

Characteristic of *Arthrospira platensis* enhanced antioxidant activity

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Arthrospira platensis(*A. platensis*) is a microscopic and filamentous cyanobacterium that derives its name from the spiral or helical nature of its filaments. In this study, we induced mutants of *A. platensis* through NMU treatment and selected two strains by level of lipid contents. We named mutant 19, 25 and they were cultivated in the same way with the wild type. During 12 days cultivation, cell growth, dry cell weight, pigment content, and lipid content were measured for characteristics of mutants. As a result, pigment and lipid content of mutants were increased about 3.6, 1.8 times compared with wild type, respectively. It was shown that total flavonoid and polyphenol contents of mutants were increased about 1.5 times compared with wild type. And radical scavenging effect of mutants were increased about 10% compared with wild type.