

**Planktic cyanobacteria from freshwater localities  
in ThuaThien-Hue province, Vietnam.  
II. Algal biomass and microcystin production**

by

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With 5 figures and 2 tables

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**Abstract:** A survey of cyanobacteria was carried out from February to August of 2004 along the Huong River and Hoamy Reservoir which supply part of the City of Hue, Vietnam with drinking water; also at some localities in the vicinity of the City of Hue. Quantitative analyses and screening for microcystin by ELISA and HPLC were done both in natural samples and in cultured cyanobacteria. The total biomass of cyanobacteria ranged from 0 to 3039 mg L<sup>-1</sup> [wet weight (ww)] with *Arthrospira massartii*, *Jaaginema* sp., *Merismopedia* spp., *Microcystis* spp., *Oscillatoria perornata*, and *Planktothrix zahidii* as the dominating species. In the water samples, microcystins detected by ELISA varied between 0 and 76.2 µg L<sup>-1</sup>. Concentrations above 1 µg L<sup>-1</sup>, which is considered the safety limit for drinking water by WHO, were not found in the drinking water resources. Cultured strains of *Microcystis aeruginosa*, *M. panniformis*, *M. botrys* and *Pseudanabaena* cf. *moniliformis* were shown by ELISA to produce microcystins. The major microcystins produced were microcystin-LR and -RR, as detected by HPLC.

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