

Water quality of the Yan Chau Tong Marine Park in Year 2001

	Yan Chau Tong			Lai Chi Wo		
No. of sample	4			4		
Depth	Surface	Middle	Bottom	Surface	Middle	Bottom
Temperature (°C)	24.94 (18.5-31.86)	24.49 (18.61-29.93)	22.53 (17.78-28.41)	25.01 (19.5-31.54)	24.50 (17.9-30.87)	22.98 (17.6-28.4)
Salinity (ppt)	29.43 (25.7-31.5)	24.20 (17.6-29.93)	22.41 (17.1-28.41)	29.13 (25.5-31.4)	29.43 (25.8-31.4)	31.03 (29.6-31.8)
Dissolved Oxygen (mg/L)	7.14 (5.75-9.13)	6.24 (5.45-6.87)	3.95 (0.19-6.93)	7.00 (6.04-8.7)	6.97 (5.61-9.45)	5.15 (0.62-7.43)
pH	8.38 (8-8.7)	8.30 (8.0-8.5)	8.20 (7.9-8.5)	8.38 (8.3-8.7)	8.30 (7.9-8.6)	8.33 (7.9-8.6)
Secchi Depth (m)	5.28 (4.1-6.3)			4.15 (3-6)		
Turbidity (NTU)	0.10 (0-0.2)	0.28 (0-0.7)	2.98 (0.1-9.1)	0.60 (0-1.6)	1.55 (0.3-4.1)	2.10 (1-3.8)
Suspended Solids (mg/L)	1.67 (0.69-2.4)	2.10 (1.13-3.91)	2.03 (0.58-5.53)	1.81 (1.09-2.45)	2.57 (1.28-5.16)	1.64 (1.3-1.92)
BOD (mg/L)	1.09 (0.17-1.55)	1.11 (0.38-1.71)	0.98 (0.05-1.61)	1.32 (0.19-2.27)	1.30 (0.5-1.77)	1.28 (0.14-2.04)
Ammoniacal Nitrogen (mg/L)	0.240 (0.00-0.8)	0.598 (0.00-2.22)	0.049 (0.00-0.165)	0.050 (0.00-0.15)	0.091 (0.00-0.22)	0.049 (0.00-0.15)
Unionized Ammonia (mg/L)	0.020 (0-0.04)	0.037 (0.00-0.12)	0.008 (0-0.03)	0.006 (0-0.02)	0.009 (0-0.02)	0.007 (0-0.03)
Nitrite Nitrogen (mg/L)	0.060 (0.00-0.2)	0.039 (0.00-0.11)	0.082 (0-0.26)	0.012 (0.00-0.03)	0.067 (0.00-0.22)	0.054 (0-0.17)
Nitrate Nitrogen (mg/L)	1.032 (0.56-2.23)	0.859 (0.11-2.09)	0.963 (0.16-2.18)	1.394 (0.26-4.50)	0.972 (0.21-2.26)	0.986 (0.17-2.36)
Total Inorganic Nitrogen (mg/L)	1.404 (0.86-2.44)	1.719 (0.73-2.94)	1.236 (0.73-2.45)	1.755 (0.51-4.51)	1.304 (0.44-2.48)	1.244 (0.51-2.53)
Total Kjeldahl Nitrogen (mg/L)	0.550 (0.04-0.94)	0.470 (0.03-0.80)	0.440 (0.03-0.67)	0.640 (0.38-1.03)	0.750 (0.03-1.57)	0.770 (0.03-2.04)
Total Nitrogen (mg/L)	1.648 (0.23-3.37)	1.500 (0.23-2.97)	2.128 (1.23-3.11)	2.005 (0.02-5.52)	2.078 (0.03-4.04)	1.980 (0.19-4.57)
Orthophosphate Phosphorus (mg/L)	0.090 (0.00-0.34)	0.053 (0.01-0.17)	0.048 (0.01-0.16)	0.054 (0.00-0.20)	0.047 (0.00-0.15)	0.071 (0.00-0.21)
Total Phosphorus (mg/L)	0.040 (0.01-0.09)	0.030 (0.02-0.03)	0.080 (0.02-0.19)	0.100 (0.02-0.23)	0.100 (0.02-0.23)	0.610 (0.02-2.28)
Silica (mg/L)	0.150 (0.04-0.26)	0.130 (0.04-0.20)	0.200 (0.04-0.42)	0.140 (0.03-0.22)	0.150 (0.03-0.24)	0.200 (0.03-0.38)
Chlorophyll-a (µg/L)	1.193 (0.17-2.49)	2.395 (0.38-4.02)	4.288 (0.05-10.5)	2.060 (0.19-4.34)	2.745 (0.5-4.28)	3.260 (0.14-6.4)
Phaeopigment (µg/L)	1.003 (0.46-1.18)	1.595 (0.61-3.4)	1.763 (0.57-2.64)	1.345 (0.59-1.99)	1.783 (0.93-2.9)	2.145 (0.98-4.4)
<i>E. coli</i> (CFU/100 mL)	10.0 (1.5-20)	4.5 (0.5-10)	5.9 (0.5-15)	8.3 (0-30)	9.1 (0-35)	10.4 (1.5-2.5)
Faecal Coliforms (CFU/100 mL)	35.4 (11.5-200)	20.6 (10-200)	103.9 (35-320)	40.5 (1.5-90)	70.4 (10-165)	155.4 (14-305)
No. of sample	3			3		
Phytoplanktons- Diatoms (cell/mL)	49038 (8798-123615)	47416 (5132-119715)	43505 (6598-102013)	53261 (5865-138617)	49617 (5132-130216)	55316 (11730-130216)
Phytoplanktons- Dinoflagellates (cell/mL)	300 (0-900)	344 (0-733)	300 (0-900)	1000 (0-1500)	800 (0-1500)	400 (0-1200)
Phytoplanktons- Others (cell/mL)	42766 (32704-51606)	37199 (25503-46506)	46765 (36004-57185)	50097 (24903-72581)	51409 (39005-64516)	58129 (33004-87977)
Zooplankton - Biomass (mg/m ³)	58 (7-126)			47 (8.4-115)		
Zooplankton - Copepoda (numbers/m ³)	20855 (12135-37086)			26878 (6037-57434)		
Zooplankton - Cladocera (numbers/m ³)	19088 (795-54203)			34053 (397-99796)		
Zooplankton - Larvae (numbers/m ³)	1717 (229-4585)			2577 (197-4073)		
Zooplankton - Noctiluca (numbers/m ³)	158 (0-306)			290 (107-611)		
Zooplankton - Others (numbers/m ³)	1807 (932-3368)			3974 (459-10591)		

* Data presented in mean value (range)