Table 2. Selected C_{40} carotenoids present in *Erythromicrobium ramosum* .				
Carotenoid Group	Carotenoid		Absorbance maximum[a] (nm)	Comment
bicyclic	β-carotene		(426), 454, 480[20]	
	β-carotene hydroxyl derivatives	tetra hydroxy β,β-carotene-4-one	456, 477	major component
		zeaxanathin	(428), 454, 482[20]	
		adonixanthin		
		caloxanthin		
		nostoxanthin		
monocyclic	bacteriorubixanthinal		492	major component
acylic	spirilloxanthin			
polar	erythroxanthin sulfate		459, 477	major component

[a] The absorbance maxima are given for acetone extracted carotenoids. If there are multiple peaks characteristic of a pigment, they overlap, often presenting only as a shoulder peak. Peak maxima may differ slightly depending on the impurities present.

The expected relative distance migrated and carotenoid pigment color for bacteria investigated in this lab (Table 3).

Table 3. Aerobic anoxygenic phototrophic bacteria carotenoid migration distance and color on TLC using solvent system petroleum ether:diethyl ether:acetone:methanol (40:10:15:3). Solvent front 1 cm from end, ie. 155 mm.			
Bacteria	Major Carotenoids	Distance migrated[a] (mm)	Carotenoid color
strain ML36	carotene derivative	125	yellow
	unknown	51	pale orange
Roseococcus thiosulfatophilus	carotenedioate	104	pink-red
	diglycosyl carotenedioate[b]	31 (broad band - may extend to 95)	rosy- red
Erythromicrobium ramosum	bacteriorubixanthinal	104	red
	tetra hydroxy β,β-carotene-4-one	94	gold
	erythroxanthin sulfate	82	orange

[a] Amount of sample loaded and subjective estimate of distance migrated by a broad band affects the distance migrated. Therefore, distance migrated may differ slightly from assay to assay.
[b]diglycosyl carotenedioate is more polar than carotenedioate

[20]Kobizekm M, Beja, O, Bidigard, RR, Christensesn, S, Benitez-Nelson, B, Vetriani, C, Kolber, MK, Falkowski, PG, Kolber, ZS. 2003 Isolation and characterization of Erythorbacter sp. strains from the upper ocean. Arch Microbiol. 180: 327-338.