

Table 1: Characterization of *Chromatiaceae* isolated from two sites (Khor E-Ramla and Khor Manam) from Aswan High Dam Lake

Feature	Genera and Species					
	<i>Allochromatium vnosum</i>	<i>Allochromatium warmingii</i>	<i>Thiocystis violacea</i>	<i>Thioapsa roseopersicina</i>	<i>Thiodictyon elegans</i>	<i>Lamprocystis roseopersicina</i>
Bacteriochlorophyll absorption maxima	375 590 805 830 890	375 590 805 830 890	375 559 805 830 890	375 590 805 830 890	375 590 805 830 890	375 590 805 830 890
Bacteriochlorophyll present	a	a	a	a	a	a
Carotenoid absorption maxima	425 460 490 525	- 465 490 525	- 470 490 523	- 485 515 545	- 470 - 525	- 464 490 -
Carotenoid present	spirillo-xanthin	rhodopinal and rhodopinol	okenone and rhodopinal	spirillo-xanthin	rhodopinal and rhodopin	lycopinal and lycopinol
Culture pigmentation	orange-brown	purple-violet	purple-violet	pink	purple-violet	purple-violet
Morphology	ovoid	ovoid to rod	spherical	spherical	rod shaped	spherical to ovoid
Cell size (µm)						
width	2	3.5-4	2.5-3.0	1.5	1.5 - 2	2.0 - 3.5
length	2.5-6	5-11			3.8	6.5 -7.3
pH range	6.5-7.5	6.5 - 7.3	6.5-7.6		6.7-7.3	2.5-30°C
Temperature range	30-35°C	30-35°C	25-35°C		25-30°C	
Photo assimilation:						+
Acetate	-	+	+	+	+	+
Pyruvate	+	+	+	+	+	-
Fumarate	+	-	-	+	-	-
Malate	+	-	-	+	-	-
Succinate	+	-	-	+	-	-
Formate	+	-	-	-	-	-
propionate	+	-	-	-	-	-
Glycerol	-	-	-	+	-	-
Fructose	-	-	-	+	-	-
Sulphide	+	+	+	+	+	+
Thiosulphate	+	-	+	-	-	+
Bicarbonate	-	+	+	+	+	-
Nitrogen soueccc: ammonium salts	+	+	+	+	+	+
urea	-	+	+	-	-	-