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## Chemical rationale for selection of isolates for genome sequencing

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Poster (abstract)

Christian Rank, Thomas Ostenfeld Larsen, Jens Christian Frisvad.

Title

Chemical rationale for selection of isolates for genome sequencing

Abstract

The advances in gene sequencing will in the near future enable researchers to affordably acquire the full genomes of handpicked isolates. We here present a method to evaluate the chemical potential of an entire species and select representatives for genome sequencing. The selection criteria for new strains to be sequenced can be manifold, but for studying the functional phenotype, using a metabolome based approach offers a cheap and rapid assessment of critical strains to cover the chemical diversity.

We have applied this methodology on the complex *A. flavus/A. oryzae* group. Though these two species are in principal identical, they represent two different phenotypes. This is clearly presented through a correspondence analysis of selected extrolites, in which the subtle chemical differences are visually dispersed. The results points to a handful of strains, which, if sequenced, will likely enhance our knowledge of the chemical potential of *A. flavus/A. oryzae*.