mangrove plant *Rhizophora mucronata* Lam. under prolonged submergence and soil water stress. *Physiology and Molecular Biology of Plants*, 26: 1609-1622.

Kolinug, K.H., Langi, M.A., Ratag, S.P. and Nurmawan, W. 2014. Zonasi tumbuhan utama penyusun mangrove berdasarkan tingkat salinitas air laut di deAS Teling Kecamatan Tombariri. *In Cocos*, 5(4): 1-7.

Kumalasari, M.L.F. and Andiarna, F., 2020. Uji fitokimia ekstrak etanol daun kemangi (*Ocimum basilicum* L). *Indonesian Journal for Health Sciences*, 4(1): 39-44.

Kusuma, I.M. and Ningrum, C.W., 2021. Potensi Antibakteri Ekstrak Etanol Daun Kemangi (*Ocimum x africanum* Lour.) terhadap Staphylococcus epidermidis. *Sainstech Farma: Jurnal Ilmu Kefarmasian*, 14(2): 87-90.

Leiva-Ampuero, A., Agurto, M., Matus, J.T., Hoppe, G., Huidobro, C., Inostroza-Blancheteau, C., Reyes-Díaz, M., Stange, C., Canessa, P. and Vega, A., 2020. Salinity impairs photosynthetic capacity and enhances carotenoid-related gene expression and biosynthesis in tomato (*Solanum lycopersicum* L. cv. Micro-Tom). *PeerJ*, 8: e9742.

Li, A., Sun, X. and Liu, L., 2022. Action of salicylic acid on plant growth. *Frontiers in Plant Science*, 13: 878076.

Liu, J., Qiu, G., Liu, C., Li, H., Chen, X., Fu, Q., Lin, Y. and Guo, B., 2022. Salicylic acid, a multifaceted hormone, combats abiotic stresses in plants. *Life*, 12(6): 886.

Liu, Y., Su, M. and Han, Z., 2022. Effects of NaCl Stress on the Growth, Physiological Characteristics and Anatomical Structures of Populus talassica× Populus euphratica Seedlings. *Plants*, 11(22): 3025.

Lovelock, C.E. and Feller, I.C., 2003. Photosynthetic performance and resource utilization of two mangrove species coexisting in a hypersaline scrub forest. *Oecologia*, 134: 455-462.

Lovelock, C.E., Feller, I.C., Ball, M.C., Ellis, J. and Sorrell, B., 2007. Testing the growth rate vs. geochemical hypothesis for latitudinal variation in plant nutrients. *Ecology Letters*, 10(12): 1154-1163.

Ma, X., Zheng, J., Zhang, X., Hu, Q. and Qian, R., 2017. Salicylic acid alleviates the adverse effects of salt stress on *Dianthus superbus* (Caryophyllaceae) by activating photosynthesis, protecting morphological structure, and enhancing the antioxidant system. *Frontiers in plant science*, 8: 600.

Maie, N., Pisani, O. and Jaffé, R., 2008. Mangrove tannins in aquatic ecosystems: their fate and possible influence on dissolved organic carbon and nitrogen cycling. *Limnology and Oceanography*, 53(1): 160-171.

McFadden, L., Spencer, T. and Nicholls, R.J., 2007. Broad-scale modelling of coastal wetlands: what is required?. *Hydrobiologia*, 577: 5-15.

Mohammadi, H., Rahimpour, B., Pirasteh-Anosheh, H. and Race, M., 2022. Salicylic acid manipulates ion accumulation and distribution in favor of salinity tolerance in *Chenopodium quinoa*. *International Journal of Environmental Research and Public Health*, 19(3): 1576.

Mohammadi, H., Amirikia, F., Ghorbanpour, M., Fatehi, F. and Hashempour, H., 2019. Salicylic acid induced changes in physiological traits and essential oil constituents in different ecotypes of *Thymus kotschyanus* and *Thymus vulgaris* under well-watered and water stress conditions. *Industrial Crops and Products*, 129: 561-574.

Mohammed, N., El-Hendawy, S., Alsamin, B., Mubushar, M. and Dewir, Y.H., 2023. Integrating application methods and concentrations of salicylic acid as an avenue to enhance growth, production, and water use efficiency of wheat under full and deficit irrigation in arid countries. *Plants*, *12*(5): 1019.

