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## Studies on Extracting Microcystin-Lr from Microcystis Aeruginosa by Water Bath

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### ABSTRACT

Different temperatures of water bath was used to extract the intracellular microcystin-LR(MC-LR) of *Microcystis aeruginosa*. Researching the extraction efficiency under the suitable temperature, so that it could find out the best temperature and time for extracting MC-LR from *Microcystis aeruginosa* cells. Five equal *Microcystis aeruginosa* was used to find out the best temperature, extracting at 60°C, 70°C, 80°C, 90°C and 100°C for 15 minutes, respectively. Results showed that the content of MC-LR extracted with the water under 100°C was the highest. But meanwhile, the type and the content of impurities was the highest, too. In addition, another six equal *Microcystis aeruginosa* was extract with the water under 100°C for 5min, 10 min, 15 min, 20 min, 25 min and 30 min respectively. It was proved that 20 minutes was enough for extracting MC-LR from *Microcystis aeruginosa*, no long time was needed.

### KEYWORDS

Boiling Water Bath, Extract, Microcystin-LR

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