



## Compounds from the Cyanobacterium *Oscillatoria obscura*

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### Introduction

Cyanobacteria are among the most primitive and widely distributed organisms. The diverse secondary metabolites from these organisms are in part, responsible for their adaptation to ecological pressures. Cyanobacterial secondary metabolites have also been a validated source of new compounds and potential drug leads. Here, we purified and determined the structure of five compounds from a Philippine cyanobacterium *Oscillatoria obscura*.

### Experimental

<sup>1</sup>H and 2D NMR spectra were recorded on a Bruker Avance II 600 MHz spectrometer equipped with a 5-mm TXI cryogenic probe using residual solvent signals as internal standards.

### Results and Discussion

Chemistry- and bioactivity-guided purification of the cultured cyanobacterium *Oscillatoria obscura* yielded four alkaloids and one polyketide-derived compound. The indole alkaloids are characterized by the presence of a nitrile moiety. Structure elucidation of the polyketide-derived compound is ongoing. These compounds have weak to moderate antiproliferative activity against colorectal adenocarcinoma cells.

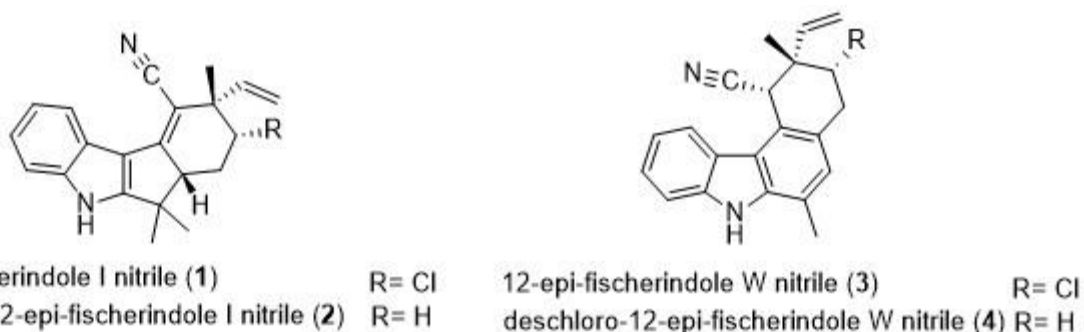


Fig.1 Indole alkaloids from the cultured cyanobacterium *Oscillatoria obscura*.

### Conclusions

We demonstrated the chemical diversity from a Philippine *O. obscura* collection.

### Acknowledgements

This study was supported by the University of the Philippines Balik PhD Program (Grant No. OVPAA-BPhD-2015-09). A portion of this work was performed at the National High Magnetic Field Laboratory, which is supported by National Science Foundation Cooperative Agreement No. DMR-1157490 and the State of Florida.

### References

[1] Kim, H. *et al.*, *Tetrahedron*, **68**, 3205-3209 (2012).