remote sensing

MDPI

Supplementary Material

Table S1. Dates of the three cultivation cycles of *Kappaphycus* monitored in 2022 in Punaga (South Sulawesi) and corresponding water quality variables. Temp = Temperature, Sal = Salinity, NTU = Nephelometric Turbidity Unit, NO_3^- = Nitrates, PO_4^{3-} = Phosphates. Standard deviation in brackets. For carrageenan content, n = 5. NA = not available. Seawater variables were obtained for each cycle and sampling date. Water temperature was measured in situ using a digital thermometer, along with salinity measurements carried out using a digital refractometer. Water samples were stored in 1 L bottles and kept in a cool box during transportation from the field to the laboratory for pH, turbidity, nitrate (NO3-) and phosphate (PO43-) analysis. Turbidity was measured with a turbidimeter and expressed in Nephelometric Turbidity Units (NTU). Nutrient concentrations (mg.L-1) were measured using a DREL 2800 spectrophotometer and processed with the methods described by [61].

Cycle	Date	Temp	Sal	NTU	PH	NO_3^-	PO_4^{3-}
		(°C)				(mg L^{-1})	(mg L^{-1})
1	10/03	26.8	33.0	8.6	7.78	0.14	0.01
1	29/03	26.9	34.7	10.4	7.87	0.24	0.02
1	10/04	28.0	34.0	12.6	7.73	0.26	0.01
1	16/04	28.7	35.1	15.4	7.68	0.18	0.01
2	19/04	27.6	33.4	6.8	7.83	0.14	0.02
2	28/04	28.3	34.8	9.6	7.94	0.17	0.02
2	10/05	27.2	34.9	14.8	7.97	0.19	0.02
2	20/05	27.9	34.0	16.8	7.92	0.14	0.02
2	30/05	28.6	34.7	10.6	7.74	0.26	0.02
3	08/06	27.4	33.6	15.8	7.78	0.10	0.01
3	17/06	27.7	34.0	16.4	7.86	0.16	0.01
3	27/06	27.8	34.5	25.8	7.92	0.10	0.01
3	08/07	28.8	34.6	40.4	7.97	0.03	0.01
3	19/07	28.8	34.0	37.5	7.93	0.34	0.01