



Cluster	Time of Activity	Types of Genes Expressed
ME3	9AM – 5PM (daylight)	Photosystem II
ME6	1PM – 5PM (peak daylight)	Photosystem II carbohydrate transport
ME7	5PM – 9PM (evening)	Glucose/arabinose dehydrogenase Outer membrane starch binding Phosphate transport Iron transport F-type ATPase Spermidine/putrescine transport Flagellin
ME8	9PM – 5AM (night to dawn)	Photosystem I Sugar transport
ME2	5PM – 1AM (evening to night)	Sugar transport Peptide/nickel transport Bacteriorhodopsin
ME13	1AM – 5AM (dawn)	Aerobic anoxygenic photosynthesis machinery Nitrate/nitrite transport