

## Peer Review Report

# Review Report on Optimization of Erythritol Production through Fermentation Using Molasses as Carbon Source

Original Research, Acta Biochim. Pol.

Reviewer: Grzegorz Wegrzyn

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### EVALUATION

#### Q 1 Please summarize the main findings of the study.

The main finding described in this paper is optimization of production of Erythritol using fermentation with molasses as a carbon source. Untypical yeast, *Moniella pollinis*, was used in the study.

#### Q 2 Please highlight the limitations and strengths.

The strengths of the paper is its originality, and the use of *Moniella pollinis*, an untypical biotechnological yeast. The major limitation is a lack of solid statistical analysis. Despite statistical methods are described in the Materials and Methods section, no statistically significant differences are marked in the figures. This must be corrected.

#### Q 3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The methods used are fine, apart of the statistical analysis presentation in the figures.

### Check List

#### Q 4 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)

The main finding described in this paper is optimization of production of Erythritol using fermentation with molasses as a carbon source. Untypical yeast, *Moniella pollinis*, was used in the study. The strengths of the paper is its originality, and the use of *Moniella pollinis*, an untypical biotechnological yeast. The major limitation is a lack of solid statistical analysis. Despite statistical methods are described in the Materials and Methods section, no statistically significant differences are marked in the figures. This must be corrected. The methods used are fine, apart of the statistical analysis presentation in the figures. Thus, such analysis should be significantly more robust. Moreover, major conclusions might be more precise.

#### Q 5 Is the English language of sufficient quality?

No.

#### Q 6 Is the quality of the figures and tables satisfactory?

Yes.

**Q 7** Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

**Q 8** Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

No.

**Q 9** Are the methods sufficiently documented to allow replication studies?

Yes.

**Q 10** Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

Yes.

**Q 11** Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Not Applicable.

**Q 12** Have standard biosecurity and institutional safety procedures been adhered to?

Not Applicable.

#### QUALITY ASSESSMENT

**Q 13** Originality



**Q 14** Rigor



**Q 15** Significance to the field



**Q 16** Interest to general audience



**Q 17** Quality of the writing



**Q 18** Overall quality of the study

