



Cluster	Time of Activity	Types of Genes Expressed
ME1	1AM – 5AM (dawn)	RuBisCO Type II secretion Multiple photosynthesis types
ME4	1AM – 9AM (dawn to morning)	Carbohydrate degradation and transport Photosystem II DNA and RNA helicases Outer membrane porins
ME3	5AM – 9AM (morning)	Carbohydrate degradation and transport Outer membrane porins DNA-directed RNA polymerase
ME11	9AM – 5PM (daytime)	Photosystem II
ME18	1PM – 9PM (afternoon to evening)	Pyruvate metabolism Amino acid metabolism Chromosome segregation
ME16	1PM – 1AM (afternoon to night)	Histones Kinesin