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G06. Seasonal dynamics of phytoplankton production and loss rate in tropical coastal waters

In the present study, phytoplankton production and loss rates were measured by Landry and Hassett (1982) dilution method. We sampled at Klang (estuarine) and Port Dickson (coastal water), both located at the Straits of Malacca over a two-year period. Physical and chemical parameters measured were typical of tropical coastal waters. Chl *a* at Klang fluctuated from 0.20 to 26.31 $\mu\text{g L}^{-1}$ whereas at Port Dickson, Chl *a* fluctuated from 0.14 to 2.76 $\mu\text{g L}^{-1}$. At Klang, production and loss rates ranged from 0.042 to 0.314 h^{-1} and 0.024 to 0.121 h^{-1} , respectively whereas at Port Dickson, production and loss rates ranged from 0.024 to 0.165 h^{-1} and 0.017 to 0.121 h^{-1} , respectively. Production and loss rates were tightly coupled ($r^2 = 0.34$, $df = 44$, $p < 0.001$), and about 60% of phytoplankton production was lost, probably due to grazing.