Mikroalga Epiplastik Berpotensi Harmful Algal Blooms Pada Sampah Plastik Makanan Kemasan Jenis Polypropylene di Pantai Lagoon Ancol, Jakarta Utara. = Epiplastic Microalgae Potentially Causing Harmful Algal Blooms on Polypropylene Food Plastic Waste at Ancol Lagoon Beach, North Jakarta.

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Abstrak

Penelitian mengenai identifikasi keanekaragaman serta perhitungan kelimpahan mikroalga epiplastik di substrat sampah plastik makanan kemasan jenis polypropylene yang berpotensi menyebabkan Harmful Algal Blooms di lakukan di Pantai Lagoon Ancol dengan metode purposive random sampling pada 3 titik stasiun dengan metode subsample di bawah mikroskop. Tujuh belas genus mikroalga epiplastik ditemukan yang berasal dari tiga kelas, yaitu Bacillariophyceae (14 genus), Dinophyceae (1 genus), dan Cyanophyceae (2 genus) dengan 3 genus yang berpotensi toksik. Tujuh belas genus tersebut adalah Achnanthes, Cocconeis, Coscinusdiscus, Cymbela, Gyrosigma, Lyngbya, Mastogloia, Merismopedia, Navicula, Nitzschia, Paralia, Pleurosigma, Prorocentrum, Skeletonema, Stephanopyxis, Thalassionema, dan Thalassiosira. Hasil penelitian menunjukan kelimpahan total mikroalga epiplastik berkisar 249 – 24.051 sel/gram dengan kelimpahan terbesar dari genus Navicula sebesar 121.342 sel/gram dan terkecil dari genus Merismopedia sebesar 249 sel/gram. Berdasarkan perhitungan korelasi Pearson, hampir semua parameter lingkungan yang diukur berpengaruh sangat tinggi dengan rentang koefisien ± 0.80 – ± 1.00, dengan koefisien korelasi terendah oleh intensitas cahaya yaitu 0.3 dimana termasuk kedalam rentang berpengaruh rendah.
.....Research on identifying diversity and calculating the abundance of epiplastic microalgae in polypropylene plastic food packaging waste substrates that have the potential to cause Harmful Algal Blooms was conducted at Ancol Lagoon Beach with purposive random sampling method at 3 station points and using the subsample method under a microscope. Seventeen genera of epiplastic microalgae were found from three classes, namely Bacillariophyceae (14 genera), Dinophyceae (1 genus), and Cyanophyceae (2 genera) with 3 potentially toxic genus. The seventeen genera are Achnanthes, Cocconeis, Coscinusdiscus, Cymbela, Gyrosigma, Lygbya, Mastogloia, Merismopedia, Navicula, Nitzschia, Paralia, Pleurosigma, Prorocentrum, Skeletonema, Stephanopyxis, Thalassionema, and Thalassiosira. The results showed that the total abundance of epiplastic microalgae ranged from 249 – 24.051 cells/gram with the greatest abundance from the genus Navicula of 121.342 cells/gram and the smallest from the genus Merismopedia of 249 cells/gram. Based on Pearson correlation calculations, almost all environmental parameters measured have a very high effect with a coefficient range of ± 0.80 – ± 1.00, with the lowest correlation coefficient by light intensity of 0.3 which is included in the low influential range.