# Article information:

筛选贝类和藻类中的亲脂性海洋毒素：使用液相色谱与轨道质谱联用法开发文库 - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0003267010014510>

# Article summary:

1. This article discusses the development of a library for screening lipophilic marine toxins in molluscs and algae using liquid chromatography coupled with high resolution orbitrap mass spectrometry.

2. 85 different toxins were identified, including 33 OA, 26 YTX, 18 AZA and 8 PTX group toxins.

3. A software program called metAlign was used to reduce the data file size and a search library was created for the 85 identified toxins.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides detailed information on the development of a library for screening lipophilic marine toxins in molluscs and algae using liquid chromatography coupled with high resolution orbitrap mass spectrometry. The authors provide evidence for their claims by citing relevant literature and providing detailed descriptions of their methods and results. Furthermore, they discuss potential risks associated with their method such as animal testing which is now considered unethical.

However, there are some potential biases that should be noted. For example, the authors do not explore any counterarguments or alternative methods that could be used to screen lipophilic marine toxins in molluscs and algae. Additionally, they do not provide any evidence to support their claim that LC-MS/MS methods have superior sensitivity and selectivity compared to other methods such as bioassays or LC-MS/MS analysis. Finally, the authors do not present both sides equally when discussing animal testing; while they acknowledge that it is now considered unethical, they do not provide any arguments in favor of animal testing or discuss any potential benefits associated with it.

# Topics for further research:

* Alternatives to animal testing
* Advantages of LC-MS/MS analysis
* Lipophilic marine toxins
* Bioassays for screening toxins
* Ethical considerations of animal testing
* Liquid chromatography coupled with high resolution orbitrap mass spectrometry

# Report location:

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