

## **SELECTIVE MEDIA AS A RAPID METHOD FOR THE DIFFERENTIATION OF THE SPOILAGE YEAST *ZYGOSACCHAROMYCES BAILII* FROM FOOD AND BEVERAGES**

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A collection of spoilage yeasts, isolated mostly from wines, was used in order to develop selective media as a rapid method for the differentiation of such yeasts from food and beverages. The strains tested belonged to species of *Pichia membranaefaciens*, *Pichia anomala*, *Torulaspota delbrueckii*, *Dekkera anomala*, *Dekkera bruxellensis*, *Debaryomyces hansenii*, *Rhodotorula mucilaginosa*, *Zygosaccharomyces rouxii*, *Zygosaccharomyces florentinus* and *Zygosaccharomyces bailii*, the yeast *Saccharomyces cerevisiae* being used as reference.

The culture media tested included a weak carboxylic acid or a mixture of a sugar plus a weak carboxylic acid as the only carbon and energy sources. Depending on the pH, the acid concentration and the proportion of the concentration of the two substrates, the species displayed different ability to transport and metabolize the substrate(s), being possible to differentiate distinct groups of yeasts. The incorporation of an acid-base indicator in the media allowed to visualize those distinct behavior patterns and hence to develop a rapid colorimetric method for the differentiation of *Z. bailii* from food and beverages, with potential industrial application.