# Article information:

Occurrence, distribution, source identification, and risk assessment of organophosphate esters in the coastal waters of Beibu Gulf, South China Sea: Impacts of riverine discharge and fishery - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0304389422010044?via%3Dihub>

# Article summary:

1. This study investigated the occurrence, distribution, sources and risks of 11 widely used OPEs in surface waters from seagoing rivers and multiple coastal functional areas of the Beibu Gulf.

2. Higher ∑11OPEs occurred in summer than in winter due to high emission caused by climate reasons.

3. Source identification revealed that fishery activity, especially fishing vessels, and urban rivers were the main sources of OPEs in the Beibu Gulf.

# 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 “Occurrence, Distribution, Source Identification, and Risk Assessment of Organophosphate Esters in the Coastal Waters of Beibu Gulf, South China Sea: Impacts of Riverine Discharge and Fishery” is a comprehensive study on organophosphate esters (OPEs) in the coastal zone with multiple functional areas. The article provides an overview of OPEs’ levels and sources in the Beibu Gulf as well as their ecological risk assessment at different trophic levels. The authors have conducted a thorough investigation into the spatiotemporal distribution, sources and risks of 11 widely used OPEs in surface waters from seagoing rivers and multiple coastal functional areas of the Beibu Gulf.

The article is generally reliable as it is based on scientific research conducted by experts in this field. The authors have provided sufficient evidence to support their claims such as data collected from various sites across the Beibu Gulf which has been analyzed using statistical methods such as Principal Component Analysis (PCA). Furthermore, they have also discussed potential sources for OPEs such as riverine discharge and fishery activities which are supported by previous studies on this topic.

However, there are some points that could be improved upon such as providing more information about potential risks posed by OPEs to aquatic organisms at different trophic levels or exploring counterarguments to their findings. Additionally, while they have discussed potential sources for OPEs they do not provide any evidence for these claims which could be addressed by conducting further research into this area.

In conclusion, while this article provides a comprehensive overview of OPEs’ levels and sources in the Beibu Gulf as well as their ecological risk assessment at different trophic levels it could benefit from further exploration into potential risks posed by OPEs to aquatic organisms at different trophic levels or exploring counterarguments to their findings.

# Topics for further research:

* Organophosphate Esters Risk Assessment
* Aquatic Organisms Trophic Levels
* Riverine Discharge Pollution
* Fishery Activities Pollution
* Principal Component Analysis
* Counterarguments to OPEs Findings

# Report location:

<https://www.fullpicture.app/item/66b8a8fc83b3c1cf24bf3c7f97f09653>