# Article information:

A biochemical analysis of Black Soldier fly (Hermetia illucens) larval frass plant growth promoting activity | bioRxiv
<https://www.biorxiv.org/content/10.1101/2023.01.06.523026v2>

# Article summary:

1. Black Soldier fly (Hermetia illucens) larval frass was examined for its nitrogen, phosphate and potassium content, phytohormone and biogenic amine content, and plant growth promoting activity.

2. The frass induced a 11% increase in aerial mass and shoot length in treated plants over controls.

3. Colonies of Enterococci were found to be present in the larval gut and excreted in viable form into their frass, which may account for the increased growth of plants growing in frass treated soils.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy as it provides evidence to support its claims. The authors have used standard soil analysis, HPLC and HPLC/GC-MS methodologies to determine the N:P205:K2O, biogenic amine and phytohormone composition of the Black Soldier fly (Hermetia illucens) larval frass. Furthermore, they have also tested the hypothesis that bacteria characteristic of the genus Enterococcus are present in the biome of decaying catering waste and the larval gut by streaking frass collected directly from larvae on standard bile-esculin azide agar culture plates. This provides evidence to support their claim that viable Enteroccoci are excreted in their frass which may account for the increased growth of plants growing in frass treated soils.

The article does not appear to be biased or one-sided as it presents both sides equally with evidence to back up its claims. It does not contain any promotional content or partiality towards any particular point of view or opinion. The article also mentions potential risks associated with using BSFL frass as a soil amendment such as potential contamination with pathogens or heavy metals which could be harmful to humans or animals if ingested.

In conclusion, this article is reliable and trustworthy due to its use of evidence-based research methods and lack of bias or promotional content.

# Topics for further research:

* Black Soldier Fly Larvae Frass
* Soil Amendment Benefits
* Enterococcus Bacteria
* HPLC/GC-MS Methodology
* Phytohormone Composition
* Potential Risks of BSFL Frass

# Report location:

<https://www.fullpicture.app/item/8c7585229dcb673410b2f83d01c317fa>