

Mangrove Landscaping As An Adaptation Pattern To Reduce The Impact of Climate Change in Segara Anakan Lagoon, Cilacap Regency Indonesia

Publons ID	(not set)
Wos ID	WOS:001157354000017
Doi	10.21123/bsj.2023.8828
Title	Mangrove Landscaping As An Adaptation Pattern To Reduce The Impact of Climate Change in Segara Anakan Lagoon, Cilacap Regency Indonesia
First Author	
Last Author	
Authors	Hilmi, E; Anwar, N; Santosa, I; Mahdiana, A; Rachman, TM; Wardoyo, T;
Publish Date	2024
Journal Name	BAGHDAD SCIENCE JOURNAL
Citation	
Abstract	<p>Mangrove landscaping in the Segara Anakan Lagoon (SAL) is an adaptation pattern of mangrove ecosystems to live and grow in unstable areas. This research aimed to develop a mangrove landscape to mitigate the impacts of ocean waves, currents, and inundation due to climate change. The study was conducted in SAL and Cilacap Coast (CC) using the environmental properties and climate change data. The data obtained were analyzed using mapping and trendline analyses. The results showed that mangrove landscaping in Segara Anakan had four zones with <i>Nypa frutican</i>, <i>Rhizophora stylosa</i>, <i>Aegiceras corniculatum</i>, <i>Rhizophora apiculata</i>, <i>Avicennia marina</i>, <i>Sonneratia alba</i> identified as the best adaptation of mangrove species. Climate change give a high impact on mangrove degradation (degradation 142.1 ha/year), the instability of rainfall intensity with average intensity 3552 mm/year, irregular wind direction with a speed average of 7 knots, and increasing of sea wave and sea level rise (range from 2.7 m to 3.4 m) The results conclude that the mangrove species have ability to live and grow, because the climate change does not affect mangrove growth (the correlation with rainfall intensity = -0,35, with wind speed = 0,18 and sea wave = - 0,34).</p>
Publish Type	Journal
Publish Year	2024
Page Begin	338
Page End	357
Issn	2078-8665
Eissn	2411-7986
Url	https://www.webofscience.com/wos/woscc/full-record/WOS:001157354000017
Author	Dr IMAM SANTOSA, M.Si