# Article information:

Effects of biochar on soil microbial community and functional genes of a landfill cover three years after ecological restoration - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0048969720306434?via%3Dihub=>

# Article summary:

1. Landfills generate a large amount of municipal solid waste and require ecological restoration after closure.

2. Biochar amendment can improve soil properties and microbial communities in landfill covers, but its effects on functional genes related to nutrient cycling change over time.

3. Biochar-amended soils are less active in processes involved in carbon and nitrogen cycling but enhanced in processes related to phosphorus cycling compared to control soil.

# 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:

该文章主要探讨了生物炭对垃圾填埋场覆盖层土壤微生物群落和功能基因的影响，但其存在一些潜在的偏见和局限性。

首先，文章没有充分考虑生物炭的潜在风险。尽管生物炭可以改善土壤质量和微生物功能，但其也可能释放有害化学物质或增加土壤中重金属含量。此外，生物炭的制备过程也可能产生温室气体排放。

其次，文章未能平等地呈现双方观点。文章只关注了生物炭对土壤质量和微生物功能的积极影响，并未探讨任何潜在的负面影响或争议。

此外，文章提出了一些主张，但缺乏足够的证据支持。例如，文章声称添加生物炭会降低与C和N循环相关的基因丰度，但并未提供详细数据或实验结果来支持这一主张。

最后，文章存在一些片面报道和缺失考虑点。例如，在讨论垃圾填埋场时，文章只关注了其对自然环境造成的负面影响，并未探讨垃圾填埋场对社会和经济的影响。此外，文章未考虑生物炭的成本和可持续性问题。

因此，该文章需要更全面地探讨生物炭的潜在风险和争议，并提供更多证据来支持其主张。同时，应该平等地呈现双方观点，并考虑到社会、经济和可持续性问题。

# Topics for further research:

* Potential risks of biochar
* Balanced presentation of viewpoints
* Lack of evidence to support claims
* One-sided reporting and missing considerations
* Cost and sustainability issues
* Social and economic impacts of landfill sites

# Report location:

<https://www.fullpicture.app/item/b4609c93428e0df4b53bf04738483db8>