

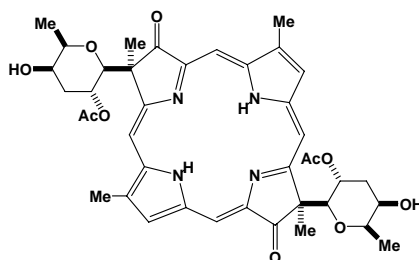
LDI-TOF MS OF THE TOLYPORPHINS, BIOACTIVE METABOLITES FROM THE CYANOBACTERIUM *TOLYPOTHRIX NODOSA*

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The tolyporphins are a family of bacteriochlorins, isolated from cultures of the cyanobacterium *Tolypothrix nodosa*¹⁻³ which exhibit a range of bioactivities, including multidrug resistance (MDR) reversing activity⁴ and the ability to photosensitise tumour tissue.⁵ These metabolites comprise a novel porphyrin-like macrocycle with attached C-glycosides and represent an unique opportunity to investigate mass spectral fragmentation of this combination of structural units.

Tolyporphins A-K and an unknown tolyporphyrin mixture were examined by laser desorption ionisation-time of flight (LDI-TOF) mass spectrometry in both positive and negative ion mode and by a post source decay method (LIFT). Like porphyrins, the tolyporphins can be analysed by these methods in neat form (without a matrix) and the resultant spectra contain intense radical cations or anions. Results of this study will be presented.



Tolyporphin A

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