

## APPENDIX 1. - Investigated reef-surface biofilm sections of samples taken in October 1993 (dry season).

depth	reef station	sample	number of sections	substrate rock	reef surface community	carbonate precipitation	carbonate corrosion
0 m	10	Sat93/23	4	red algal-nubeculariid crust upon green algal/stromatolitic microbialite	living <i>Peyssonnelia</i> - <i>Lithoporella</i> crusts with scattered <i>Phormidium</i> -" <i>Dermocarrella</i> " ( <i>Pleurocapsa</i> in subsurface voids)	-	(+)
0 m	18	Sat93/24	3	red algal-nubeculariid crust encrusting green algal filaments	living <i>Peyssonnelia</i> - <i>Lithoporella</i> crusts with scattered <i>Phormidium</i> -" <i>Dermocarrella</i> " ( <i>Pleurocapsa</i> in subsurface voids)	-	(+)
0.5 m	1	Sat93/4	4	red algal-nubeculariid crust encrusting insect larval tubes and green algal filaments	living <i>Peyssonnelia</i> - <i>Lithoporella</i> crusts with living nubeculariid foraminifera and scattered <i>Phormidium</i>	+	(+)
0.5 m	18a	Sat93/84	3	cornflake-like framework of red algal-nubeculariid crusts	living <i>Peyssonnelia</i> - <i>Lithoporella</i> crusts, locally with <i>Hyella</i> and <i>Phormidium</i> -" <i>Dermocarrella</i> "- <i>Pleurocapsa</i> ; <i>Cladophora</i> , <i>Cladophoropsis</i> ; sponge	-	++
7 m	1	Sat93/6	4	cornflake-like framework of red algal-nubeculariid crusts	living <i>Peyssonnelia</i> - <i>Lithoporella</i> crusts with " <i>Dermocarrella</i> ", and <i>Pleurocapsa</i> in crevices	-	-
14 m	10	Sat93/69	3	cornflake-like framework of red algal-nubeculariid crusts	<i>Pleurocapsa</i> -" <i>Dermocarrella</i> " upon living <i>Lithoporella</i> crusts	-	-
16 m	10	Sat93/72	4	cornflake-like framework of red algal-nubeculariid crusts	<i>Pleurocapsa</i> -" <i>Dermocarrella</i> " upon living <i>Lithoporella</i> crusts, locally <i>Phormidium</i>	-	+
18 m	1	Sat93/3	4	cornflake-like framework of red algal-nubeculariid crusts	<i>Phormidium</i> -" <i>Dermocarrella</i> "- <i>Pleurocapsa</i> upon living <i>Lithoporella</i> crusts	-	+
chemocline at 22 m depth							
24- 25 m	10/11	Sat93/28	4	cornflake-like framework of red algal-nubeculariid crusts	non-phototrophic bacteria with scattered coccoid cyanobacteria	-	-

carbonate precipitation/corrosion:

- not detected
- + detected
- ++ minor
- +++ moderate

## APPENDIX 2. - Investigated reef-surface biofilm sections of samples taken in June 1996 (end of wet season).

depth	reef station	sample	number of sections	substrate rock	reef surface community	carbonate precipitation	carbonate corrosion
0.3 m	1	Sat96/12	2	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella; Cladophoropsis</i>	+++	+++
0.3 m	1	Sat96/12a	4	green algal microbialite with volcanic detritus	<i>Phormidium-Calothrix-Pleurocapsa-Hyella; Cladophoropsis</i>	++	+++
0.3 m	1	Sat96/14	9	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella</i>	++	+++
0.5 m	1	Sat96/18	2	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella</i>	+++	+++
0.6 m	1	Sat96/15	4	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella</i>	+++	+++
0.6 m	1	Sat96/16	6	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella</i>	+++	+++
0.6 m	1	Sat96/17	2	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella</i>	++	+
0.6 m	3	Sat96/23	1	green algal microbialite	<i>Phormidium-Calothrix-Pleurocapsa-Hyella; Cladophoropsis</i>	(+)	+
0.6 m	3	Sat96/24	2	red algal-nubeculariid crust upon green algal/stromatolitic microbialite	<i>Phormidium-Pleurocapsa-Hyella; Cladophoropsis, locally "Dermocarrella"</i>	+	+
0.6 m	3	Sat96/25	2	red algal-nubeculariid crust upon green algal/stromatolitic microbialite	<i>Phormidium-Pleurocapsa-Hyella; Cladophoropsis, locally "Dermocarrella"</i>	-	+
seasonal lowstand of lake level (October) at 0.6 m depth							
0.9 m	1	Sat96/19	4	red algal-nubeculariid crust encrusting insect larval tubes (core: peloidal microbialite)	living <i>Peyssonnelia</i> crusts with scattered <i>Phormidium</i> - "Dermocarrella" ( <i>Pleurocapsa</i> in subsurface voids); <i>Cladophoropsis</i> , <i>Cladophora</i> , sponge	-	+
0.9 m	1	Sat96/20	4	red algal-nubeculariid crust upon green algal/peloidal microbialite	living <i>Peyssonnelia-Lithoporella</i> crusts with scattered <i>Phormidium</i> ; <i>Pleurocapsa</i> and "Dermocarrella" on <i>Cladophora</i> , sponges	-	+
0.9 m	1	Sat96/21	1	red algal-nubeculariid crust upon green algal/peloidal microbialite	living <i>Peyssonnelia</i> crusts with scattered <i>Phormidium</i> , <i>Pleurocapsa</i> , "Dermocarrella"; sponges; seldom living <i>Hyella</i>	-	+
0.9 m	1	Sat96/22	2	red algal-nubeculariid crust encrusting insect larval tubes	living <i>Peyssonnelia</i> crusts with sponge; locally <i>Hyella</i> ;	-	+
5 m	1a	Sat96/33	2	red algal-nubeculariid crust upon green algal/peloidal microbialite	living <i>Peyssonnelia-Lithoporella</i> crusts with scattered "Dermocarrella"; <i>Cladophora</i> , sponges	-	++
15 m	1	Sat96/6	4	green algae with red algal-crusts of upon cornflake-like framework of red algal-nubeculariid crusts	living <i>Peyssonnelia-Lithoporella</i> crusts with abundant "Dermocarrella"; <i>Cladophora</i> , sponges	-	++
15 m	1	Sat96/7	6	cornflake-like framework of red algal-nubeculariid crusts	living <i>Lithoporella</i> crusts with scattered "Dermocarrella"; <i>Cladophora</i> , sponges	-	+
15 m	1	Sat96/11	2	red algal-nubeculariid crust upon green algal/peloidal microbialite	<i>Phormidium</i> -diatoms with basal <i>Pleurocapsa</i> upon living <i>Lithoporella</i> crusts; scattered "Dermocarrella"	-	+
17 m	1a	Sat96/31	4	cornflake-like framework of red algal-nubeculariid crusts	<i>Phormidium</i> -diatoms with basal <i>Pleurocapsa</i> upon living <i>Lithoporella</i> crusts; scattered "Dermocarrella"	-	+
23 m	1	Sat96/5a	4	red algal-nubeculariid crust upon recrystallized red algal flakes	<i>Phormidium</i> -diatoms with basal <i>Pleurocapsa</i> upon living <i>Lithoporella</i> crusts; scattered "Dermocarrella"	-	+
23 m	1	Sat96/5b	3	red algal-nubeculariid crust upon recrystallized red algal flakes	<i>Phormidium</i> -diatoms with basal <i>Pleurocapsa</i> upon living <i>Lithoporella</i> crusts; scattered "Dermocarrella"	-	+
chemocline at 24 m depth							