PP 022

Development of Oligonucleotide Primers for Detecting *Microcystis*

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A bloom of the cyanobacterium *Microcystis* has been a major problem in fresh water due to the production of microcystin (hepatotoxins). Accordingly, early detection of toxic *Microcystis* has been of great importance in monitoring cyanobacterial bloom in fresh water. In an effort to detect microcystin-producing cyanobacterial strains, we designed the PCR primers from *N*-methyltransferase (NMT) domain of microcystin synthetase gene (*mcyA*). We tested 32 *Microcystis* sp. strains with the primers. The PCR reaction was successful from all the cultures of *Microcystis* strains that produce microcystins, determined by an ELISA. This results suggest that the designed primers have a potential in detecting microcystin-producing *Microcystis* in fresh water.