





Biomass Monitoring For Filamentous Fungi - A Publication Summary

Challenges of Monitoring Biomass Manually with Filamentous Fungi

Filamentous fungi typically form complex morphologies, preventing common optical density measurements.

-  **Non-homogenous liquid cultures prevent common (OD) sampling**
-  **Cell Dry Weight measurements are invasive and time-consuming**
-  **Process interruptions and loss of culture volume**
-  **Limited and delayed data**

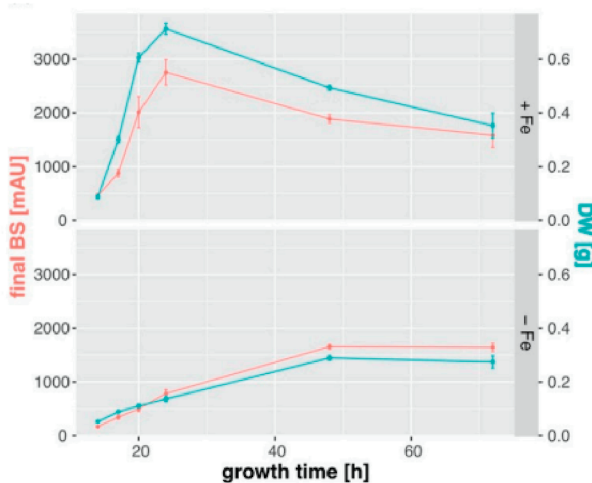
The Solution: How the Cell Growth Quantifier Measures Biomass

The CGQ emits light into the cultivation broth and measures the light that is scattered back. A high raw data density delivers a complete image of the liquid.

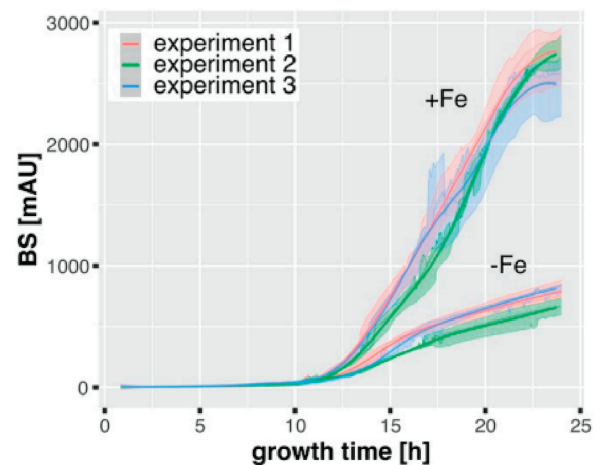
-  **Irregular signals are equaled out**
-  **Automated biomass monitoring saves time**
-  **Reduced risk of contamination**
-  **Continuous growth curves**

What the Paper Says

Researchers conducted a series of experiments showing that sbi's Cell Growth Quantifier (CGQ) facilitates biomass monitoring of filamentous fungi and provides reliable and reproducible results.



CGQ Backscatter (BS) data corresponds well with the Cell Dry Weight (DW) under iron rich (+Fe) and iron depleted (-Fe) conditions.



CGQ-monitored growth of *Aspergillus fumigatus* cultured on different days (experiments 1-3) under iron rich (+Fe) or -depleted (-Fe) conditions.