Molefe, N.I., Mogale, M.A. and Gololo, S.S., 2018. Qualitative and Quantitative Phytochemical Analysis of Leaves and Roots of Barleria dinteri with Varying Exposure to Road-Dust Pollution. *Asian Journal of Chemistry*, 30(11): 2521-2526.

Muliawan, N.R.E., Sampurno, J. and Jumarang, M.I., 2016. Identifikasi nilai salinitas pada lahan pertanian di daerah Jungkat berdasarkan metode daya hantar listrik (DHL). *Prisma Fisika*, 4(2): 19-29.

Nahrjoo, M. and Sedaghathoor, S., 2018. The induction of salinity stress resistance in rosemary as influenced by salicylic acid and jasmonic acid. *Communications in Soil Science and Plant Analysis*, 49(14): 1761-1773.

Nakata, M. and Okada, K., 2013. The leaf adaxial-abaxial boundary and lamina growth. *Plants*, 2(2): 174-202.

Nandy, P., Das, S., Ghose, M. and Spooner-Hart, R., 2007. Effects of salinity on photosynthesis, leaf anatomy, ion accumulation and photosynthetic nitrogen use efficiency in five Indian mangroves. *Wetlands Ecology and Management*, 15: 347-357.

Nizam, A., Meera, S.P. and Kumar, A., 2022. Genetic and molecular mechanisms underlying mangrove adaptations to intertidal environments. *Iscience*, 25(1): 1-10.

Nizar, M., Shaukat, K., Zahra, N., Hafeez, M.B., Raza, A., Samad, A., Ali, Q., Siddiqui, M.H. and Ali, H.M., 2022. Exogenous application of salicylic acid and hydrogen peroxide ameliorate cadmium stress in milk thistle by enhancing morpho-physiological attributes grown at two different altitudes. *Frontiers in Plant Science*, 12: 809183.

Noreen, S. and Ashraf, M., 2008. Alleviation of adverse effects of salt stress on sunflower (*Helianthus annuus* L.) by exogenous application of salicylic acid: growth and photosynthesis. *Pak. J. Bot*, 40(4): 1657-1663.

Odjegba, V.J. and Alokolaro, A.A., 2013. Simulated drought and salinity modulates the production of phytochemicals in *Acalypha wilkesiana*. *Journal of Plant Studies*, 2(2): 105.

Omidi, M., Khandan-Mirkohi, A., Kafi, M., Zamani, Z., Ajdanian, L. and Babaei, M., 2022. Biochemical and molecular responses of *RoAS damascena* mill. cv. Kashan to salicylic acid under salinity stress. *BMC Plant Biology*, 22(1): 1-20.

Osing, P., Jondonero, M., Suson, P., Guihawan, J., Amparado Jr, R. F. 2019. Species composition and diversity in a natural and reforested mangrove forests in Panguil Bay, Mindanao, Philippines. *Journal of Biodiversity and Environmental Sciences (JBES)*, 15(3): 88-102.

Panda, D., Dash, P.K., Dhal, N.K. and Rout, N.C., 2006. Chlorophyll fluorescence parameters and chlorophyll content in mangrove species grown in different salinity. *Gen APPL Plant Physiology*, 32(4): 175-180.

Parida, A.K. and Das, A.B., 2005. Salt tolerance and salinity effects on plants: a review. *Ecotoxicology and environmental safety*, 60(3): 324-349.

Parida, A.K., Das, A.B., Sanada, Y. and Mohanty, P., 2004. Effects of salinity on biochemical components of the mangrove, *Aegiceras corniculatum*. A*quatic botany*, 80(2):77-87.

Parida, A.K. and Jha, B., 2010. Salt tolerance mechanisms in mangroves: a review. *Trees*, 24(2): 199-217.

Parida, A.K., Veerabathini, S.K., Kumari, A. and Agarwal, P.K., 2016. Physiological, anatomical and metabolic implications of salt tolerance in the halophyte *Salvadora persica* under hydroponic culture condition. *Frontiers in Plant Science*, 7: 351.

Patel, A.D., Lalcheta, K., Gill, S.S. and Tuteja, N., 2013. *Salinity tolerance of avicennia officinalis l.(Acanthaceae) from Gujarat coasts of India : Climate change and plant abiotic stress tolerance*. Wiley-VCH Verlag GmbH & Co. KGaA. p.189-208.

Pessarakli, M.. 1993. *Handbook of Plan and Crop Stress*. Marcel Dekker Inc. New York. p. 189

Prabowo, I. and Rachmawati, D., 2020. Respons fisiologis dan anatomi akar tanaman bayam (*Amaranthus tricolor* L.) terhadap cekaman NaCl. *Jurnal Penelitian Saintek*, *25*(1): 36-43.

