Diurnal Expression Pattern of *puf*M Photosynthetic Gene by Natural Aerobic Anoxygenic Phototrophic Bacterial Community

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The aerobic anoxygenic phototrophic (AAP) bacteria share the functional ability of anoxygenic phototrophy under fully aerobic conditions. Previous experiments established that they accumulate the photosynthetic pigment only in the dark and gradual decay follow through the day, which in case of natural communities creates a diurnal pattern. Only a few culture based experiments showed that light regulation happens at the transcriptional level. Here we employed an intensive diurnal sampling campaign of Lake Cep and we were following changes of BChl-*a* concentration combined with expression of photosynthetic *puf*M gene in natural AAP bacterial community.