# Article information:

Release and microbial degradation of dissolved organic matter (DOM) from the macroalgae Ulva prolifera - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0025326X17306999?via%3Dihub=>

# Article summary:

1. Ulva prolifera is a dominant green seaweed that causes serious environmental concerns in the Yellow Sea due to its great proliferation, which is believed to be related to water pollution from agriculture and industry.

2. The release of dissolved organic matter (DOM) from Ulva prolifera is a rapid process, and the DOM released is highly labile and biodegradable, with protein-like DOM being the major organic component.

3. The green-tide-forming macrophyte blocks sunlight and consumes oxygen from the water, significantly influencing water quality and local ecosystems, especially in benthic communities.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

该文章主要介绍了绿潮现象中的海藻——裙带菜释放和微生物降解的溶解有机物（DOM）的情况。然而，该文章存在一些偏见和不足之处。

首先，该文章没有充分探讨绿潮现象的根本原因。虽然提到了农业和工业排放高浓度营养物质是导致绿潮现象的原因之一，但并没有深入探讨这些排放源如何影响海洋生态系统，并且也没有提到其他可能的原因。

其次，该文章只关注了裙带菜释放DOM的情况，而忽略了其他海洋生物对DOM释放和降解的贡献。这种片面报道可能会导致读者对整个生态系统中DOM循环过程的理解不足。

此外，该文章未能提供足够的证据来支持其所述。例如，在介绍裙带菜释放DOM时，文章声称“DOM释放是一个快速过程”，但并未给出具体数据或实验结果来支持这一说法。

最后，该文章似乎缺乏对可能风险和平等呈现双方的考虑。尽管裙带菜不会对人类或海洋动物产生毒性，但其大规模生长可能会对当地生态系统和水质产生重大影响。此外，该文章似乎只关注了裙带菜释放DOM的积极作用，而忽略了DOM过量释放对海洋环境的潜在危害。

综上所述，该文章存在一些偏见和不足之处，需要更全面、客观地探讨绿潮现象及其影响。

# Topics for further research:

* Root causes of green tide phenomenon
* Contribution of other marine organisms to DOM release and degradation
* Lack of evidence to support claims
* Potential risks and equal presentation of both sides
* Impact of large-scale seaweed growth on local ecosystems and water quality
* Potential harm of excessive DOM release on marine environment

# Report location:

<https://www.fullpicture.app/item/23641e269238262d6327491178bae574>