

Food Quality Control

Culture medium for yeasts with high osmotic tolerance

Invention

Food with high sugar content is prone to contamination with yeasts that have a high osmotic tolerance. This contamination leads to a shortened storage life and a loss of quality. Therefore, potential contamination of each food production charge needs to be carefully monitored before delivery. The problem is that these contaminating yeasts are slowly growing and difficult to detect. Therefore, the analysis process is time consuming and the food production charge ages in the meantime accompanied by a loss of quality. Consequently, there is a strong market need to expedite the quality control analysis. The herewith presented invention contributes to troubleshooting by a culture medium that strongly enhances growth activity of the yeasts. This reduces the time needed for quality analysis and allows an earlier delivery of the respective food production charge with higher freshness and quality.



Food with high sugar content is especially susceptible to contamination with osmotolerant yeast

Commercial Opportunities

Food industry is seeking for strategies to enhance production throughput in order to reduce costs. One bottleneck is not the production process itself, but the subsequent quality control analysis of each production charge. The herein described invention expedites this process and is therefore of interest for contract analytic labs as well as for food production companies with an own quality analysis laboratory.

Current Status

The culture medium has been optimized for osmo-tolerant yeast growth and has been tested and validated in comparison to conventional culture media. The invention is ready for industrial use. On behalf of TH OWL, PROvendis offers access to rights for commercial use as well as the opportunity for further co-development. In case of interest we will be pleased to inform you about the patent status.

Relevant Publications

Colombie S, Latrille E, Sablayrolles JM. Online estimation of assimilable nitrogen by electrical conductivity measurement during alcoholic fermentation in enological conditions. *J. Biosci. Bioeng.* 2007; 103(3): 229–35

Schnierda T, Bauer FF, Divol B, van Rensburg E, Görgens JF. Optimization of carbon and nitrogen medium components for biomass production using non-Saccharomyces wine yeasts. *Letters Applied Microbiol.* 2014; 58(5), 478–85

An invention of the TH OWL.

Competitive Advantages

- Expedite food quality control
- Enhanced quality of sugar containing food

Technology Readiness Level

12345678

Technology validated in lab

Industries

- Biotechnology Industry

Ref. No.

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