Prayunita, P., Basyuni, M. and Agustina, L., 2012. Respon Pertumbuhan dan BiomasAS Semai *Rhizopora apiculata* BI Terhadap Salinitas dan Kandungan Lipidanya pada Tingkat Pohon. *Peronema Forestry Science Journal*, 1(1): 1-9.

Prihastanti, E., Hastuti, E.D., Haryanti, S. and Purnomo, S.P., 2021, July. The anatomic response of the mangrove vegetation due to the changing in land functions. *In Journal of Physics: Conference Series*. 1943(1): 012061

Purwaningrum, H., 2020. Pengembangan Ekowisata Hutan Mangrove Pantai Baros DeAS Titihargo Kecamatan Kretek Kabupaten Bantul. *Journal of Tourism and Economic*, *3*(1): 31-40.

Putri, R., 2019. Pengaruh Asam Salisilat Terhadap Pertumbuhan Dan Produksi Beberapa Varietas Padi Gogo (*Oryza Sativa* L.) Di Gawangan Tanaman Karet (*Havea Brasiliensis*.) (*Doctoral dissertation*), Universitas Muhammadiyah Sumatera Utara. Medan. Pp. 9-11.

Quamruzzaman, M., Manik, S.N., Shabala, S. and Zhou, M., 2021. Improving performance of salt-grown crops by exogenous application of plant growth regulators. *Biomolecules*, 11(6): 788.

Ramayani, R., 2012. Pengaruh Salinitas Terhadap Pertumbuhan Dan BiomasAS Semai Dan Kandungan Lipida Pohon Non-Sekresi Ceriops tagal. *Peronema Forestry Science Journal*, 1(1): 155895.

Rahmadhani, T., Rahmawati, Y.F., Qalbi, R., HP, N.F. and Husna, S.N., 2021. Zonasi dan formasi vegetasi hutan mangrove: studi kasus di Pantai Baros, Yogyakarta. *Jurnal Sains Dasar,* 10(2): 69-73.

Rosaria, P., De Rosa, P., De Castro, O. and Colombo, P., 2013. Leaf and stem anatomy in eight Hypericum species (Clusiaceae). *Acta Botanica Croatica*, 72(2), pp.269-286.

Sahromi, 2011. *Sonneratia caseolaris* : Jenis Mangrove yang Hidup di Kebun Raya Bogor. *Warta Kebun Raya,* 11(1): 22-27.

Sarkar, P., Bosneaga, E. and Auer, M., 2009. Plant cell walls throughout evolution: towards a molecular understanding of their design principles. *Journal of experimental botany*, 60(13): 3615-3635.

Sarker, U. and Oba, S., 2020. The response of salinity stress-induced A. tricolor to growth, anatomy, physiology, non-enzymatic and enzymatic antioxidants. *Frontiers in Plant Science*, 11: 559876.

Schweitzer, J.A., Madritch, M.D., Bailey, J.K., LeRoy, C.J., Fischer, D.G., Rehill, B.J., Lindroth, R.L., Hagerman, A.E., Wooley, S.C., Hart, S.C. and Whitham, T.G., 2008. From genes to ecosystems: the genetic basis of condensed tannins and their role in nutrient regulation in a Populus model system. *Ecosystems*, 11: 1005-1020.

Setiawan, C. and Asrilya, N.J. 2020. Preparasi dan Karakterisasi Senyawa Tanin dari Daun Stevia (*Stevia Rebaudiana*) Menggunakan Instrumen HPLC sebagai Gula Pereduksi dalam Pembuatan Sukrosa. *Walisongo Journal of Chemistry*, *3*(2): 86-91.

Sharma, A., Kapoor, D., Wang, J., Shahzad, B., Kumar, V., Bali, A.S., Jasrotia, S., Zheng, B., Yuan, H. and Yan, D., 2020. Chromium bioaccumulation and its impacts on plants: an overview. *Plants*, 9(1): 100.

Shazwan, K., Shahari, R., Amri, C., Kassim, C., Ahmad, Z.. 2021. Morphological structures of *Rhizophora apiculata* blume. And *Rhizophora mucronata* Lam. *Science*, 5(1): 01-04.

