Microplankton (>20 μm)∗2 Diatoms

Dinoflagellates Nanoplankton (2–20 μm)∗1

Green algae Prymnesiophytes∗4 (Haptophytes) Picoplankton (0.2–2 μm)∗1 Prokaryotes Pico-eukaryotes∗5 Prochlorococcus sp.

Diagnostic Pigments

Fucoxanthin (Fuco), Peridinin (Perid) Fuco

Perid

19’-Hexanoyloxyfucoxanthin (Hex)

Chlorophyll-b (Chl-b) Butanoyloxyfucoxanthin (But) Alloxanthin (Allo)

Chl-b

Hex, But

Zeaxanthin (Zea), Hex, Chl-b Zea

Hex, Chl-b

Divinyl Chlorophyll-a (DVChl-a)

Estimation Formula

1.41 (Fuco + Perid)/􏰒DP∗2

1.41 Fuco/􏰒DP∗2

1.41 Perid/􏰒DP∗2

(Xn∗ 1.27 Hex + 1.01 Chl-b

+ 0.35 But + 0.60 Allo)/􏰒DP∗3

1.01 Chl-b/􏰒DP∗2

(0.86 Zea + Yp 1.27 Hex)/􏰒DP∗3

0.86 Zea/􏰒DP∗2 0.74 DVChl-a/Chl-a