# Article information:

Effects of two common fungicides on the reproduction of Aporrectodea caliginosa in natural soil - ScienceDirect  
<https://www.sciencedirect.com/science/article/abs/pii/S0147651319306876?via%3Dihub=>

# Article summary:

1. The use of fungicides can have negative effects on earthworm reproduction, which plays a key role in soil functioning.

2. The ISO guideline for assessing the impacts of chemicals on earthworm reproduction has weaknesses, including not assessing the impacts on cocoon production and viability.

3. Aporrectodea caliginosa is a more representative and sensitive species for pesticide risk assessment than Eisenia fetida. Two commercial fungicides, Cuprafor micro and Swing Gold, were found to negatively impact A. caliginosa reproduction.

# 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:

该文章是一项研究，旨在评估两种杀菌剂对蚯蚓繁殖的影响。然而，该文章存在一些潜在的偏见和缺失。

首先，该文章没有考虑到其他可能影响蚯蚓数量和生产力的因素。例如，土壤质量、气候变化、农业实践等都可能对蚯蚓产生影响。因此，该研究结果不能完全代表现实情况。

其次，该文章只关注了两种杀菌剂对蚯蚓的影响，并未探讨其他农药或化学物质对土壤生态系统的影响。这可能导致读者忽略了其他潜在的风险。

此外，该文章并未提供足够的证据来支持其结论。例如，在第二个实验中，只有一个指标受到Swing Gold污染的影响。这是否足以证明Swing Gold会对整个土壤生态系统产生负面影响？需要更多数据来支持这一点。

最后，该文章似乎偏袒使用纯天然农业方法而非化学农药。虽然化学农药确实存在潜在风险，但它们也可以帮助农民提高产量和保护作物。因此，需要平衡考虑这些风险和收益。

总之，该文章提供了一些有用的信息，但也存在一些潜在的偏见和缺失。读者应该谨慎对待其结论，并考虑其他可能影响土壤生态系统的因素。

# Topics for further research:

* Other factors affecting earthworm populations and productivity
* Potential risks of other pesticides or chemicals on soil ecosystems
* Insufficient evidence to support conclusions
* Bias towards natural agriculture methods over chemical pesticides
* Need for balancing risks and benefits of chemical pesticides
* Caution in interpreting study conclusions and considering other factors.

# Report location:

<https://www.fullpicture.app/item/6cf75fb048ef2dd33388b014d8bb73bb>