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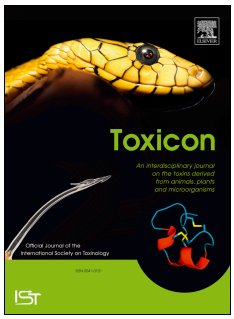

Benthic periphyton from Pennsylvania, USA are a source for both hepatotoxins (microcystins/nodularin) and neurotoxins (anatoxin-a/homoanatoxin-a)

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Benthic Periphyton from Pennsylvania, USA are a source for both hepatotoxins (Microcystins/Nodularin) and neurotoxins (Anatoxin-a/Homoanatoxin-a)

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Abstract:

In 2016, the Pennsylvania Department of Environmental Protection conducted a limited survey of streams in the Susquehanna River basin in Pennsylvania, USA, to screen for microcystins/nodularins and anatoxin-a (ATX) and homoanatoxin-a (HTX). Testing revealed the presence of HTX in samples collected from the Pine Creek basin, with ATX present at lower levels. Microcystins/nodularins (MCs/NODs) were also tested and found to be concomitant, with NOD-R confirmed present by LC-MS/MS.

Keywords: anatoxin-a, homoanatoxin-a, microcystins, nodularin, benthic cyanobacteria, periphyton