

Appendices

Appendix 1: Monthly physical parameters

Parameters	April	May	June	July	August	September	Avg.
Air temp. (°C)	28.3	29.2	30.8	31.1	29.3	27.8	29.4
Water temp. (°C)	26.6	28.8	29.2	29.3	28	28.1	27.76
Sacci disc depth (cm)	66	70	95	110	108	98	91.16
Depth (ft)	33.2	34	35.2	37	43	43	37.57

Appendix 2: Monthly chemical parameters

Parameters	April	May	June	July	Aug.	Sep.	Avg.
DO (mg ^l ⁻¹)	7.33	7.7	8.47	8.77	8.23	8.1	8.1
Free CO ₂ (mg ^l ⁻¹)	4.5	4.7	3.73	3.97	3.5	4.1	4.08
Ammonia (mg ^l ⁻¹)	0.27	0.15	0.14	0.1	0.16	0.18	0.17
Nitrate (mg ^l ⁻¹)	0.086	0.053	0.057	0.03	0.053	0.097	0.062
pH	8.53	8.28	8.56	7.7	7.37	7.73	8.04
Total alkalinity (mg ^l ⁻¹)	48.8	50.1	51.9	52.76	55.7	53.8	52.01
Phosphate (mg ^l ⁻¹)	0.012	0.013	0.011	0.007	0.013	0.012	0.011

Appendix 3: Monthly primary production

Parameters	April	May	June	July	August	September	Avg.
Gross (gCm ⁻³ h ⁻¹)	0.48	0.40	0.30	0.30	0.55	0.60	0.44
Net (gCm ⁻³ h ⁻¹)	0.36	0.35	0.25	0.30	0.45	0.40	0.35
Respiration (gCm ⁻³ h ⁻¹)	0.12	0.05	0.10	0.15	0.10	0.20	0.12

Appendix 4: Seasonal variation of primary production

PP (gCm ⁻³ h ⁻¹)	Pre monsoon	Monsoon	Post monsoon
GPP (gCm ⁻³ h ⁻¹)	0.39	0.31	0.61
NPP (gCm ⁻³ h ⁻¹)	0.35	0.26	0.41
CR (gCm ⁻³ h ⁻¹)	0.11	0.12	0.13

Appendix 5: Quantitative results of phytoplankton

Month Site	April	May	June	July	August	September
(S ₁) Cell/l	19	21	17	15	22	26
(S ₂) Cell/l	17	20	15	13	21	25
(S ₃) Cell/l	17	21	17	14	19	28

Appendix 6: Quantitative results of zooplankton

Month	April	May	June	July	August	September
(S ₁) Unit/l	10	8	12	11	13	14
(S ₂) Unit/l	13	12	10	7	11	13
(S ₃) Unit/l	12	9	13	13	11	17

Brief Biography of Author

This is Mohammad Afsar Hossain, youngest son of Mohammad Aflatun and Rokeya Begum who came from Sandwip under Chattogram district. He passed Secondary School Certificate examination in 2011 from Baitush Sharaf Ideal Kamil Madrasha and Higher Secondary certificate examination in 2013 from Govt. City College Chattogram. He achieved his B.Sc Fisheries (Hons.) Degree in 2018 from Faculty of Fisheries, Chattogram Veterinary and Animal Sciences University (CVASU). Now, he is a candidate for the degree of MS in Fisheries Resource Management under the Department of Fisheries Resource Management, Faculty of Fisheries, Chattogram Veterinary and Animal Sciences University, Chattogram, Bangladesh.