

Life of an aerobic anoxygenic phototroph near the Arctic Circle

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Biogenesis of bacterial photosynthetic machinery involves coordinated gene expression and membrane remodeling that is by default regulated by levels of oxygen and light. How do the aerobic anoxygenic phototrophic communities in polar regions adapt to a half a year of constant daylight concomitant with low temperature facilitating high oxygen tension? We seek answers to these questions by studying cells of *Sediminicoccus rosea* isolated from an Icelandic creek.