

Water quality of the Hoi Ha Wan Marine Park in Year 2001

	Coral Beach			Moon Island		
No. of sample	4			4		
Depth	Surface	Middle	Bottom	Surface	Middle	Bottom
Temperature (°C)	24.46 (18-30.77)	24.38 (18.30-52)	22.80 (18-27.32)	24.60 (18.3-30.89)	23.57 (18.3-27.79)	22.01 (18.1-25.73)
Salinity (ppt)	29.45 (25.8-31.4)	29.60 (26-31.4)	31.45 (31-32.1)	29.55 (25.9-31.4)	30.58 (29.8-31.6)	32.05 (31.1-33.5)
Dissolved Oxygen (mg/L)	6.81 (6.01-8.28)	6.65 (5.89-8.14)	4.62 (1.7-7.97)	6.76 (6.04-7.73)	5.51 (2.86-7.68)	4.47 (0.5-8.02)
pH	8.48 (8.3-8.6)	8.43 (8.2-8.6)	8.45 (8.3-8.6)	8.43 (8.2-8.6)	8.43 (8.2-8.6)	8.28 (8-8.5)
Secchi Depth (m)	4.53 (3.5-5.5)			5.08 (4-6.7)		
Turbidity (NTU)	0.40 (0-1.3)	0.68 (0.1-1.5)	3.53 (1.7-6.1)	0.08 (0-0.3)	1.00 (0.2-2.5)	4.18 (1.6-7.3)
Suspended Solids (mg/L)	1.56 (1.14-2)	1.49 (0.86-1.75)	1.48 (0.69-2.02)	1.09 (0.79-1.44)	1.30 (0.95-1.6)	1.72 (1.11-3.11)
BOD (mg/L)	1.37 (1.11-1.52)	1.31 (0.93-1.68)	1.28 (0.93-1.63)	1.33 (1.04-1.66)	1.38 (1.09-1.63)	1.05 (0.63-1.55)
Ammoniacal Nitrogen (mg/L)	0.020 (0.00-0.06)	0.010 (0.00-0.03)	0.010 (0.00-0.03)	0.000 (0.00-0.01)	0.020 (0.00-0.04)	0.030 (0.00-0.04)
Unionized Ammonia (mg/L)	0.000 (0.000-0.005)	0.000 (0-0.01)	0.000 (0-0.01)	0.001 (0-0.006)	0.002 (0.00-0.01)	0.003 (0.00-0.01)
Nitrite Nitrogen (mg/L)	0.060 (0.00-0.209)	0.060 (0.00-0.20)	0.060 (0.00-0.20)	0.070 (0.00-0.21)	0.055 (0.00-0.17)	0.140 (0.02-0.48)
Nitrate Nitrogen (mg/L)	1.080 (0.37-2.67)	1.060 (0.31-3.10)	0.700 (0.23-1.56)	1.008 (0.22-2.73)	0.920 (0.27-2.53)	1.356 (0.27-4.34)
Total Inorganic Nitrogen (mg/L)	1.180 (0.46-2.88)	1.160 (0.367-3.31)	0.800 (0.24-1.76)	1.105 (0.23-2.94)	1.013 (0.28-2.7)	1.543 (0.33-4.83)
Total Kjeldahl Nitrogen (mg/L)	0.790 (0.35-1.07)	0.690 (0.3-1.22)	0.760 (0.45-1)	0.838 (0.52-1.07)	0.755 (0.46-1.15)	0.770 (0.34-0.98)
Total Nitrogen (mg/L)	2.810 (1.18-4.98)	2.700 (0.64-5.14)	2.470 (0.87-5.2)	2.703 (1-4.57)	2.628 (1-5.13)	3.208 (0.81-5.72)
Orthophosphate Phosphorus (mg/L)	0.040 (0.00-0.13)	0.040 (0.00-0.15)	0.040 (0.00-0.13)	0.044 (0.00-0.13)	0.049 (0.00-0.17)	0.080 (0.01-0.28)
Total Phosphorus (mg/L)	0.250 (0.02-0.86)	0.170 (0.02-0.62)	0.110 (0.02-0.42)	0.140 (0.02-0.49)	0.155 (0.02-0.54)	0.083 (0.03-0.21)
Silica (mg/L)	0.190 (0.1-0.29)	0.170 (0.08-0.29)	0.170 (0.08-0.29)	0.148 (0.08-0.19)	0.193 (0.08-0.27)	0.375 (0.08-0.76)
Chlorophyll-a (µg/L)	2.010 (0.99-3.93)	1.990 (1.06-4.17)	2.190 (0.97-4.27)	1.533 (0.74-2.43)	2.185 (0.79-4.6)	2.108 (0.99-3.2)
Phaeopigment (µg/L)	0.980 (0.53-1.8)	1.050 (0.56-1.9)	1.300 (0.64-2.8)	0.973 (0.45-2)	1.328 (0.5-3.2)	1.415 (0.61-3)
<i>E. coli</i> (CFU/100 mL)	6.8 (1-15)	13.4 (1-40)	33.3 (0-125)	8.8 (0-25)	8.4 (0.5-20)	17.5 (0.5-55)
Faecal Coliforms (CFU/100 mL)	24.3 (2.5-40)	147.5 (15-435)	232.8 (10-660)	94.0 (5-300)	64.3 (10-205)	100.1 (25-245)
No. of sample	3			3		
Phytoplanktons- Diatoms (cell/mL)	27402 (6598-51006)	31826 (3666-65408)	34815 (5132-72609)	28358 (5865-61208)	32314 (5132-72009)	26080 (9531-48906)
Phytoplanktons- Dinoflagellates (cell/mL)	400 (0-900)	1544 (300-3600)	1200 (0-2700)	600 (0-1500)	700 (0-1800)	400 (0-1200)
Phytoplanktons- Others (cell/mL)	32454 (20102-45455)	39875 (28203-55718)	41564 (27003-57185)	39842 (27003-53519)	48530 (33904-68182)	33954 (27303-38856)
Zooplankton - Biomass (mg/m ³)	29 (11.6-56.1)			31 (16.3-59)		
Zooplankton - Copepoda (numbers/m ³)	30861 (10346-55185)			30175 (8449-51783)		
Zooplankton - Cladocera (numbers/m ³)	9065 (1406-23889)			11943 (176-32598)		
Zooplankton - Larvae (numbers/m ³)	1761 (109-3982)			2371 (1175-3905)		
Zooplankton - Noctiluca (numbers/m ³)	62 (0-185)			624 (0-1613)		
Zooplankton - Others (numbers/m ³)	1915 (474-2870)			2778 (317-5433)		

* Data presented in mean value (range)