Shetty, P., Gitau, M.M. and Maróti, G., 2019. Salinity stress responses and adaptation mechanisms in eukaryotic green microalgae. *Cells*, 8(12): 1657.

Silva, T.I.D., Silva, J.D.S., Dias, M.G., Martins, J.V.D.S., Ribeiro, W.S. and Dias, T.J., 2022. Salicylic acid attenuates the harmful effects of salt stress on basil. *Revista Brasileira de Engenharia Agrícola e Ambiental*, 26: 399-406.

Souri, M.K. and Tohidloo, G., 2019. Effectiveness of different methods of salicylic acid application on growth characteristics of tomato seedlings under salinity. *Chemical and Biological Technologies in Agriculture*, 6(1): 1-7.

Srivastava, S., 2022. *Morpho-Anatomical Adaptation against Salinity: Plant Defense Mechanisms*, IntechOpen, pp.187.

Sudhir, S., Arunprasath, A. and Vel, V.S., 2022. A critical review on adaptations, and biological activities of the mangroves. *Journal of Natural Pesticide Research,* 100006:1-10.

Susilo, D.E.H., 2015. Identifikasi Nilai Konstanta Bentuk Daun untuk Pengukuran Luas Daun Metode Panjang Kali Lebar pada Tanaman Hortikultura di Tanah Gambut: Identification Of Constanta Value Of Leaf Shape For Leaf Area Measurement Using Length Cross Width Of Leaf Of Horticulture Plant In Peat Soil. *Anterior Jurnal*, 14(2): 139-146.

Tuteja, & I. Narendra. 2007. Mechanisms of high salinity tolerance in plants. *Methods in enzymology*, 428: 419-438.

Urry, L.A., Cain, M.L., Minorsky P.V, Wasserman,S.A., Reece J.B. 2016. *Campbell Biology. 11th* ed. Pearson, 330 Hudson Street, New York, NY 10013. pp 190-210.

Uzunova, A.N. and Popova, L.P., 2000. Effect of salicylic acid on leaf anatomy and chloroplast ultrastructure of barley plants. *Photosynthetica*, 38: 243-250.

Wardhani, M. K. 2011. Kawasan Konservasi Mangrove: Suatu Potensi Ekowisata.Jurnal Kelautan. 4(1): 60–76.

Wang, Y., Pan, G., Huang, T., Zhang, T., Lin, J., Song, L., Zhou, G., Ma, X., Ge, Y., Xu, Y. and Yuan, C., 2023. Exogenous tannic acid relieves imidacloprid-induced oxidative stress in tea tree by activating antioxidant responses and the flavonoid biosynthetic pathway. *Ecotoxicology and Environmental Safety*, 266: 115557.

Yilmaz, M., Kizilgeçi, F., Tazebay, N., Ufuk, A.S.A.N., İqbal, A. and İqbal, M.A., 2022. Determination of the effect of salicylic acid application on salinity stress at germination stage of bread wheat. *Yuzuncu Yıl University Journal Of Agricultural Sciences*, 32(2): 223-236.

Yona, D., Hidayati, N., Sari, S.H.J., Amar, I.N. and Sesanty, K.W., 2018. Teknik pembibitan dan penanaman mangrove di Banyu Urip mangrove center, deAS Banyu Urip, Kecamatan Ujungpangkah, Kabupaten Gresik. J-dinamika. *Jurnal Pengabdian Masyarakat*, 3(1):67-79.

Yu, Z., Duan, X., Luo, L., Dai, S., Ding, Z. and Xia, G., 2020. How plant hormones mediate salt stress responses. *Trends in plant science*, 25(11): 1117-1130.

Yusniawati, M. and Wardoyo, E.R.P., 2017. Pertumbuhan Semai Bakau Putih (*Bruguiera cylindrica* (L.) BI.) pada tingkat Salinitas Yang Berbeda. *Jurnal Protobiont*, 6(2): 31-36.

Zarattini, M. and Forlani, G., 2017. Toward unveiling the mechanisms for transcriptional regulation of proline biosynthesis in the plant cell response to biotic and abiotic stress conditions. *Frontiers in plant science*, 8: 927.

Zhao, Y.H., Deng, Y.J., Wang, Y.H., Lou, Y.R., He, L.F., Liu, H., Li, T., Yan, Z.M., Zhuang, J. and Xiong, A.S., 2022. Changes in carotenoid

concentration and expression of carotenoid biosynthesis genes in Daucus carota taproots in response to increased salinity. *Horticulturae*, 8(7): 650.